2013-2014 Catalog

11555 Old Oregon Trail
P.O. Box 496006
Redding, CA 96049-6006
(530) 242-7500

Shasta College
Tehama Campus
770 Diamond Avenue
Red Bluff, CA 96080
tehama@shastacollege.edu
530-529-8980

Shasta College
Trinity Campus
30 Arbuckle Court
Weaverville, CA 96093
trinity@shastacollege.edu
530-623-2231

Shasta College
Intermountain Campus
37581 Mountain View Road
Burney, CA 96013
intermountain@shastacollege.edu
530-335-2311

Shasta College
Downtown Redding Campus
1504 Market Street
Redding, CA 96001
530-339-3606

Shasta College is accredited by the Accrediting Commission for Community and Junior Colleges of the Western Association of Schools and Colleges, 10 Commercial Blvd., Suite 204, Novato, CA 94949, TELEPHONE (415) 506-0234, FAX (415) 506-0238. Shasta College is listed as a public community college in the approved list of the Education Directory, Higher Education Part 3, published by the U.S. Office of Education.

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version. The online version is updated at the start of registration for each semester and, therefore, should be relied upon as the most up-to-date.
MISSION STATEMENT

Shasta College provides students of diverse backgrounds, interests, and abilities with open access to educational and life-long learning opportunities, thereby contributing to the social, cultural, and economic development of our region. The District offers programs and extensive distance education offerings in general education and transfer curriculum, career-technical education, and basic skills education where students are provided opportunities to practice and improve critical thinking, effective communication, quantitative reasoning, information competency, community and global awareness, self-efficacy, and workplace skills.

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Institutional Student Learning Outcomes

To support student success, Shasta College has identified the following Institutional Student Learning Outcomes (ISLOs).

1. Critical Thinking
   Critical thinking is the ability to comprehend, communicate, or engage in problem-solving or strategy-building techniques.

2. Information Competency
   Information competency is the ability to find, evaluate, use and communicate information in all its various formats.

3. Effective Communication
   Effective communication is the ability to effectively use written, oral and nonverbal communication.

4. Quantitative Reasoning
   Quantitative reasoning is the ability to use appropriate mathematical methods.

5. Self-Efficacy
   Self-efficacy is the confidence and ability to perform the courses of action required to effectively meet personal, social, academic and professional goals.

6. Workplace Skills
   Workplace skills provide the ability to perform effectively at work.

7. Community and Global Awareness
   Community and global awareness includes an understanding of community and global issues and cross-cultural awareness.

Board Approved 6/08/11

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.
Welcome to Shasta College!

Shasta College serves Shasta, Tehama, and Trinity Counties as a comprehensive community college offering programs in a broad range of fields of study to prepare you for new opportunities and challenges.

We at Shasta College pride ourselves on our dedication to students as our first priority. You will have the opportunity to have your own personalized education and career plan. Whether your goal is employment upon graduation or transfer to a four-year university, our desire is to assist you and ensure you know how, at each step, to best steer your own pathway to success.

A decision to enroll at Shasta College is a wise investment of your time, talent and resources. Thousands of successful graduates since 1950 throughout Northern California and the nation attest to their pride in being part of the Shasta College family. We welcome you to that tradition and to a wide new world of opportunities made possible through higher education.

Joe Wyse
Superintendent/President

¡Bienvenidos a Shasta College!

Shasta College atiende a los condados de Shasta, Tehama, Trinity como un colegio de comunidad integral ofreciendo una gran variedad de programas en varios campos de estudio para prepararte al Nuevo siglo.

En Shasta College nos sentimos muy orgullosos de la dedicación brindada a nuestros estudiantes, siendo esta nuestra primera prioridad. Como estudiante tú tendrás la oportunidad de tener un plan personalizado de educación. Si tu objetivo es conseguir empleo después de graduarte o transferirte a una Universidad, nuestro deseo es asistirte y asegurar que tú sabes como, a cada paso, conducirte en tu propio camino al éxito.

Decidir matricularse en Shasta College es una sabia inversión de tu tiempo, talento y recursos. Miles de exitosos graduados, desde 1950, del norte de California y de la nación dan fe del orgullo de ser parte de la familia de Shasta College. Nosotros te damos la bienvenida a esta tradición y al nuevo mundo de oportunidades que es posible gracias a la educación superior.

Joe Wyse
Superintendente/Presidente

Applications and information should be requested from:
Admissions and Records Office, Shasta College, Administration Building, 11555 Old Oregon Trail, P.O. Box 496006, Redding, CA 96049-6006
Telephone: (530) 242-7650

Don't forget to visit our website at www.shastacollege.edu
Administrative Staff

Superintendent/President............................................................................................................. Joe Wyse
Assistant to the Superintendent/President.................................................................................. Theresa Markword
Associate Vice President of Human Resources............................................................................ Laura Cyphers Benson
Associate Vice President of Information Services and Technology ........................................... Doug Meline
   Information Services Technology Supervisor........................................................................ James Crandall
   Technology Programmer/Analyst.......................................................................................... Nicole Chelonis
   Technology Support Supervisor............................................................................................ John Lutkemeier
Vice President of Student Services................................................................................................ Kevin O’Rorke
   Dean, Enrollment Services ................................................................................................. Timothy Johnston
   Director, Admissions and Records........................................................................................ Sheree Whaley
   Director, Financial Aid......................................................................................................... Connie Barton
   Director, Foster and Kinship Care......................................................................................... Shen Wiggins
   Director, DSPS/EOPS........................................................................................................... Sandra Hamilton-Slane
   Program Director, Gateway to College................................................................................ Nancy Berkey
   Program Director, TRIO – Educational Talent Search & Dual Enrollment............................. Liz Kohn (Interim)
   Program Director, TRIO – Upward Bound/SSS.................................................................. Sylvia Ruano
   Program Coordinator – CalWORKS...................................................................................... Nadia Salsedo Elwood
Director of Research and Planning .............................................................................................. Marc Beam
Executive Director, Shasta College Foundation......................................................................... Scott Thompson
Vice President of Academic Affairs.............................................................................................. Meridith Randall
   Dean, Arts, Communication and Social Sciences ................................................................. Ralph Perrin
   Dean, Business, Agriculture, Industry and Technology and EWD....................................... Eva Jimenez
   Associate Dean, CTE............................................................................................................. Dan Haskins
   Director, SBDC ................................................................................................................... Keli Anthis
   Dean, Extended Education ................................................................................................. Thomas Orr
   Dean, Health Sciences........................................................................................................ Kathy Royce
   Dean, Science, Language Arts and Math............................................................................. Frank Nigro
   Dean, Safety, Physical Education and Consumer Sciences................................................... Gary Houser
   Director, Early Childhood Education.................................................................................... Kathleen Tibbals
   Director, Fire Technology and EMS Programs...................................................................... Tony Osa
   Dean, Library Services and Educational Technology.......................................................... William Breitbach
Vice President of Administrative Services ................................................................................... Morris Rodrigue
   Comptroller ......................................................................................................................... Nancy Funk
   Director, Campus Safety....................................................................................................... Craig Carmena
   Director, Food Services........................................................................................................ Denise Axtell
   Director, Physical Plant Services........................................................................................ George Estrada
   Supervisor, Custodial Services.............................................................................................. Gregory Wacker
   Supervisor, Transportation Department................................................................................ John Moore
   Hazardous Materials Compliance Supervisor...................................................................... Dave Freeman

College Calendar

FALL SEMESTER 2013
Aug. 16 ............ All College Day for Faculty
Aug. 19 ............ INSTRUCTION BEGINS - DAY AND EVENING,
        ON AND OFF-CAMPUS
Sept. 2 ............ Labor Day Holiday
Nov. 11 .......... Veterans Day Holiday
Nov. 27 ........... No evening courses (5 PM or later starting
        time). DAY COURSES HELD AS USUAL.
Nov 28 – 29 ..... Thanksgiving Holiday
Dec. 16 – 20 ..... Final Examinations
Dec. 23-Jan. 10.. Semester Break

SPRING SEMESTER 2014
Jan. 13 ............ INSTRUCTION BEGINS - DAY AND
        EVENING, ON AND OFF-CAMPUS
Jan. 17 ............ All College Day for Faculty
Jan. 20 ............ Martin Luther King, Jr. Holiday
Feb. 7 ............. Lincoln’s Day Holiday
Feb. 17 ............ Washington’s Day Holiday
April 14-18........ Spring Break
April 21.......... Classes Resume
May 19-23...... Final Examinations
May 23 .......... Commencement
The College

A Brief History
In the Centennial year of California and Shasta County (1950), Shasta College opened its first campus. As part of the state’s Centennial celebration, President Harry S. Truman spoke at the college’s Thompson Field. There were 26 original faculty members.

Shasta College extends its educational, cultural, and recreational facilities and services to all people in Shasta, Tehama, and Trinity Counties, including parts of Lassen, Modoc, and Humboldt Counties, an area that is more than 10,000 square miles, which is larger than the State of Massachusetts. An eight-member Board of Trustees, which includes a non-voting Student Trustee, represents the Shasta-Tehama-Trinity Joint Community College District.

Shasta College was founded in 1948 as part of the Shasta Union High School District. After opening its doors on Eureka Way in the fall of 1950, with 256 day students, Shasta College grew so rapidly that, in 1964, voters approved a bond issue for construction of a 337-acre campus at the main campus location. The present Shasta College main campus was originally a fur and trading center, the Wintu Home. It was purchased by a soldier and his family after the Mexican-American War. A state-of-the-art $1.5 million Early Childhood Education child care center and instructional facility opened in the fall of 2005. A new 44,000 square foot Health Sciences and University Center opened in the fall of 2007, which houses the college’s Dental Hygiene and Nursing Programs. It also serves as host to baccalaureate degree programs offered by both public and private universities.

Shasta College is part of the California Community College system, which is the largest system of higher education in the world, with 112 colleges organized into 72 districts. Research has shown that students who have an A.A. or A.S. degree will make an average yearly salary which is 50% higher than a person with less than a high school diploma. Also according to that research, students who have an A.A. or A.S. degree will make an average yearly salary which is 24% higher than a person with only a high school diploma. The college has articulation agreements to facilitate transfer to the University of California and California State University systems, and many private college campuses.

The Shasta College mascot is the Knight. In 1955 the Shasta College Motor Knights Club built a knight with a suit of armor and lance. His name is “Oakey Doaks” (named for a cartoon character of the time).

Because of the diversified goals and needs of its students, Shasta College offers a wide range of programs and services, including counseling, tutoring, financial aid, performing arts and athletic events, student activities, veterans’ services, cultural events, lecture series, workshops, and art exhibits. Shasta College has extensive offerings on the Internet and through Interactive Television (ITV). Shasta College also offers instruction and student services at the Downtown Campus, Intermountain Campus, Tehama Campus, and Trinity Campuses and each location utilizes ITV and computer-assisted learning to supplement on-site courses.

Fall 2013 marks the 63rd Anniversary of Shasta College, serving the north state with pride and distinction.

Welcome Everyone!

Motor Vehicles on Campus
Operation of motor vehicles on the Shasta College campus must be conducted in a manner which ensures the safety of the driver, passengers, pedestrians, and/or any others, and which prevents damage to college property. The college is not responsible for loss of any property or damage to any property sustained by any person parking on campus.

Parking on Campus: PARKING PERMITS ARE REQUIRED TO PARK ON CAMPUS (Redding Main Campus and Tehama Campus). ALL PARKING IS ON A FIRST-COME, FIRST-SERVED BASIS. PARKING PERMITS ARE SOLD WITH NO GUARANTEE OF SPACE AVAILABILITY. Parking on campus is a privilege extended by the Board of Trustees to those who have college-related business. Drivers of vehicles on college property shall comply with the rules and regulations of the college. Parking privileges can be withdrawn for violations of parking and traffic regulations. Regulations and review process information are provided on-line at shastacollegeparking or by clicking on Resources, then Campus Safety, or may be obtained from Campus Safety at (530) 242-7913. Permits may be obtained at registration or from the Business Office.

Cost of Parking Permit: Refer to the Schedule of Classes or call (530) 242-7913.

Daily Parking Permits are available from parking permit machines in various locations throughout the campus parking lots. These are valid for the day on which the permit is purchased.

Parking permits must be displayed in plain view in the appropriate location according to Parking Regulations or a citation will be issued. There are no exceptions. Should you receive a citation, follow the written instructions on the front of the citation. Restricted parking where regular permits are not valid: 30 minute zones, staff spaces, handicapped spaces (blue) and car pool spaces.

Car Pool Parking requires the purchase of a student permit and an additional permit which can be obtained without additional cost through the Security Department.

Enforcement: Campus parking and traffic safety regulations are enforced by Shasta College and the Redding Police Department. Security issues parking citations for violations. For additional information contact campus parking at (530) 242-7913.

Economic and Workforce Development (EWD)
The Economic and Workforce Development (EWD) Division at Shasta College offers a variety of programs, services, and training for businesses, personal and professional growth, nonprofit organizations, and classes for personal enrichment.

- For Businesses, we offer one-on-one consulting services available through the Small Business Development Center (SBDC) at Shasta College. From business start-ups to expanding your store, the SBDC is your one-stop location! In addition, the EWD provides custom developed, Business and employee training programs to improve your businesses’ profitability and operational efficiency.
- The Non-Profit Resources Center offers grant research facilities, member support, and courses to enhance nonprofit operations. These services provide the nonprofit community with a valuable resource for success.
- We offer a variety of courses for personal and professional development, from vocational training in allied healthcare to classes in medical billing and renewable energies. We also offer CEUs for healthcare professionals as well as occupational certification programs.
- We also offer classes for personal enrichment where you can explore and develop new interests and hobbies.

For additional information visit our website at shastacollege.edu Center for Economic & Workforce Development 2990 Innsbruck Redding, California 96003 Voice: (530) 242-7630; Fax: (530) 225-8582; Email: ewd@shastacollege.edu

Crime Statistics
The Annual Shasta College Security Report is provided to help ensure a safe environment for our college community and prospective students and employees. This document contains crime statistics for the previous three years in addition to valuable safety and security information. A complete copy of the Security Report may be obtained from the Security Office located in Room 5015. The report is also available through our Campus Website: shastacollegesecurityreport.

Extended Education
The Extended Education Division of Shasta College is assigned the responsibility to provide access to higher education for residents beyond the traditional patterns of campus-based education and programs. It does so by offering a variety of programs and courses in surrounding communities designed for those who seek to expand their interests, improve or broaden their occupational and professional preparation, or further their degree aspirations.

Classes are held at each of the three campuses listed below as well as other locations throughout the District. Classes are offered in a variety of formats including live instruction and 2-way interactive television (ITV), and many students are now able to complete their degree or certificate without commuting to the main campus. Office hours at each campus are Monday through Thursday, 8:00 a.m. to 9:30 p.m., and Friday, 8:00 a.m. to 4:30 p.m.

Shasta College Tehama Campus
770 Diamond Avenue, Red Bluff, CA 96080
530-529-8980; tehana@shastacollege.edu
Shasta College Intermountain Campus
37581 Mountain View Road, Burney, CA 96013
530-335-2311, intermountain@shastacollege.edu
Shasta College Trinity Campus
30 Arbuckle Court, Weaverville, CA 96093
530-623-2231, trinity@shastacollege.edu

Services available at each campus include admissions assistance, on-site registration and counseling, assessment and orientation, tutoring, and career guidance.
Field Trips and Excursions Liability Policy

Throughout the semester/school year, the District may sponsor off-campus, extra-curricular field trips/excursions. If you choose to participate, be advised that pursuant to California Code of Regulations Sub-Chapter 5, Section 55220, you have agreed to hold the District, its officers, agents and employees harmless from any and all liability or claims which may arise out of or in connection with your participation in the activity.

Foundation

The Shasta College Foundation was established in 1995 as a 501(c)(3) non-profit corporation organized by community-spirited citizens to support and benefit the Shasta-Tehama-Trinity Joint Community College District. The Foundation is made up of 45 volunteers representing Shasta, Tehama and Trinity Counties. Its primary purpose is to raise funds to support and benefit Shasta College. The Foundation recognizes community and campus relationships as core to our mission.

Contributions to the Shasta College Foundation take many forms: gifts of cash, gifts in kind, stock or securities, trusts, real estate, gifts in memoriam, wills and bequests.

The Foundation Executive Director is always available to assist donors in establishing scholarships and in making other contributions. Legal counsel is provided to those wishing to make planned gifts. Please write or call:

Scott Thompson, Executive Director
Nancy de Halas, Administrative Assistant
Shasta College Foundation
P.O. Box 4956, Redding, CA. 96049-6006
(530) 242-7512
shastacollegefoundation

Open Access Policy

Reference: Title 5, Section 51006; Board Policy 5052

All courses, course sections, and classes of the District shall be open for enrollment to any person who has been admitted to the college. Enrollment may be subject to any priority system that has been established. Enrollment may be limited to students meeting properly validated prerequisites and corequisites, or due to other practical considerations such as exemptions set out in statute or regulation.

Sexual Violence Prevention and Education (AB 1088, amends Ed Code 67385.7)

Starting January 1, 2008, post secondary education districts are required to provide to students educational and preventive information about sexual violence, in addition to the sexual harassment information required by Ed Code 66281.5. At Shasta College this information, titled Sexual Assault Policy, is found on page 4 of the Crime Statistics report, posted on the Campus Security webpage: shastacollegecampussafety.

Transportation

Public transportation is available in our District.

RABA (Redding Area Bus Authority)  
http://www.rabaride.com/

RABA provides rides to over 650,000 people each year, and has been serving the Redding, Shasta Lake and Anderson communities since 1981. Their website shows all of the RABA bus routes, hours of operation, fares and tips on using the service, and additional information including the location of each bus stop along the route. Their Customer Service Center is also available at 241-2877 for all of your route and schedule questions and to purchase tickets and passes.

TRAX (Tehama Rural Area Express)  
http://www.taketrax.com

Fixed route bus service connecting Red Bluff, Corning, Los Molinos, Gerber, Tehama and places in-between. City routes are available in Red Bluff and Corning, and special morning commuter runs are available along the Highway 99E and 99W corridors which connect to city routes. Their website contains information on routes, fares, etc. Special discounted fares are available for seniors, students and the disabled.

TRINITY TRANSIT  
http://trinitytransit.org

Trinity Transit is the public transit operator for Trinity County. It operates two fixed-route services in the County: the Weaverville Shuttle and the Hayfork-Weaverville Bus, and a pilot program service in Lewiston and Trinity Center and between Weaverville and Willow Creek. The Weaverville Shuttle operates hourly within Weaverville, Monday through Friday from 9:00 a.m. to 5:00 p.m. It stops at numerous destinations, including Weaver Creek Senior Apartments, the Senior Center, the Trinity Hospital, Library, Social Services Complex, and the Post Office.
Administrative procedures have been established to define harassment and to investigate and resolve complaints regarding harassment and unlawful discrimination, which shall be widely published and available to administrators, faculty, staff and students. All participants are protected from retaliatory acts by the District, its employees, students, and agents.

Employees who violate this policy and related procedures may be subject to disciplinary action up to and including termination from employment. Students who violate this policy and related procedures may be subject to disciplinary measures up to and including expulsion.

Contact Information
The Human Resources Office has responsibility to ensure fair and equitable treatment in all programs including issues dealing with physical access, individual barriers, and removal of architectural barriers for mobility impaired students. The unlawful discrimination policy is available at the Human Resources Office and online. The Office is located in the Administration Building, Room 121, (530) 242-7640. Students with complaints of discrimination related issues may contact the Associate Vice President of Human Resources at (530) 242-7649. For further information regarding Section 504 of the Rehabilitation Act, contact the Section 504 Coordinator, (530) 242-7649, Shasta College, 11555 Old Oregon Trail, P.O. Box 496006, Redding, CA 96049-6006.

Declaración de Cumplimiento
El Distrito del Shasta -Tehama-Trinity Joint Community College (Shasta College) cumple con el Código Educacional de California, el Título 5 del Código de Regulación de California, todos los Títulos y Secciones pertinentes del Acto de Derechos Civiles de 1964, el Título IX de los Enmiendas de Educación de 1972, el Acto de Rehabilitación de 1973, la Ley para estadounidenses con Incapacidades, y todas las demás leyes estatales y federales pertinentes.

No Discriminación
Es la póliza del Distrito de Shasta College de mantener un ambiente libre de discriminación ilegal. El Distrito se compromete a dar oportunidades iguales de educación, empleo, e igualdad de acceso a los programas y actividades institucionales.

El Distrito, y cada persona quien lo representa, reconocen la obligación que tiene de proveer acceso a los servicios, clases y programas, sin discriminación por razones de origen nacional, religión, edad, género, raza, color, ascendencia, orientación sexual, estado civil, o incapacidades física o mental, o debido a que una persona es percibida de tener una o mas de las características descritas anteriormente. El Distrito prohíbe cualquier forma de discriminación y fomenta procedimientos administrativos que reconocen y ponen fin a la discriminación de acuerdo con el Título 5 y las reglas y estatutos tanto del estado de California como las leyes federales. Es ilegal y prohibido tomar algún tipo de represalia en contra de la persona que presenta la queja o participa en la investigación de acceso a los programas y actividades institucionales.

Información de Contacto
La Oficina de Recursos Humanos es la entidad responsable de asegurar el tratamiento justo y equitativo. La Póliza de Discriminación ilegal está disponible en la Oficina de Recursos Humanos y en Internet. La Oficina está localizada en el edificio de Administración, salón 121, (530) 242-7640.

Estudiantes que deseen presentar una queja, deberían de ponerse en contacto con en la Oficina de Recursos Humanos (530) 242-7640, o con el Decano para Estudiantes, (530) 242-7622. Para más información sobre el Acto de Rehabilitación póngase en contacto con Coordinadora de Seccion 504 del Acto de Rehabilitacion (530) 242-7649, o con el Decano para Estudiantes, (530) 242-7622 Shasta College, 11555 Old Oregon Trail, P.O. Box 496006, Redding CA 96009-6006.
Chapter 2 - Admission and Enrollment Information

Admissions

Anyone 18 years of age or older or anyone under 18 who has graduated from high school or passed the California High School Proficiency Exam may be admitted to Shasta College classes.

Student Area Outcomes

1. Admissions and Records staff will promote the benefits of using MyShasta and provide needed assistance to students registering via the internet.

Auditing a Course

Purpose:
1. Auditing is to allow students to participate in class activities beyond the course repetition limit; and
2. Auditing is to allow students to repeat a course with the intent of upgrading needed skills or reviewing course content.

Eligibility:
1. Students must be eligible for admission to the college as regularly enrolled students.
2. Students may audit classes only when they have exhausted repetition opportunities for the course.
3. Students must meet course prerequisites; and
4. Priority in class enrollment shall be given to students desiring to take the course for credit towards a degree or certificate. (Education Code Section 76370(d)).

Fees:
1. The fee for auditing a class is $15.00 per unit, per semester (Education Code Section 76270(a)). Material fees, if applicable, are payable with audit fees upon submitting the approved application. The audit fee is non-refundable; and
2. Students enrolled in classes to receive credit for ten or more semester credit units shall not be charged a fee to audit three or fewer units per semester.

Procedures:
1. Verification of eligibility from Admissions and Records Office.
2. Instructor’s signature of approval on audit form.
3. Dean of the Division’s signature of approval on audit form.
4. Return of approved audit form to Admissions and Records Office within 7 days with payment of all fees.

Continuing Students

CONTINUING STUDENTS and RETURNING STUDENTS may register as described in the current Schedule of Classes. Students planning to enroll in math or English classes are advised to take the appropriate assessment test and consult with a counselor before registering. See "Assessment Center" in the current Schedule Supplement for details on where and when assessment tests are given.

Coursework – Acceptance of Upper Division Work

Shasta College will accept coursework completed at the upper division level under the following conditions:

- The course must have been completed at a regionally accredited college or university.
- The course must be deemed comparable to a Shasta College course by the faculty in the discipline, or an appropriate designee, or an articulation agreement. Upper division courses (or graduate level courses) which require attainment of the lower division course competencies may also be accepted.
- The upper division course may be used to satisfy a Shasta College major requirement, an A.S. degree general education requirement, or a prerequisite.
- Courses will be accepted for subject credit only. Unit credit will not be awarded toward the 60 units required for the degree. Upper division courses will not be used to certify CSU GE or IGETC requirements.
- For the purposes of ADN or Dental Hygiene prerequisites, the grades earned will be calculated in the same manner as those transferred from another regionally accredited college or university.

Dropping a Class Without Record

Students may drop a class and have no notation appear on their transcripts through the census date of each class. IT IS THE STUDENT’S RESPONSIBILITY TO DROP CLASS(ES). Forms are available from Admissions and Records, Extended Education sites, or by mail. Students can drop a class in person at Admissions and Records or Extended Education sites, online through MyShasta. If a student intends to drop a class and stops attending but fails to file the necessary forms, a failing letter grade may be assigned by the instructor. Students may be dropped by the instructor based on excessive absences from a class so long as the instructor has announced attendance criteria.

First-Time Students

MATRICULATION SERVICES

SUCCESS BEGINS WITH A PLAN! The college has found that students who have supplied transcripts, participated in English and math assessments, attended an orientation and discussed their educational goals with a counselor significantly improve their performance in college. We call this process "matriculation."

FIRST-TIME STUDENTS are STRONGLY URGED to take advantage of the matriculation services. Those who do will be eligible for "priority registration."

Participation in matriculation services is OPTIONAL for the following students. If you fall into one of these categories, contact the Admissions and Records Office for appropriate registration information.

1. Students who have received a full array of matriculation services at another California community college;
2. Students who plan to enroll only in courses having no English and/or math skill requirements/prerequisites;
3. Students who plan to enroll in fewer than 6 units and who have "personal interest," advancement in their current jobs, or maintenance of a certificate or license as their goals;
4. Students who have completed an Associate or higher degree and are not pursuing a program or degree objective at Shasta College;
5. Students who have completed 30 or more semester units at another regionally accredited college or university, and are not pursuing a program or degree objective at Shasta College.

ALL OTHER FIRST-TIME STUDENTS should participate in matriculation services. The matriculation process consists of:

1. Application: This starts the process! Fill out an online application or turn one in to the Admissions and Records Office or Extended Education campus.
2. Records: Arrange to have official transcripts of high school and previous college work sent to Shasta College. These are important for counseling and program planning. Transcripts sent to Shasta College from other regionally accredited colleges and/or educational institutions at the request of a student become part of the student's permanent file and are not duplicated nor distributed.
3. Assessment Testing: This service provides students with information that will help them to make appropriate selections of major programs and courses. Reading, writing, and mathematical skill assessment tests are offered to all students at a variety of times and locations on a walk-in basis. See the section titled, "Assessment Center" in the current Schedule Supplement for details. Note: Qualifying scores from approved tests taken within the last two years at accredited institutions and sent to Shasta College may exempt students from having to take Shasta College assessment tests.
4. Orientation: The orientation program provides new students an opportunity to prepare for college and meet with a counselor to select courses. The orientation includes information about Shasta College policies and procedures, tips for college success, and instruction in using MyShasta – Shasta College’s online records and registration system. Counselors at orientation provide assistance to students in selecting their classes for the following semester. Please contact the Assessment Center at (530) 242-7751 to sign up or receive additional information on orientation times and locations.
5. Registration: Students who participate in services 1 through 4 will be given "priority registration" status

Students wishing to appeal any component of the matriculation process should contact the Director of Admissions and Records at (530) 242-7659.

ONGOING COUNSELING

Throughout the semester, counselors are available to assist students in planning and achieving their educational and career goals. Services are available by appointment; brief walk-in appointments are available most days. Call the Counseling Center at (530) 242-7724 or go to counselingappointments.

ASSESSMENT TEST INFORMATION

Location: Building 100, Room 101-102

All first-time non-exempt students will need to take the Reading, Writing, and Math Assessment. At the time of assessment, all students must provide photo
Prerequisites, Corequisites, Limitations on Enrollment and Advisories

**FREQUENTLY ASKED QUESTIONS**

What is an "advisory on recommended preparation"?  
Advisories are intended to identify skills which will broaden or deepen a student’s learning experience, but without which the student can still succeed in the course. The college does not block enrollment in a course for lack of advisory skills. The exception to this is that “Special Admit” (Concurrent) students are required to meet the Advisory.

Where can I find advisories for each course?

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.
The three ways a student can meet a prerequisite at Shasta College

1. Receive a grade of C or higher in the prerequisite course at Shasta College
   - Student Enrolls
   - Petition for Equivalency
   - Course Equivalency:
     A. Equivalent course at other college
     B. AP Exam
     C. CLEP
   - Student Enrolls

2. Multiple Measures:
   A. High School course work
   B. Placement Exam
   C. etc.
   - Student Enrolls
   - Multiple Measures Failure
   - Student disagrees
   - Student agrees
   - Granted
   - Denied

3. Prerequisite/Corequisite Challenge Form
   - Student files a challenge form and has a challenge hearing. Provisional enrollment in target course allowed.
   - Student Enrolls
   - Stop

Prerequisites, Corequisites, Limitations on Enrollment and Advisories (cont.):

Note: If you are attempting to register in a course that has Math, English or Chemistry as a prerequisite, then part of the Multiple Measures Procedure might include taking an Assessment Test at the Assessment Center. You are free to take the Assessment Test before you see your Counselor.

Note: Because you will be unable to enroll in the target course until a counselor determines that you have satisfied the prerequisite through Multiple Measures, it is in your best interest to see a counselor before attempting to register for the course.

Note: If you have a disability and believe that you could be successful in the class with reasonable accommodations then see the Counselor for Disabilities or Learning Disability Specialist, (530) 242-7790, before attempting to register for the course.

What is a Placement Level Number?
In some cases, such as in math and English, the prerequisite is stated in terms of a Placement Level. Your Placement Level is a number that is based on many factors which may include high school course work and Assessment Test scores. You will be assigned a Placement Level after completion of the Course Equivalency and/or Multiple Measures process.

Can I challenge a prerequisite or corequisite?
Yes, you can. The five grounds for a student to challenge a prerequisite or corequisite are:

1. The student has the knowledge or ability to succeed in the course or program despite not meeting the prerequisite or corequisite
2. The prerequisite or corequisite has not been established in accordance with the district’s process for establishing prerequisites and corequisites
3. The prerequisite or corequisite is in violation of Title 5
4. The prerequisite or corequisite is either unlawfully discriminatory or is being applied in an unlawfully discriminatory manner
5. The student will be subject to undue delay in attaining the goal of his or her educational plan because the prerequisite or corequisite course has not been made reasonably available, or accessible.

If a student is citing reason #1 as the basis for challenging the prerequisite/corequisite, the student must first have failed to meet the prerequisite/corequisite through the Multiple Measures Procedure. You should seek advice regarding the challenge from a Counselor.

PREREQUISITE/COREQUISITE CHALLENGE PROCEDURE
The student will obtain a Prerequisite/Corequisite Challenge Form at the Admissions and Records Office. Academic Affairs will retain documentation of Board Policy and Title 5 regulations regarding prerequisite/corequisite challenges. A student may review this information prior to submitting a Prerequisite/Corequisite Challenge Form. A student who chooses to challenge a prerequisite or corequisite may do so for any of the following reasons:

1. The student has the knowledge or ability to succeed in the course or program despite not meeting the prerequisite or corequisite;
2. The prerequisite or corequisite has not been established in accordance with the district’s process for establishing prerequisites and corequisites;
3. The prerequisite or corequisite is in violation of Title 5;
4. The prerequisite or corequisite is either unlawfully discriminatory or is being applied in an unlawfully discriminatory manner;
5. The student will be subject to undue delay in attaining the goal of his or her educational plan because the prerequisite or corequisite course has not been made reasonably available, or accessible;

A statement of specific skills and abilities needed to enter the class for which the challenge is being issued will be made available to the student through the Office of Academic Affairs, Room 115, on any workday.

The student must complete a Prerequisite/Corequisite Challenge Form. The student must attach a completed and signed Multiple Measures Form to the Prerequisite/Corequisite Challenge Form. The student must return these forms along with the other supporting documentation to the Director of Admissions and Records. The student has the obligation to provide satisfactory evidence that the challenge should be upheld. Without supporting documentation, the application for a challenge will be considered incomplete and the challenge will be denied. When a complete application is filed, the Director of Admissions and Records will forward the Prerequisite/Corequisite Challenge Form and supporting documentation to the appropriate Academic Division Office. The Division staff will arrange a Challenge Hearing.

If the challenge form is submitted during the period when the student is eligible to register for the course, and if space is available, then the student will be conditionally enrolled in the target course until resolution of the challenge is complete.
Prerequisite/Corequisite Challenge Procedure (continued):

Two or more faculty members will conduct the Challenge Hearing. If possible, the faculty members will be from a discipline closely related to the target course. The student will have the right to attend and speak at the Challenge Hearing. Staff from the appropriate Academic Division Office will attempt to notify the student regarding the time and location of the Challenge Hearing at least one business day prior to the start of that hearing. The results of the Challenge Hearing will be documented and forwarded to the student and to the Admissions and Records Office within five business days from the date that the challenge was filed with the Director of Admissions and Records. If the college has not made a decision within five working days then the student’s challenge is upheld and the Admissions and Records Office will allow the student to enroll in the course.

If a student is citing reason #2, #3, #4 or #5 as the basis for challenging the prerequisite/corequisite, the student must submit a completed Prerequisite/Corequisite Challenge Form along with supporting documentation to the Vice President of Academic Affairs in the Office of Academic Affairs, Room 115.

The student has the obligation to provide satisfactory evidence that the challenge should be upheld. Without supporting documentation, the application will be considered incomplete and the challenge will be denied. When a complete application is filed, the Vice President of Academic Affairs will conduct a Challenge Hearing. This hearing will include as voting members the Vice President of Academic Affairs, one faculty from the Curriculum Council, and one other faculty, preferably from a discipline closely related to the target course.

The student will have the right to attend and speak at the Challenge Hearing. Staff from the Office of Academic Affairs will attempt to notify the student regarding the time and location of the Challenge Hearing at least one business day prior to the start of that hearing. The results of the Challenge Hearing will be documented and forwarded to the student and to the Admissions and Records Office within five business days from the date of the hearing. If the college has not made a decision within five working days then the student’s challenge is upheld and the Admissions and Records Office will allow the student to enroll in the course.

Note 1: Students who submit a Prerequisite/Corequisite Challenge Form claiming that a specific disability is a factor in their challenge rationale must forward a copy of the Prerequisite/Corequisite Challenge Form to the Disability Resource Center. The Disabled Students Programs and Services Office will determine if accommodations or academic adjustments are warranted.

Note 2: Students who initiate the challenge procedure during registration may obtain the Prerequisite/Corequisite Challenge Form at the registration site and submit the completed form along with supporting documentation at that site. If space is available, the student will be provisionally enrolled in the target course until resolution of the challenge is complete. Staff at the registration site will time-stamp the form and forward it to the Director of Admissions and Records, or to the Vice President of Academic Affairs as appropriate. The Challenge Procedure will then proceed as outlined above.

Registration and Related Fees Including Transcripts

1. Enrollment Fee: Refer to current class schedule or visit the Shasta College website.
2. Student Health Fee: Refer to current class schedule or visit the Shasta College website.
3. Campus Center Fee: Refer to current class schedule or visit the Shasta College website.
4. Out-of-State Tuition: Refer to current class schedule or visit the Shasta College website.
5. Day and evening parking fee: Refer to current class schedule or visit the Shasta College website (Campus Safety).
6. Student Representation Fee (Voluntary): Refer to current class schedule or visit the Shasta College website.
7. Student Events and Activities Fee (Voluntary): Refer to current class schedule or visit the Shasta College website.

NOTE: Fees are subject to change. The fee schedule is published each semester in the Schedule of Classes.

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.
California Nonresident Tuition Exemption Request

For Eligible California High School Graduates

SHASTA COLLEGE ADMISSIONS AND RECORDS OFFICE – PO Box 496006 – Redding, CA  96049-6006

Note: This form is accepted by all California Community Colleges and all Universities in the both the University of California and California State University systems.

Complete and sign this form to request an exemption from Nonresident Tuition. You must submit any documentation required by the College or University (for example, proof of high school attendance in California). Contact the California Community College, University of California, or California State University campus where you intend to enroll (or are enrolled) for instructions on documentation, additional procedures and applicable deadlines.

ELIGIBILITY:
I, the undersigned, am applying for a California Nonresident Tuition Exemption for eligible California high school graduates at (specify the college or university) _____________________________ and I declare the following:

☐ Yes  ☐ No  I have graduated from a California high school or have attained the equivalent thereof, such as a High School Equivalency Certificate, issued by the California State GED Office or a Certificate of Proficiency, resulting from the California High School Proficiency Examination.

☐ Yes  ☐ No  I have attended high school in California for three or more years.

Provide information on all school(s) you attended in grades 9 - 12:

<table>
<thead>
<tr>
<th>School</th>
<th>City</th>
<th>State</th>
<th>Dates: From – Month/Year</th>
<th>To – Month/Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Documented high school attendance and graduation (or its equivalent) is required by the University of California, the California State University and some California Community Colleges. Follow campus instructions.

Check the box that applies to you – check only one box:

☐ I am a nonimmigrant alien as defined by federal law. [Nonimmigrant aliens have been admitted to the United States temporarily and include, but are not limited to, foreign students (persons holding F visas) and exchange visitors (persons holding J visas).]

OR

☐ I am NOT a nonimmigrant alien. [U.S. citizens, permanent residents, or aliens without lawful immigration status, among others, should check this box.]

AFFIDAVIT:
I, the undersigned, declare under penalty of perjury under the laws of the State of California that the information I have provided on this form is true and accurate. I understand that this information will be used to determine my eligibility for the nonresident tuition exemption for eligible California high school graduates. I hereby declare that, if I am an alien without lawful immigration status, I have filed an application to legalize my immigration status or will file an application as soon as I am eligible to do so. I further understand that if any of the above information is untrue, I will be liable for payment of all nonresident charges from which I was exempted and may be subject to disciplinary action by the College or University.

Print Full Name (as it appears on your campus student records)  Campus/Student Identification Number
Print Full Mailing Address (Number, Street, City, State, Zip Code)  Email Address (Optional)
Phone Number (Optional)
Signature  Date

RETURN COMPLETED FORM TO SHASTA COLLEGE ADMISSIONS AND RECORDS OFFICE FOR APPROVAL

Revised 3/07
California Nonresident Tuition Exemption

For Eligible California High School Graduates
(The law passed by the Legislature in 2001 as "AB 540")

GENERAL INFORMATION

Any student, other than a nonimmigrant alien, who meets all of the following requirements, shall be exempt from paying nonresident tuition at the California Community Colleges, the University of California, and the California State University (all public colleges and universities in California).

- **Requirements:**
  - The student must have attended a high school (public or private) in California for three or more years.
  - The student must have graduated from a California high school or attained the equivalent prior to the start of the term (for example, passing the GED or California High School Proficiency exam).
  - An alien student who is without lawful immigration status must file an affidavit with the college or university stating that he or she has filed an application to legalize his or her immigration status, or will file an application as soon as he or she is eligible to do so.

- **Students who are nonimmigrants** [for example, those who hold F (student) visas, B (visitor) visas, etc.] are not eligible for this exemption.

- The student must file an exemption request including a signed affidavit with the college that indicates the student has met all applicable conditions described above. Student information obtained in this process is strictly confidential unless disclosure is required under law.

- Students eligible for this exemption who are transferring to another California public college or university must submit a new request (and documentation if required) to each college under consideration.

- Nonresident students meeting the criteria will be exempted from the payment of nonresident tuition, but they will not be classified as California residents. They continue to be "nonresidents."

- AB540 does not provide student financial aid eligibility for undocumented alien students. These students remain ineligible for state and federal financial aid.

PROCEDURES FOR REQUESTING THIS EXEMPTION FROM NONRESIDENT TUITION

**California Community Colleges:** Complete the form on the reverse. Submit it to the Admissions Office at the community college where you are enrolled or intend to enroll. You may be required to submit additional documentation. Call the college Admissions Office if you have questions.

**University of California:** The University of California (UC) system has its own nonresident tuition exemption application and affidavit form, but it will accept the exemption request form used by the California Community Colleges and the California State University. Your campus has established deadlines for submission of exemption requests; however, requests are not to be submitted until you have been admitted to a UC campus. Some students, such as transfer, graduate, and professional students, also must submit their official high school transcripts; check your campus for specific instructions. Once you are determined to be eligible for the exemption, you will continue to receive it as long as you fulfill the eligibility requirements or until the University no longer offers this exemption. The exemption covers the Nonresident Tuition Fee and the Educational Fee differential charged to nonresident students. Applying for the exemption does not alter your responsibility to pay by the campus deadline any nonresident tuition and associated fees that may be due before your eligibility is determined. For campus-specific instructions regarding documentation and deadline dates, contact the campus Office of the Registrar.

**California State University:** Complete the form on the reverse. Contact the Office of Admissions and Records at the CSU campus where you are enrolled or intend to enroll for instructions on submission, deadline information, and additional requirements. You will be required to submit final high school transcripts and appropriate records of high school graduation or the equivalent, if you have not done so already. Call the Office of Admissions and Records at the campus if you have questions.

**Instructions for Shasta College Students:** Please submit an official copy of your high school transcript documenting three years of attendance **AND** proof of your high school graduation **OR** a copy of your G.E.D. or California Proficiency Certificate. Any questions should be directed to the Shasta College Admissions office, ATTN: Residency Technician at (530) 242-7664.

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.
Chapter 3 - Finance

Debts Owed to the College
Students who fail to comply with College rules or regulations, pay debts owed to the College, or pay for damaged College property may not be allowed to register, receive degrees or certificates, have transcripts forwarded, receive enrollment verifications, and/or receive other services related to student records. When the student has cleared the obligation with the College, the impoundment of records will be removed.

Financial Aid for Enrollment Fees
If you are a California resident, you may qualify for a Board of Governors fee waiver (BOGFW) to cover your enrollment fee. There are three ways to qualify for enrollment fee assistance:

1. For 2013-14, if you fall within these income levels:
   Number in Household (including yourself)  2012 Total Family Income
   1 $16,755 or less
   2 $22,695 or less
   3 $28,635 or less
   4 $34,575 or less
   + Add $5,940 for each additional family member

2. If you or your family receives any ONE of the following types of untaxable income:
   a. Aid to Families with Dependent Children (TANF/CALWORKS); or
   b. Supplemental Security Income (SSI/SSP); or
   c. General Assistance/General Relief

3. Special Classification:
   a. Deceased/Disabled Veterans Dependent’s Fee Waiver – certification provided by the California Department of Veterans Affairs or your county Veterans Services Office or the National Guard Adjutant General.
   b. A recipient of the Congressional Medal of Honor or a child of a recipient, or a dependent of a victim of the September 11, 2001 terrorist attack.
   c. A dependent of deceased law enforcement/fire suppression personnel killed in the line of duty.

You may also qualify for the BOGFW fee waiver by filing the Free Application for Federal Student Aid (FAFSA).

Students may apply for the BOGFW online at BOGFewaiverApplication. You may complete an online application or download a printable PDF application. Only complete one. Applications for 2013-14 are good for Summer 2013, Fall 2013, and Spring 2014.

DEADLINES: To file for a BOGFW fee waiver with the FAFSA, apply NOW. Applications take a minimum of eight (8) weeks to process. For enrollment fee assistance only, apply one (1) week prior to registration.

Students who are awarded a Board of Governors fee waiver (BOGFW) after they have paid their enrollment fees will be reimbursed only for the semester in which they are granted a BOGFW fee waiver. The fee waivers will not be applied retroactively to prior semesters.

For further information contact: SHASTA COLLEGE FINANCIAL AID OFFICE, Room 108, or phone (530) 242-7700.

Registration and Related Fees
Refer to Chapter 2 – Admission and Enrollment Information.

Financial Aid/Scholarships
(530) 242-7700 Room 108

FINANCIAL AID
The Financial Aid Office assists students in funding their educational objective through federal and state financial aid programs. We seek to package and award as many eligible students within an adequate time frame to enable students to financially prepare for school. It is our belief that a well-prepared student is a successful student. Awarding financial aid equips our students with the resources needed to successfully accomplish their declared educational goals.
Chapter 4 – Grading and Academic Standards

Audit

Please see Chapter 2 – Admission and Enrollment Information for details.

Grading

It is the responsibility of the instructor for the assignment of grades in any Shasta College course. To insure that grading is done consistently and fairly, the instructor shall:

1. Develop a grading procedure prior to the beginning of the course and have this procedure clearly communicated to each student on the first day handout (syllabus) of each course.
2. Establish a grading procedure that shall guarantee the academic integrity of the course at the appropriate level.
3. Once established, adhere to the course grading procedure throughout the semester.
4. Give sufficient evaluations throughout the course to insure that students are aware of progress and to inform the students of standing in the course.
5. Abide by established examination schedules of the college.
6. Adhere to established deadlines and use appropriate forms for submitting grades to the Records Office.
7. File all grade changes within two (2) years of the original grade being issued.

GRADE CHANGE PROCEDURE

Under no circumstances except for completion of work for removal of an incomplete, may a grade change be made as the result of work completed or presented following the close of a grading period (Administrative Procedure 4230). The Incomplete (I) may be made up no later than one year following the end of the term in which it was assigned. (Note: Fall 79 to Fall 81 students had one semester in which to make up incompletes. Beginning with Fall 81 a written record must be filed by the instructor stipulating the condition to be made for an evaluative grade.) ALL GRADE CHANGES MUST BE SUBMITTED DIRECTLY BY THE INSTRUCTOR TO THE ADMISSIONS AND RECORDS OFFICE.

GRADE CHANGE APPEAL PROCEDURE – BOARD POLICY 4230

The instructor of the course shall determine the grade to be awarded to each student. The determination of the student’s grade by the instructor is final in the absence of mistake, fraud, bad faith, or incompetence. The removal or change of an incorrect grade from a student’s record shall only be done upon authorization by the instructor of the course. In the case of mistake, fraud, bad faith, or incompetence, the final determination concerning removal or change of grade will be made by the Vice President of Academic Affairs or his/her designee.

The procedure for appealing a grade is available at the Admissions and Records Office.

Grading Definitions

The course grading procedure is based on the established course objectives according to the following grade definitions:

A – Excellent - Outstanding achievement of the course objectives. (4 grade points)

B – Good - Above average achievement of the course objectives. The quality of work demonstrates a comprehensive knowledge of the subject matter and a marked ability to interpret it. (3 grade points)

C – Fair to Average - Satisfactory or average achievement of the course objectives. The performance fulfills the course requirements in both quality and quantity and meets acceptable standards for graduation. (2 grade points)

D – Passing - Less than satisfactory achievement below the course objectives but such that it is not necessary to repeat the course. The level of achievement is not generally satisfactory for advancement in studies in the same or related areas. (1 grade point)

F – Failing - Failure to achieve objectives of the course. The performance is undeserving of course credit. (0 grade points)

P – Pass - Satisfactory achievement of course objectives. Student is passing the course with a "C" or better. (Not used in grade point calculations.) See Board Policy 4230 for more information.

FW – Failing Withdrawal - A student who has both ceased participating in a course sometime after the last day to withdraw from the course without having achieved a final passing grade, and who has not received district authorization to withdraw from the course due to extenuating circumstances may be assigned an "FW".

NP – No Pass - Student is doing "D" or "F" work in the course. (Not used in grade point calculations.)

Non-Evaluative Symbols Definitions

AU – Audit – Auditing is to allow students to participate in class activities beyond the course repetition limit and to allow students to repeat a course with the intent of upgrading needed skills or reviewing course content. Priority will be given to credit-seeking students.

I – Incomplete - Incomplete academic work for unforeseeable emergencies and justifiable reasons at the end of the term may result in an "I" symbol being entered in the student’s record. The condition for removal of the "I" shall be stated by the instructor in a written record (form available from the registrar). This record shall contain the conditions for removal of the "I" and the grade assigned in lieu of its removal. This record must be given to the student with a copy on file with the registrar until the "I" is made up or the time limit has passed. A final grade shall be assigned when the work stipulated has been completed and evaluated, or when the time limit for completing the work has passed. The "I" may be made up no later than one year following the end of the term in which it was assigned; however, the student may petition the Scholastic Standards Committee for a time extension due to unusual circumstances.

IP - In progress - The "IP" symbol shall be used to denote that the course extends beyond the normal end of an academic term. It indicates that work is "in progress", but that the assignment of a substantive grade must await its completion. The "IP" symbol shall remain on the student's permanent record in order to satisfy enrollment documentation. The appropriate evaluative grade and unit credit shall be assigned and appear on the student's record for the term in which the course is completed. The "IP" shall not be used in calculating grade point averages.

RD - Report Delayed - The "RD" symbol shall be assigned by the registrar only. It is to be used when there is a delay in reporting the grade of a student due to circumstances beyond the control of the student. It is a temporary notation to be replaced by a permanent symbol as soon as possible. "RD" shall not be used in calculating grade point averages.

MW – Military Withdrawal – Military withdrawal occurs when a student who is a member of an active or reserve United States military service receives orders (other than TDY) compelling a withdrawal from courses. A student must file a petition requesting this option and attach a copy of military orders at the Admissions and Records Office. Military withdrawals will not be counted in progress probation and dismissal calculations. See the Dean of Enrollment Services for specific details.

W - Withdrawal - Withdrawal - Students may withdraw from a class after the official “drop” date and up through the last day of the fourteenth week or 75% of the term, whichever is less. The notation “W” will appear on the student’s transcript and will not be used in calculation of grade point average. Excessive “W” shall, however, be used as factors in probation and dismissal procedures. IT IS THE STUDENT’S RESPONSIBILITY TO OBTAIN FORMS AND SUBMIT THE NECESSARY PAPERWORK TO WITHDRAW FROM A CLASS(ES). An instructor may also drop a student during the first 75% of the class for non-participation. Forms are available from Admissions and Records, Extended Education sites, or by mail. Students who have not dropped or withdrawn from a class before the end of the fourteenth week or 75% of the term will be assigned a course grade.

Non-Traditional Ways to Earn Credit

ADVANCED PLACEMENT EXAMINATION CREDIT

Shasta College will award credit to students scoring a 3, 4, or 5 on Advanced Placement examinations as indicated below. Students should have test scores sent to the Shasta College Admissions and Records Office and then contact the office during their first semester to have credit posted to their transcripts. Each transfer institution will determine the number of units awarded and the courses satisfied according to individual campus policies. For specific course information, students are encouraged to meet with a counselor.

All CSU campuses will accept the exams shown below toward fulfillment of the designated General Education-Breadth area if the examination is included in a full or subject-area certification. The CSU campus to which the student is transferring determines the total number of units awarded for successful completion of an Advanced Placement examination and the applicability of the examination to other graduation requirements.
The University of California grants credit for all Advanced Placement examinations on which a student scores 3 or higher. The credit may be subject credit, graduation credit, or credit toward General Education or breadth requirements, as determined by evaluators at each campus. Shasta College will certify the units for the IGETC General Education area indicated below.

<table>
<thead>
<tr>
<th>AP Subject Exam</th>
<th>CSU GE AREA</th>
<th>IGETC AREA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art History</td>
<td>C1 or C2</td>
<td>3A or 3B</td>
</tr>
<tr>
<td>Biology</td>
<td>B2 and B3</td>
<td>5B with lab</td>
</tr>
<tr>
<td>Calculus AB</td>
<td>B4</td>
<td>2A</td>
</tr>
<tr>
<td>Calculus BC</td>
<td>B4</td>
<td>2A</td>
</tr>
<tr>
<td>Chemistry</td>
<td>B1 and B3*</td>
<td>5A with lab</td>
</tr>
<tr>
<td>Chinese Language and Culture</td>
<td>C2</td>
<td>3B</td>
</tr>
<tr>
<td>English Language</td>
<td>A2</td>
<td>1A</td>
</tr>
<tr>
<td>English Literature</td>
<td>A2 + C2</td>
<td>1A or 3B</td>
</tr>
<tr>
<td>Environmental Science</td>
<td>B2 + B3</td>
<td>5A with lab</td>
</tr>
<tr>
<td>Environmental Science</td>
<td>B1 + B3</td>
<td>5A with lab</td>
</tr>
<tr>
<td>European History</td>
<td>C2 or D6</td>
<td>3B or 4F</td>
</tr>
<tr>
<td>French Language</td>
<td>C2*</td>
<td>3B and 6A</td>
</tr>
<tr>
<td>French Literature</td>
<td>C2</td>
<td>3B and 6A</td>
</tr>
<tr>
<td>German Language</td>
<td>C2*</td>
<td>3B and 6A</td>
</tr>
<tr>
<td>Government &amp; Politics: Comparative</td>
<td>D8</td>
<td>4H</td>
</tr>
<tr>
<td>Human Geography</td>
<td>D5</td>
<td>4E</td>
</tr>
<tr>
<td>Italian Language and Culture</td>
<td>C2*</td>
<td>3B and 6A</td>
</tr>
<tr>
<td>Japanese Language and Culture</td>
<td>C2</td>
<td>3B and 6A</td>
</tr>
<tr>
<td>Latin Literature</td>
<td>C2*</td>
<td>3B and 6A</td>
</tr>
<tr>
<td>Latin: Virgil</td>
<td>C2</td>
<td>3B and 6A</td>
</tr>
<tr>
<td>Macroeconomics</td>
<td>D2</td>
<td>4B</td>
</tr>
<tr>
<td>Microeconomics</td>
<td>D2</td>
<td>4B</td>
</tr>
<tr>
<td>Music Theory</td>
<td>C1*</td>
<td>NA</td>
</tr>
<tr>
<td>Physics B</td>
<td>B1 + B3*</td>
<td>5A with lab</td>
</tr>
<tr>
<td>Physics C (Electricity/Magnetism)</td>
<td>B1 + B3</td>
<td>5A with lab</td>
</tr>
<tr>
<td>Psychology</td>
<td>D9</td>
<td>4I</td>
</tr>
<tr>
<td>Spanish Language</td>
<td>C2*</td>
<td>3B and 6A</td>
</tr>
<tr>
<td>Spanish Literature</td>
<td>C2</td>
<td>3B and 6A</td>
</tr>
<tr>
<td>Statistics</td>
<td>B4</td>
<td>3A</td>
</tr>
<tr>
<td>United States History</td>
<td>(C2 or D6) + US-1</td>
<td>3B or 4F</td>
</tr>
<tr>
<td>World History</td>
<td>C2 or D6</td>
<td>3B or 4F</td>
</tr>
</tbody>
</table>

*Check with a counselor for restrictions.

CHALLENGE (CREDIT BY EXAMINATION) – BOARD POLICY 4235
A student may challenge a class by taking an examination. Examinations may be taken only once and, if passed, the credit will be posted on the student’s permanent academic record. No more than 15 units may be earned through this procedure and only courses determined by each Division of the college are open for the option.

This option is restricted to students registered for credit during the fall or spring semester. Credit by examination is not possible during the summer session. Petition (challenge) forms are available from each Division Office. A listing of approved courses can be obtained from the Division office.

CREDIT THROUGH THE COLLEGE LEVEL EXAMINATION PROGRAM (CLEP) – BOARD POLICY 4235
Upon completion of six semester units at Shasta College, a student may submit official College Level Examination Program (CLEP) test results to Shasta College from the College Entrance Examination Board (CEEB). Contact the CEEB for a testing center location (Shasta College is not a testing center). CEEB established the program to serve students who have a college-level education developed outside of the classroom (e.g. military experience/training). The following restrictions apply:

- Up to 30 semester units may be applied toward an Associate degree.
- A scaled score of 50 or higher on a CLEP examination will earn credit. (For the older General Exams, a score of 500 or better will earn credit.)
- Units awarded for satisfactory completion of CLEP examinations will post as electives, except as noted by departmental policy referenced below.
- Grades and grade points will not be assigned to CLEP units.
- Units awarded through CLEP will not apply toward the 12-unit residency requirement for Shasta College.
- The Univ. of California (UC) does not accept credit awarded through CLEP.
- Where considered by the appropriate department and division, CLEP Examinations may satisfy specific courses or a specific course prerequisite. Contact the appropriate department or Division to determine which, if any, of the examinations may satisfy specific courses or course prerequisites. Minimum scores for Shasta College course equivalencies, where established, may be obtained from Admissions and Records.

- Contact the Admissions and Records Office for more information.

Shasta College will grant credit for the following CLEP Subject Exams in accordance with the CSU system-wide policy:

<table>
<thead>
<tr>
<th>CLEP EXAM</th>
<th>CSU GE AREA</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Algebra &amp; Trigonometry</td>
<td>B4</td>
</tr>
<tr>
<td>Calculus &amp; Elementary Functions</td>
<td>B5</td>
</tr>
<tr>
<td>General Chemistry</td>
<td>B4</td>
</tr>
</tbody>
</table>

DISTANCE EDUCATION (DE)
Distance education means providing access to education beyond the traditional patterns of campus-based education and programs. It does so by offering a variety of programs and courses held at each of the three Extended Education campuses in Red Bluff, Weaverville, and Burney as well as other sites throughout the District. It also means offering classes in a variety of formats including live, internet-based (online/hybrid/web enhanced), and 2-way interactive television (ITVA) instruction. Students may register online, on campus and at Extended Education campuses for all Distance Education courses.

All courses offered in these formats are assigned rigorous learning experience found in traditional face-to-face courses. These courses are designed for individuals who are unable to attend campus classes on a regular basis, prefer independent learning, or would like to take courses at their convenience.

Interactive Television (ITV): A variety of courses are available at selected sites using two-way interactive video technology. These courses originate on the Redding campus or one of the Extended Education campuses with real-time delivery of the classroom activities to the other sites. Students are able to fully interact with the faculty member and other students at each of the sites. Procedures for examinations, assignments, and other class requirements are explained at the first class meeting.

Internet-based Courses: Courses are available in a variety of Internet-based formats (online, hybrid, or web enhanced) and typically offer greater flexibility for students’ schedules. Contrary to some beliefs, however, Internet-based courses are not easy. They require a well disciplined, motivated student with computer skills, familiarization with the Internet, a reliable computer, and a high-speed Internet connection. State regulations regarding enrollment in online classes may change and online classes may not be available to students residing outside California. Three types of Internet-based courses are offered at Shasta College:

1. Web Enhanced: Any class which meets face to face for the full number of instructional hours AND utilizes the Internet to augment course materials is a web enhanced course. No class hours are scheduled to be replaced by online time. Web enhanced courses are listed in the front part of the schedule with other face to face course offerings, but may require login to SC Online. Consult the MyShasta online schedule for specific information.

2. Hybrid: A hybrid class meets face to face for some number of instructional hours AND a portion of the required instructional hours is conducted online (normally requiring login to SC Online). Students MUST access online materials to successfully complete course requirements. Hybrid courses are listed with the days and times of
actual face to face meetings followed by "INTERNET.

3. Online: A fully online class is one which requires that all class content, activities, and interaction be done online (normally requiring login to SC Online). Some instructors may include on-campus orientation, student conferences, or other on-campus events (consult the MyShasta online schedule for specific information). Students MUST access online materials to successfully complete course requirements. Fully online courses are listed as “INTERNET.” State regulations regarding enrollment in online classes may change and online classes may not be available to students residing outside California.

INDEPENDENT STUDY

Independent study provides a forum for advanced work in a given field of study. A student may contract with a full-time instructor to do independent study in a specific subject area in which he/she has exhausted the regular curricular offerings provided that:

99 - Transfer Level Courses* -- The student has a declared major or already possesses a degree and has completed a minimum of 12 transfer units at Shasta College.

199 - Non-Transfer Level Courses* -- The student has completed a minimum of 12 units at Shasta College

Independent study can be taken for .5-.3 units. The total hours required are as follows:

.5 unit = 27 hours; 1.0 unit = 54 hours; 1.5 units = 81 hours;
2.0 units = 108 hours; 2.5 units = 135 hours; and 3.0 units = 162 hours.

*Note: Any combination of these courses may be repeated three times (total of four enrollments) or a maximum of six independent study units.

Forms and additional information are available from your instructor or the Division Office.

INTERNATIONAL BACCALAUREATE (IB) EXAMINATIONS

<table>
<thead>
<tr>
<th>IB Exam</th>
<th>CSU GE AREA</th>
<th>IGETC AREA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology HL</td>
<td>B2</td>
<td>5B (without lab)</td>
</tr>
<tr>
<td>Chemistry HL</td>
<td>B1</td>
<td>5A (without lab)</td>
</tr>
<tr>
<td>Economics HL</td>
<td>D2</td>
<td>4B</td>
</tr>
<tr>
<td>Geography HL</td>
<td>D5</td>
<td>4E</td>
</tr>
<tr>
<td>History (any region) HL</td>
<td>C2 or D6</td>
<td>3B or 4F</td>
</tr>
<tr>
<td>Language A1 (any language except English) HL</td>
<td>C2</td>
<td>3B and 6A</td>
</tr>
<tr>
<td>Language A2 (any language except English) HL</td>
<td>C2</td>
<td>3B and 6A</td>
</tr>
<tr>
<td>Language A1 (any language) HL</td>
<td>C2</td>
<td>3B</td>
</tr>
<tr>
<td>Language A2 (any language) HL</td>
<td>C2</td>
<td>3B</td>
</tr>
<tr>
<td>Language B (any language) HL</td>
<td>N/A</td>
<td>6A</td>
</tr>
<tr>
<td>Mathematics HL</td>
<td>B4</td>
<td>2A</td>
</tr>
<tr>
<td>Physics HL</td>
<td>B1</td>
<td>5A</td>
</tr>
<tr>
<td>Psychology HL</td>
<td>D9</td>
<td>4I</td>
</tr>
<tr>
<td>Theatre HL</td>
<td>C1</td>
<td>3A</td>
</tr>
</tbody>
</table>

MILITARY EXPERIENCE

In general, Shasta College will follow the recommendations of the State Board of Educ., the Univ. of Calif., and the American Council of Education in granting credit for military experience. Total credit for military experience is limited to 15 units.

Correspondence courses given by the United States Armed Forces Institute or by an accredited college or university are accepted for credit value as recommended by the American Council on Education. College credit will not be allowed for duplicated training. The total number of units granted for USAFI courses shall not exceed 24 units. No credit will be given at Shasta College for General Education Development tests.

Credits will be granted to those students who present a DD214. The student will be required to provide the Registrar with a copy of his/her DD214 for verification. Application for such credit must be made on a form obtained from the Registrar's Office at Admissions and Records. This credit must be verified. All new Veterans to Shasta College should call for information and an appointment at (530) 242-7662 or visit the Admissions and Records Office, Bldg. 100.

PRIOR WORK EXPERIENCE

A student having experience related to the program in which he/she is enrolled may be granted credit for such experience. The credit is applicable only for an Associate degree at Shasta College. Students applying for credit should obtain an application from the Admissions and Records Office.

WORKSITE LEARNING

Students who are interested in combining practical work experience with classroom instruction may enroll in a Worksite Learning class. Worksite Learning classes (the complete list of courses provided below) are open entry. This means that the student may enroll throughout the semester, but must complete all work by the end of the semester (per agreement with the instructor). One unit of Worksite Learning credit is granted for each 75 hours of actual on-the-job activity for a paid work position or 60 hours for a non-paid work position of on-the-job activity. It is imperative for the student to determine how many units he/she should sign up for. This should be worked out with the instructor in the initial orientation meeting. If the student is unable to verify enough work hours to meet the units for which he/she enrols, the student will receive an "F" in the course. For example, if a student enrols in a three (3)-unit worksite learning class and fails to verify 225 paid hours of on-the-job activity by the deadline established by the instructor, the student will receive an "F" in the class. The student has the same withdrawal and add/drop options as for any other course.

The following courses are listed in the catalog under the appropriate disciplines as worksite learning classes. For details look under the specific prefixes. The classes, units, instructors, and times of the initial orientation meetings for each semester are listed in the current schedule of classes. Not all worksite learning classes are offered every semester.


Please note that it is up to the instructor in the specific discipline to determine if the student’s proposed work assignments are related to the student’s major. If a proposed work assignment is not discipline/major related, credit will not be granted.

Each worksite learning course has a prerequisite or co-requisite. Check the course description for specific information.

*WSL 94 is considered a General Work Experience course for supervised employment that is intended to assist students in acquiring desirable work habits, attitudes and career awareness. The work experience need not be related to the student’s educational goals.

FINANCIAL AID STUDENTS: Students must maintain concurrent enrollment in seven (7) units which include worksite learning units.

VETERAN STUDENTS: Worksite learning will NOT be paid unless it is required for the student’s major. In addition, veterans receiving veteran’s educational benefits for WSL units MUST register for the appropriate co-requisite in the same semester.

Pass/No Pass Policy

Shasta College offers two categories of “Pass/No Pass” courses. “Pass/No Pass” classes must be so designated in the college catalog. The catalog must specify into which “Pass/No Pass” category each course falls. (Title 5, Section 55022)

The two categories are:

1) Courses which are designated as only Pass/No Pass, and
2) Courses in which a student has the option of receiving a grade or taking the course for credit through Pass/No Pass. A student who exercises that option and applies to take a course for Pass/No Pass shall not receive a grade for that course and will receive a “P” for credit or a “NP” for no credit shall appear on his/her official transcript of record. Units attempted for which the symbol “NP” is recorded shall be considered in probation and dismissal procedures.

Students may use the Pass/No Pass grade option in no more than one course per semester, and may apply no more than ten semester credit (P) units toward the A.A. Degree.

Students who are awarded credit (P) in a course shall receive both course credit and the full unit credit for the course. In computing a student’s grade-point average, grades of “Pass/No Pass” are omitted.

It is the responsibility of the student to be familiar with the “Pass/No Pass” policy in force at the college or university campus to which he/she hopes to transfer and to comply with that policy.

Repetition of a Course: Board Policy 4225

Repetition of a college course is restricted and shall occur only under the following conditions:

For purposes of this policy, an evaluative grade is defined as a grade of A, B, C, D, F, or PW.

Repetition of a college course is generally restricted to two repetitions for a total of three enrollments and shall occur under the following conditions:

...
Students receiving a D, F, FW, W, or NP grade in a course may repeat the course once without petition. When a course is repeated under this condition, the last evaluative grade earned shall be the grade used in the computation of the student’s grade point average.

In order to repeat a course one time in which an A, B, C or P grade was earned, the student must petition the Scholastic Standards Committee for permission prior to enrolling in the course. When a course is repeated under this condition, the grade awarded shall not be calculated in the student’s grade point average. However, the new grade may be considered by a specific program for admission to that program.

In order to repeat a course a third time (for a total of four enrollments) in which a D, F, FW, W, or NP grade was earned, the student must petition the Scholastic Standards Committee for permission prior to enrolling in the course. When a course is repeated under this condition, the last evaluative grade earned shall be the grade used in the computation of the student’s grade point average.

When course repetition occurs, the student’s permanent academic record shall clearly indicate any courses repeated using an appropriate symbol and be annotated in such a manner that all work remains legible, insuring a true and complete academic history.

When there has been a significant lapse of time, defined as 5 years, since a student obtained a satisfactory grade in a course, the student may petition the Scholastic Standards Committee to repeat the course. When repetition due to a significant lapse of time is granted, the grade received will not be calculated in the GPA.

Scholastic Deficiency

For the purposes of Board Policy, the phrases “units attempted,” “all units,” or “all units attempted,” mean all units of credit for which the student was enrolled and for which entries of “W”, “I”, and “NC” are recorded shown by the official academic record shall be placed on progress probation when the percentage of units in which a student has enrolled and for which entries of “W”, “I,” and “NC” are recorded reaches or exceeds fifty percent (50%).

For record purposes, any changes made in the student’s class schedule as a result of a counselor recommendation shall be treated as occurring within the first four weeks of the semester or 30% of the term for classes less than a semester in length.

NOTIFICATION OF PROBATION

Students shall be notified by the Admissions and Records Office that they are on probation no later than 20 working days after the start of the next succeeding semester. The notification will include an explanation of the conditions that the student must satisfy as a result of their probation.

REMOVAL FROM PROBATION

A student on academic probation for a grade point deficiency shall be removed from probation when the student’s accumulated grade point average is 2.0 or higher.

A student on progress probation because of an excess of units for which entries of “W”, “I,” and “NP” are recorded shall be removed from probation when the percentage of units in this category drops below fifty percent (50%).

EXTENSION OF PROBATION

A student on academic probation who earns a grade point average of 2.0 or better for the semester, but whose cumulative grade point average still results in academic probation, shall have his/her probation extended an additional semester prior to dismissal.

A student on progress probation who completes more than 50% of all units attempted for the semester, but whose cumulative records still result in progress probation, shall have his/her probation extended an additional semester prior to dismissal.

Standards for Academic Dismissal

For purposes of this section, semesters shall be considered consecutive on the basis of the student’s enrollment (for example, a fall semester followed by a fall semester shall be considered consecutive if the student was not enrolled in the spring semester of that academic year).

A student who is on academic probation shall be dismissed if the student earned a cumulative grade point average of less than 2.0 in all units attempted and graded in each of three consecutive semesters, including the semester that placed the student on probation (which were graded on the basis of the grading scale described in Board Policy, Section 4230). A student who has been placed on progress probation shall be dismissed if the percentage of units in which the student has been enrolled for which entries of “W”, “I,” and “NC” (as defined in Board Policy, Section 4230) are recorded in at least three consecutive semesters reaches or exceeds fifty percent (50%) in accordance with Board Policy, Section 4230.

NOTIFICATION OF DISMISSAL

The Admissions and Records Office shall make every reasonable effort to notify a student of dismissal from Shasta College due to academic disqualification as soon as that information is available following the completion of the semester. If a dismissed student has already enrolled in classes for a fall or spring semester, the Admissions and Records Office will disenroll the student retroactively as of the first day of the new term. The Admissions and Records Office will notify the student in writing of this action. Dismissal does not apply to summer school.

REINSTATEMENT

A student who has been dismissed from Shasta College because of academic or progress disqualification must meet with a counselor and then file a request for reinstatement with the Admissions and Records Office. A dismissed student may be reinstated after an absence of one or more fall or spring semesters. This will not preclude the student from being eligible for priority registration.

a. Academic Dismissal - A student who was dismissed because of academic probation must earn satisfactory grades (a grade point average of 2.0 or better) during the semester of reinstatement. A student who does not earn the required grade point average will be dismissed.

b. Progress Dismissal - A student who was dismissed because of progress probation must satisfactorily complete more than 50% of all units attempted during the semester of reinstatement. A student who does not complete the required percentage of units will be dismissed.

APPEAL

Any student may appeal probation or dismissal procedures and regulations if that student feels there are special mitigating circumstances. All appeals shall be sent to the Scholastic Standards Committee, accompanied by a report from the student’s counselor.

Withdrawing From a Class with a “W” Grade

THE CONSEQUENCES OF WITHDRAWING FROM A CLASS ARE CHANGED EFFECTIVE SUMMER 2012. Refer to “Repetition of a Course” earlier in this chapter for limitations and other information.

Students may withdraw from a class after the official “drop” date and up through the last day of the fourteenth week or 75% of the term, whichever is less. A student may drop a class and have no notation appear on their transcripts through the census date of each class. After the census date of each class and up to 75% a student may withdraw from a class. The notation “W” will appear on the student’s transcript and will not be used in calculation of grade point average. Excessive “W’s” shall, however, be used as factors in probation and dismissal procedures. An instructor may also drop a student during the first 75% of the class for non-participation.

IT IS THE STUDENT’S RESPONSIBILITY TO OBTAIN FORMS AND SUBMIT THE NECESSARY PAPERWORK TO WITHDRAW FROM CLASS(ES). Forms are available from Admissions and Records, Extended Education sites, or by mail. Students can drop a class in person at Admissions and Records or Extended Education sites throughout Shasta County. Students who have dropped or withdrawn from a class before the end of the fourteenth week or 75% of the term will be assigned a course grade.
**Shasta College 2013-14**

**Associate Degree Requirements**

The information provided below gives a brief description of the degrees offered at Shasta College. It does not outline all of the requirements to obtain an associate degree from Shasta College or all of the requirements to transfer to a four-year college or university. All students should schedule an appointment to speak with a counselor to ensure that they meet all of the degree and/or transfer requirements. Meeting with a counselor also helps ensure that the student is pursuing a degree that meets his or her educational and career goals.

### TRANSFER DEGREES

The following associate degrees for transfer are designed for the student who wishes to complete lower-division requirements in preparation for transfer to a four-year college or university.

#### AA-T and AS-T (Transfer Degree):

Designed for the student planning on transferring to the California State University (CSU) system. Students complete the CSU or IGETC general education pattern and specific courses related to their major. Students who are awarded these degrees are guaranteed admission with junior standing in the CSU system and specific community college graduation requirements.

Students who have been awarded an AA-T or AS-T are able to complete their remaining requirement for the 120-unit baccalaureate degree within 60 semester or 90 quarter units.

Current and prospective community college students are encouraged to meet with a counselor to review their options for transfer and to develop an educational plan that best meets their goals and needs. Shasta College offers the following AA-T/AS-T degrees:

<table>
<thead>
<tr>
<th>Administration of Justice</th>
<th>Business Administration</th>
<th>Communication Studies</th>
<th>Early Childhood Education</th>
<th>Kinesiology</th>
<th>Psychology</th>
<th>Sociology</th>
<th>Studio Arts*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theatre Arts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

*Pending Approval

#### REQUIREMENTS:

1. **Unit Requirement:** Minimum of 60 California State University (CSU) transferrable semester units, courses numbered 1-99 at Shasta College.
2. **Scholarship Requirement:** An overall grade point average (GPA) of not less than 2.0 in all transferrable coursework. While a minimum of 2.0 is required for this degree, some majors or transfer universities may require a higher GPA. Please consult with a counselor for more information.
3. **Residence Requirement:** The last twelve (12) semester units of the sixty (60) semester units must be completed in residence at Shasta College immediately prior to graduation or a minimum of forty-eight (48) semester units must have been completed in residence at Shasta College if the student is not in attendance at the time of qualification for graduation.
4. **Course Requirements:**
   a. **Major Field of Study:** Select an "AA-T" or "AS-T" major. All courses in the major must be completed with a grade of "C" or higher.
   b. **General Education:**
      i. Advanced Placement (AP) examination credit can be used to satisfy both CSU GE and IGETC.
      ii. Credit through the College Level Examination Program (CLEP) can be used to satisfy CSU GE. Note: The University of California does not accept credit awarded through CLEP.
5. **Competency Requirements:**
   - Oral Communication, English Composition, Critical Thinking, and Quantitative Reasoning courses must be completed with a grade of "C" or higher.
6. **These degrees do not** require completion of a multicultural course or demonstration of computer literacy for Shasta College graduation purposes.

#### AA – University Studies Degree:

Designed for students who plan on transferring to a four-year college or university. Students complete a General Education pattern, one emphasis area, and electives to total a minimum of 60 transferrable units for the AA degree.

<table>
<thead>
<tr>
<th>Agriculture Sciences</th>
<th>Allied Health</th>
<th>Behavioral Science</th>
<th>Biological Sciences</th>
<th>Business Administration</th>
<th>Child Development</th>
<th>Criminal Justice</th>
<th>Earth System Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td>Geology</td>
<td>Humanities</td>
<td>Language Arts</td>
<td>Liberal Studies–Teaching Prep</td>
<td>Mathematics</td>
<td>Meteorology/Climatology</td>
<td>Multicultural Studies</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>Oceanography</td>
<td>Physical Education</td>
<td>Physical Sciences</td>
<td>Quantitative Reasoning</td>
<td>Science Teacher – Earth</td>
<td>Social Sciences</td>
<td>World Languages</td>
</tr>
</tbody>
</table>

#### REQUIREMENTS:

1. **Unit Requirement:** Minimum of 60 transferrable semester units, courses numbered 1-99 at Shasta College. Note: Please see a counselor to ensure that all of your units are transferrable since there are some exceptions to this rule.
2. **Scholarship Requirement:** An overall grade point average (GPA) of not less than 2.0 in all transferrable coursework. While a minimum of 2.0 is required for this degree, some majors or transfer institutions may require a higher GPA. Please consult with a counselor for more information.
3. **Residence Requirement:** The last twelve (12) semester units of the sixty (60) semester units must be completed in residence at Shasta College immediately prior to graduation or a minimum of forty-eight (48) semester units must have been completed in residence at Shasta College if the student is not in attendance at the time of qualification for graduation.
4. **Course Requirements:**
   a. **Major Field of Study:** Select a University Studies emphasis area. All courses in the emphasis area must be completed with a grade of "C" or higher.
   b. **General Education:** Completion of one of three general education options. Note: If completing Intersegmental General Education Transfer Curriculum (IGETC) all courses must be completed with a grade of "C" or higher.
      i. Advanced Placement (AP) examination credit can be used to satisfy both California State University General Education (CSU GE) and IGETC.
      ii. Credit through the College Level Examination Program (CLEP) can be used to satisfy CSU GE. Note: The University of California does not accept credit awarded through CLEP.

(Requirements continued on next page)
5. Competency Requirements:  
   a. English Composition, Critical Thinking, and Quantitative Reasoning courses must be completed with a grade of “C” or higher. Note: If you are completing General Education options 2 or 3, an Oral Communication course is also required to be completed with a grade of “C” or higher.
   b. Multicultural Requirement: Courses in the Multicultural requirement area contain perspectives on people from other cultures and backgrounds as well as an examination of the contributions of non-Western cultures, or the intersection of culture with race, ethnicity, gender, class or other important social categories, such as religion. After successful completion of a course in this area, a student will be able to summarize various ethnic, racial, religious, gender, traditions, class and other group perspectives as well as their similarities and differences.

   | ADJU 24 | CHIN 1 | FREN 1, 2, 3, 4 | JAPN 1, 2, 3, 4 | RUSS 1, 2, 3, 4 |
   | ANTH 2, 14, 25 | CMST 20 | GEOG 1B, 7, 8 | MUS 14 | SOC 25, 30 |
   | ART 4 | ECE 28 | GERM 1, 2, 3, 4 | POLS 20 | SPAN 1, 2, 3, 4 |
   | ASL 1, 2, 3, 4 | ENGL 10A, 10B, 18, 20, 24 | HIST 2, 3, 25, 35, 36, 38 | PSYC 20, 41 |

   c. Computer Literacy Competency Requirement: To earn an associate degree at Shasta College students must demonstrate computer literacy in one of the following ways:
      - CIS 1 Computer Literacy with a grade of C or better.
      - AGNR 52 Computers in Agriculture and Natural Resources with a grade of C or better.
      - Pass the Shasta College computer literacy exam. Contact the Assessment Office for more information.
      - Receive credit for CIS 1 through an articulated high school course. Check with your high school or the Shasta College counseling center for more information.
      - Possess IC² certification.
      - Receive a score of 50 or higher on the CLEP Information Systems and Computer Applications exam.
      - Document completion of a computer literacy requirement at another college.
      - Minimum of three units to include the coursework options listed below with a grade of C or better:
        - OAS 91 (Word) or OAS 51 (Introduction to Keyboarding and Word); and any 2 units from the following:
          - CIS 20 (Access), OAS 10 (Excel), OAS 80 (Outlook), or OAS 94 (Powerpoint).
        - Note: MOS or MCAS certification will substitute for the equivalent software class.

AA Degree – Art* and Music:  
Designed for the student planning on transferring to a four-year college or university. Students complete the CSU or IGETC general education pattern and the “Core Courses” electives to total a minimum of 60 transferrable units.

*The Art degree currently in the catalog is proposed to be replaced by an Associate of Arts Degree for Transfer in 2013-14. Students are advised to consult with a counselor before choosing the existing Art degree.

REQUIREMENTS:
1. Unit Requirement: Minimum of 60 transferrable semester units, courses numbered 1-99 at Shasta College. Note: Please see a counselor to ensure that all of your units are transferable since there are some exceptions to this rule.

2. Scholarship Requirement: An overall grade point average (GPA) of not less than 2.0 in all transferable coursework. While a minimum of 2.0 is required for this degree, some majors or transfer institutions may require a higher GPA. Please consult with a counselor for more information.

3. Residence Requirement: The last twelve (12) semester units of the sixty (60) semester units must be completed in residence at Shasta College immediately prior to graduation or a minimum of forty-eight (48) semester units must have been completed in residence at Shasta College if the student is not in attendance at the time of qualification for graduation.

4. Course Requirements:
   a. Major Field of Study: All courses in the major must be completed with a grade of “C” or higher.
   b. General Education: Certified completion of the California State University General Education (CSU GE) or the Intersegmental General Education Transfer Curriculum (IGETC). Note: If completing IGETC all courses must be completed with a grade of “C” or higher.
      i. Advanced Placement (AP) examination credit can be used to satisfy both CSU GE and IGETC.
      ii. Credit through the College Level Examination Program (CLEP) can be used to satisfy CSU GE. Note: The University of California does not accept credit awarded through CLEP.

5. Competency Requirements:
   a. English Composition, Critical Thinking, and Quantitative Reasoning courses must be completed with a grade of “C” or higher. Note: If completing the CSU GE pattern you must also complete an Oral Communication course with a grade of “C” or higher.
   b. Multicultural Requirement: Courses in the Multicultural requirement area contain perspectives on people from other cultures and backgrounds as well as an examination of the contributions of non-Western cultures, or the intersection of culture with race, ethnicity, gender, class or other important social categories, such as religion. After successful completion of a course in this area, a student will be able to summarize various ethnic, racial, religious, gender, traditions, class and other group perspectives as well as their similarities and differences.

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   | ANTH 2, 14, 25 | CMST 20 | GEOG 1B, 7, 8 | MUS 14 | SOC 25, 30 |
   | ART 4 | ECE 28 | GERM 1, 2, 3, 4 | POLS 20 | SPAN 1, 2, 3, 4 |
   | ASL 1, 2, 3, 4 | ENGL 10A, 10B, 18, 20, 24 | HIST 2, 3, 25, 35, 36, 38 | PSYC 20, 41 |

   c. Computer Literacy Competency Requirement: To earn an associate degree at Shasta College students must demonstrate computer literacy in one of the following ways:
      - CIS 1 Computer Literacy with a grade of C or better.
      - AGNR 52 Computers in Agriculture and Natural Resources with a grade of C or better.
      - Pass the Shasta College computer literacy exam. Contact the Assessment Office for more information.
      - Receive credit for CIS 1 through an articulated high school course. Check with your high school or the Shasta College counseling center for more information.
      - Document completion of a computer literacy requirement at another college.
      - Minimum of three units to include the coursework options listed below with a grade of C or better:
        - OAS 91 (Word) or OAS 51 (Introduction to Keyboarding and Word); and any 2 units from the following:
          - CIS 20 (Access), OAS 10 (Excel), OAS 80 (Outlook), or OAS 94 (Powerpoint).
        - Note: MOS or MCAS certification will substitute for the equivalent software class.

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.
AS Degree:
Designed for the student planning on transferring to a four-year college or university. Students complete the CSU or IGETC general education pattern and the “Core Courses” electives to total a minimum of 60 transferrable units. Shasta College offers the following AS Transfer Degrees:

| Agriculture – Agricultural Business | Agriculture – Environmental Horticulture | Agriculture – Sustainable Agriculture |

REQUIREMENTS:
1. **Unit Requirement**: Minimum of 60 transferrable semester units, courses numbered 1-99 at Shasta College.
2. **Scholarship Requirement**: An overall grade point average (GPA) of not less than 2.0 in all transferrable coursework. While a minimum of 2.0 is required for this degree, some majors or transfer institutions may require a higher GPA. Please consult with a counselor for more information.
3. **Residence Requirement**: The last twelve (12) semester units of the sixty (60) semester units must be completed in residence at Shasta College immediately prior to graduation or a minimum of forty-eight (48) semester units must have been completed in residence at Shasta College if the student is not in attendance at the time of qualification for graduation.
4. **Course Requirements**:
   a. **Major Field of Study**: All courses in the major must be completed with a grade of “C” or higher.
   b. **General Education**: Certified completion of the California State University General Education (CSU GE).
      i. **Advanced Placement (AP) examination credit** can be used to satisfy CSU GE.
      ii. **Credit through the College Level Examination Program (CLEP)** can be used to satisfy CSU GE. Note: The University of California does not accept credit awarded through CLEP.
5. **Competency Requirements**:
   a. **Oral Communication, English Composition, Critical Thinking, and Quantitative Reasoning courses** must be completed with a grade of “C” or higher.
   b. **Multicultural Requirement**: Courses in the Multicultural requirement area contain perspectives on people from other cultures and backgrounds as well as an examination of the contributions of non-Western cultures, or the intersection of culture with race, ethnicity, gender, class or other important social categories, such as religion. After successful completion of a course from this area, a student will be able to summarize various ethnic, racial, religious, gender, traditions, class and other group perspectives as well as their similarities and differences.
   c. **Computer Literacy Competency Requirement**: To earn an associate degree at Shasta College students must demonstrate computer literacy in one of the following ways:
      - CIS 1 Computer Literacy with a grade of C or better.
      - AGNR 52 Computers in Agriculture and Natural Resources with a grade of C or better.
      - Pass the Shasta College computer literacy exam. Contact the Assessment Office for more information.
      - Receive credit for CIS 1 through an articulated high school course. Check with your high school or the Shasta College counseling center for more information.
      - Receive credit for AGNR 52 through an articulated high school course. Check with your high school or the Shasta College counseling center for more information.
      - Receive a score of 50 or higher on the CLEP Information Systems and Computer Applications exam.
      - Minimum of three units to include the coursework options listed below with a grade of C or better:
         1. OAS 91 (Word) or OAS 51 (Introduction to Keyboarding and Word); and any 2 units from the following:
         2. ENGL 10A, 10B, 18, 20, 24
         3. CMST 20, HIST 2, 3, 25, 36, 38
         4. CIS 1 Computer Literacy with a grade of C or better.
         5. AGNR 52 Computers in Agriculture and Natural Resources with a grade of C or better.

NON–TRANSFER DEGREES
The associate degrees for non-transfer are designed for the student whose immediate goal is to seek out employment after completion of the degree, not to transfer to a four-year college or university.

AS General Studies Degree:
Designed for students desiring a two-year degree to prepare to enter the workforce or continue in their current career. The choice of emphasis allows the student to explore an area of interest while providing sufficient depth in a field of knowledge to contribute to lifelong interest. Students complete the Associate Degree-General Education, one emphasis area, and electives to total a minimum of 60 units of coursework at the associate and transfer level.

REQUIREMENTS:
1. **Unit Requirement**: Minimum of 60 semester units, courses numbered 1-199 at Shasta College.
2. **Scholarship Requirement**: An overall grade point average (GPA) of not less than 2.0 based on all college work attempted.
3. **Residence Requirement**: The last twelve (12) semester units of the sixty (60) semester units must be completed in residence at Shasta College immediately prior to graduation or a minimum of forty-eight (48) semester units must have been completed in residence at Shasta College if the student is not in attendance at the time of qualification for graduation.

(Requirements continued on next page)
4. Course Requirements:
   a. Major Field of Study: Select a General Studies emphasis area. All courses in the emphasis area must be completed with a grade of "C" or higher.
   b. General Education: 21-39 units. Select Associate Degree General Education, California State University General Education (CSU GE), or Intersegmental General Education Transfer Curriculum (IGETC). Note: Any student completing the CSU GE or IGETC requirements will also have met the Associate Degree General Education requirements for this degree.
      i. Advanced Placement (AP) examination credit can be used to satisfy Associate Degree General Education, CSU GE, or IGETC. Note: The University of California does not accept credit awarded through CLEP.
      ii. Credit through the College Level Examination Program (CLEP) can be used to satisfy Associate Degree General Education or CSU GE.
   c. Competency Requirements: Courses in the Multicultural requirement area contain perspectives on people from other cultures and backgrounds as well as an examination of the contributions of non-Western cultures, or the intersection of culture with race, ethnicity, gender, class or other important social categories, such as religion. After successful completion of a course from this area, a student will be able to summarize various ethnic, racial, religious, gender, traditions, class and other group perspectives as well as their similarities and differences.

5. Competency Requirements:
   a. Competence in reading and in written expression is demonstrated by a grade of "C" or higher in one of the following courses. Note: Some degrees require completion of a specific course.
      - ENGL 1A College Composition
      - BUAD 66 Business Communications
   b. Competence in mathematics is demonstrated by one of the following criteria:
      1. A grade of "C" or higher in one of the following courses or a mathematics course numbered from 1-99. Note: Some degrees require completion of a specific course.
      - MATH 102 Intermediate Algebra
      - MATH 110 Essential Math
   c. Multicultural Requirement: Courses in the Multicultural requirement area contain perspectives on people from other cultures and backgrounds as well as an examination of the contributions of non-Western cultures, or the intersection of culture with race, ethnicity, gender, class or other important social categories, such as religion. After successful completion of a course from this area, a student will be able to summarize various ethnic, racial, religious, gender, traditions, class and other group perspectives as well as their similarities and differences.

AS Degree:
The AS degree is primarily oriented to technical, science, and occupational programs. It is intended for the student who plans to enter the workforce after completion of the two-year degree. Students complete the Associate Degree-General Education, the courses in their major, and electives totaling a minimum of 60 units of coursework at the associate and transfer level.

Requirements:
1. Unit Requirement: The majority of degrees require a minimum of 60 semester units of coursework, numbered 1-199 at Shasta College. Refer to your degree for the required number of units.
2. Scholarship Requirement: An overall grade point average (GPA) of not less than 2.0 based on all college work attempted.
3. Residence Requirement: The last twelve (12) semester units of the sixty (60) semester units must be completed in residence at Shasta College immediately prior to graduation or a minimum of forty-eight (48) semester units must have been completed in residence at Shasta College if the student is not in attendance at the time of qualification for graduation.

(Requirements continued on next page)
4. Course Requirements:
   a. Major Field of Study: Select an Associate Degree major. All courses in the major must be completed with a grade of "C" or higher.
   b. General Education: 21-39 units. Select Associate Degree General Education, California State University General Education (CSU GE), or Intersegmental General Education Transfer Curriculum (IGETC). Note: Any student completing the CSU GE or IGETC requirements will also have met the Associate Degree General Education requirements for this degree.
      i. Advanced Placement (AP) examination credit can be used to satisfy Associate Degree General Education, CSU GE, or IGETC.
      ii. Credit through the College Level Examination Program (CLEP) can be used to satisfy Associate Degree General Education or CSU GE. Note: The University of California does not accept credit awarded through CLEP.

5. Competency Requirements:
   a. Competence in reading and in written expression is demonstrated by a grade of "C" or higher in one of the following courses. Note: Some degrees require completion of a specific course.
      - ENGL 1A College Composition
      - BUAD 66 Business Communications
   b. Competence in mathematics is demonstrated by one of the following criteria:
      1. A grade of "C" or higher in one of the following courses or a mathematics course numbered from 1-99. Note: Some degrees require completion of a specific course.
      - MATH 102 Intermediate Algebra
      - MATH 110 Essential Math
   c. Multicultural Requirement: Courses in the Multicultural area contain perspectives on people from other cultures and backgrounds as well as an examination of the contributions of non-Western cultures, or the intersection of culture with race, ethnicity, gender, class or other important social categories, such as religion. After successful completion of a course from this area, a student will be able to summarize various ethnic, racial, religious, gender, traditions, class and other group perspectives as well as their similarities and differences.
      - ADJU 24
      - CHIN 1
      - FREN 1, 2, 3, 4
      - JAPN 1, 2, 3, 4
      - RUS 1, 2, 3, 4
      - ANTH 2, 14, 25
      - CMST 20
      - GEOG 1B, 7, 8
      - MUS 14
      - SOC 25, 30
      - ART 4
      - ECE 28
      - GERM 1, 2, 3, 4
      - POLS 20
      - SPAN 1, 2, 3, 4
      - ASL 1, 2, 3, 4
      - ENGL 10A, 10B, 18, 20, 24
      - HIST 2, 3, 25, 35, 36, 38
      - PSYC 20, 41
   d. Computer Literacy Competency Requirement: To earn an associate degree at Shasta College students must demonstrate computer literacy in one of the following ways:
      - CIS 1 Computer Literacy with a grade of C or better.
      - AGNR 52 Computers in Agriculture and Natural Resources with a grade of C or better.
      - Pass the Shasta College computer literacy exam. Contact the Assessment Office for more information.
      - Receive credit for CIS 1 through an articulated high school course. Contact the Assessment Office for more information.
      - Possess IC3 certification.
      - Receive a score of 50 or higher on the CLEP Information Systems and Computer Applications exam.
      - Document completion of a computer literacy requirement at another college.
      - Minimum of three units to include the coursework options listed below with a grade of C or better.
      - OAS 91 (Word) or OAS 51 (Introduction to Keyboarding and Word); and any 2 units from the following:
        - CIS 20 (Access), OAS 10 (Excel), OAS 80 (Outlook), or OAS 94 (Powerpoint).

AA Degree – Theatre Arts:
Designed for students desiring a two-year degree to enter the workforce or continue in their current career. Students complete the Associate Degree-General Education, the "Core" courses in their major, and 60 units of coursework at the associate and transfer level. This Theatre Arts Degree is proposed to be replaced by an Associate of Arts Degree for Transfer in 2013-14. Students are advised to consult a counselor before choosing the existing Theatre Arts Degree.

REQUIREMENTS:
1. Unit Requirement: Minimum of 60 semester units of coursework, numbered 1-199 at Shasta College.
2. Scholarship Requirement: An overall grade point average (GPA) of not less than 2.0 based on all college work attempted.
3. Residence Requirement: The last twelve (12) semester units of the sixty (60) semester units must be completed in residence at Shasta College immediately prior to graduation or a minimum of forty-eight (48) semester units must have been completed in residence at Shasta College if the student is not in attendance at the time of qualification for graduation.
4. Course Requirements:
   a. Major Field of Study: All courses in the major must be completed with a grade of "C" or higher.
   b. General Education: 21-39 units. Select Associate Degree General Education, California State University General Education (CSU GE), or Intersegmental General Education Transfer Curriculum (IGETC). Note: Any student completing the CSU GE or IGETC requirements will also have met the Associate Degree General Education requirements for this degree.
      i. Advanced Placement (AP) examination credit can be used to satisfy Associate Degree General Education, CSU GE, or IGETC.
      ii. Credit through the College Level Examination Program (CLEP) can be used to satisfy Associate Degree General Education or CSU GE. Note: The University of California does not accept credit awarded through CLEP.

(Requirements continued on next page)
AA Degree Theatre Arts requirements continued:

2. Performance at or above the level specified below on the following examinations:

<table>
<thead>
<tr>
<th>Examination</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Board Advanced Placement Math Test</td>
<td>3</td>
</tr>
<tr>
<td>(CALC or STAT)</td>
<td></td>
</tr>
<tr>
<td>Scholastic Aptitude Test – Mathematics (SAT-M)</td>
<td>520 (Beginning 4/95)</td>
</tr>
<tr>
<td>American College Testing (ACT) – Math</td>
<td>23</td>
</tr>
<tr>
<td>COMPASS Algebra Test</td>
<td>54</td>
</tr>
<tr>
<td>Accuplacer – College Level</td>
<td>45</td>
</tr>
</tbody>
</table>

c. Multicultural Requirement: Courses in the Multicultural requirement area contain perspectives on people from other cultures and backgrounds as well as an examination of the contributions of non-Western cultures, or the intersection of culture with race, ethnicity, gender, class or other important social categories, such as religion. After successful completion of a course from this area, a student will be able to summarize various ethnic, racial, religious, gender, traditions, class and other group perspectives as well as their similarities and differences.

<table>
<thead>
<tr>
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<th>CHIN 1</th>
<th>FREN 1, 2, 3, 4</th>
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<td>MUS 14</td>
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</tr>
<tr>
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</tr>
</tbody>
</table>

Computer Literacy Competency Requirement: To earn an associate degree at Shasta College students must demonstrate computer literacy in one of the following ways:

- CIS 1 Computer Literacy with a grade of C or better.
- AGNR 52 Computers in Agriculture and Natural Resources with a grade of C or better.
- Pass the Shasta College computer literacy exam. Contact the Assessment Office for more information.
- Receive credit for CIS 1 through an articulated high school course. Check with your high school or the Shasta College counseling center for more information.
- Possess IC² certification.
- Receive a score of 50 or higher on the CLEP Information Systems and Computer Applications exam.
- Document completion of a computer literacy requirement at another college.
- Minimum of three units to include the coursework options listed below with a grade of C or better:
  - OAS 91 (Word)
  - OAS 51 (Introduction to Keyboarding and Word); and any 2 units from the following:
  - CIS 20 (Access), OAS 10 (Excel), OAS 80 (Outlook), or OAS 94 (PowerPoint).
  - List of courses that meet the requirement and the equivalent software class.

SECOND DEGREE REQUIREMENTS: Check with Admissions and Records Office for specific criteria.

APPLYING FOR YOUR DEGREE: You must apply for your Degree in the Admissions & Records Office two months before the end of the semester in which you plan to complete it.

CATALOG RIGHTS: As long as you maintain continuous attendance at Shasta College, your catalog rights are protected according to the following regulations: You may elect to meet the graduation requirements in effect 1) at the time of initial enrollment or 2) at the semester of graduation, provided you have not had an interruption in attendance of more than two successive semesters. (Summer is not considered a successive semester when not enrolled but will be used to begin enrollment or maintain continuous attendance.) If you are following an earlier version of a program in which your department has discontinued or modified required courses, the department may authorize appropriate substitutions. It is advisable that you make contact with the department as soon as possible so you can accommodate any changes into your ed plan. If while enrolled you declare a new major, you should normally expect to follow the requirements in effect at the time you change your major or in effect when you file for graduation. Whether you choose option 1) or 2) concerning your major or emphasis, you may continue to follow the general education and graduation requirements listed in the catalog at the time of initial enrollment (provided you maintain catalog rights as defined above). While catalog rights hold degree requirements, they do not shield students from changes in prerequisites required in a given course. Prerequisite requirements which students must follow are those stated in course descriptions in the current catalog.

DOUBLE COUNTING: Courses may be double counted for the emphasis, the GE pattern, and/or the Multi-Cultural/Graduation requirement. For the General Studies major, the emphasis and GE pattern must total at least 36 units. For the University Studies major, the emphasis and GE must total at least 45 units.

Note: Students also prepare to transfer to many other majors at four-year universities by completing the IGEC or CSU GE certificate and the major preparation courses listed at www.assist.org

COURSE NUMBERING SYSTEM FOR SHASTA COLLEGE:
Shasta College has numbered courses to assist students in scheduling. Refer to the complete course description in the catalog for explanation of the course. Numbering is according to the following system:

0-99* Baccalaureate level course. Courses certified by Shasta College as meeting transfer requirements to the California State University System. The U.C. system publishes a list annually that indicates which Shasta College courses are accepted for admission. This list is available in the Transfer Center, Shasta College Admissions Office, and www.assist.org.

100-199 Courses, primarily vocational in nature, meeting Associate Degree graduation requirements. Generally not transferable to four-year institutions.

200-299 Basic skills courses designed to enable students to succeed in college level work, or pre-collegiate occupational preparation courses. These courses do not transfer or apply to an Associate Degree (Title 5, Section 55002).

300-399 Ungraded (adult education) courses designed to meet specific student needs. These courses carry no unit credit.

*Baccalaureate level courses are those commonly taught in a four-year college or university at the freshman & sophomore level.
Shasta College 2013-14
Certificates

Accounting Clerk/Bookkeeper
Agriculture-Equine Science
Ag-Equipment Operations and Maintenance
Agriculture-Horticulture
   - Horticulture and Landscaping Program
   - Irrigation
   - Landscape and Turf Management
Retail Nursery Sales
Agriculture-Natural Resources
Agriculture – Pest Control Advisor Preparation*
Applied Geographic Information Systems
Automotive Technology
   - Automotive Chassis
Automotive Electrical-Electronics
Automotive Engine Performance
Automotive Engine Repair
Automotive Heating-Air Conditioning
Automotive Powertrain
Business Administration – Business Entrepreneurship
Business Retailing
Computer & Information Systems
   - Cisco Networking
   - Network Administration
   - Web Design
   - Windows Server
Computer Maintenance
Construction Technology
CSU - General Education
Customer Service Academy
Diesel Technology
Dietary Service Supervisor
Early Childhood Education
ECE-Family Childcare

Firefighter 1 Certificate
Firefighter 2 Certificate
Fire Tech-Wildland Firefighter 1 Academy
Hospitality
   - Baking – Culinary Arts Emphasis
   - Bartender – Culinary Arts Emphasis
   - Dining Room Management – Culinary Arts Emphasis
   - Dining Room Staff – Culinary Arts Emphasis
   - Line Cook – Culinary Arts Emphasis
   - Winemaking and Marketing
Hospitality Management
   - Culinary Arts Concentration
   - Hotel/Restaurant Management Concentration
Industrial Technology
IGETC – General Education
Life Management
Music
Nurse Aide/Home Health Aide
Nursing-Vocational Nursing
Office Administration
   - Administrative Office Assistant
   - Administrative Office Professional
   - Health Information Management
Transition Certificate for Students with Disabilities
Watershed Restoration
Water/Wastewater Treatment
Welding

*Pending Chancellor’s Office Approval

6/5/13
General Education - 21 units (plus a major field of study = 60 units)

The goal of general education is a more well-rounded individual with a broad understanding of the physical universe, people as individuals and as members of society, artistic and cultural expression, written composition, oral communication, analytical thinking, multicultural environments, and perspectives of people from other cultures and backgrounds.

In order to complete the General Education requirements, a student must complete twenty-one (21) units of study. Three units must be completed in each of the following areas: 1, Natural Science; 2, Social and Behavioral Sciences; 3, Humanities; 4-a, Language and Rationality; English Composition; 4-b, Oral Communication; 4c, Analytical Thinking, and 5, Multicultural/Living Skills. A course cannot be counted in more than one area of study with the exception of the following areas:

1. **NATURAL SCIENCE:** Three (3) units required. Courses in the Natural Science GE area examine the physical universe, its life forms and its natural phenomena. After successful completion of a course from this area, a student will be able to use the scientific method to conduct basic experiments, collect, analyze, and evaluate data in a lab setting, or will be able to use scientific inquiry skills related to hypothesis, prediction, assumption, interpretation and evaluation.

2. **SOCIAL AND BEHAVIORAL SCIENCES:** Three (3) units required. Courses in the Social and Behavioral Sciences GE area focus on people as individuals and as members of society. After successful completion of a course from this area, a student will be able to use the scientific method to conduct basic experiments, collect, analyze, and evaluate data in a lab setting, or will be able to use scientific inquiry skills related to hypothesis, prediction, assumption, interpretation and evaluation.

3. **HUMANITIES:** Three (3) units required. Courses in the Humanities GE area are those which study the cultural activities and artistic expressions of human beings. After successful completion of a course from this area, a student will be able to express verbally and in writing examples of how peoples of different times and cultures relate to their environments through individual artistic expression and shared cultural traditions, will be able to critically assess and discuss examples of artworks and cultural artifacts utilizing qualitative, contextual criteria, or will be able to describe, explain, evaluate, compare and contrast, theories that philosophers have used to understand the nature of reasoning, reality and value.

4. **LANGUAGE AND RATIONALITY:** Courses in the Language and Rationality GE Area are those which study the principles and applications of language toward logical thought, clear and precise expression and critical evaluation or communication in whatever system the student uses.

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**Shasta College 2013-2014**

**Associate Degree – General Education**

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**2013-2014 Shasta College Catalog Chapter 5 – Degrees and Certificates**
b. Oral Communication: Three (3) units required. Courses fulfilling the oral communication requirement are designed to emphasize the psychological, cultural and linguistic factors which affect human communication, including how communication operates in various situations. Course content includes an emphasis on the ability to speak and listen effectively, as well as verbal and non-verbal communication. After successful completion of a course from this area, a student will be able to identify and discuss the role oral communication plays in academic, social, and professional endeavors; and will be able to demonstrate oral competency by constructing messages appropriate to particular communication situations covered in their particular courses.

CMST 10 Interpersonal Communication
CMST 30 Oral Interpretation
CMST 54 Small Group Comm.
CMST 20 Inter-cultural Communication*
CMST 40 Argument/Debate
CMST 60 Public Speaking

5. MULTICULTURAL/LIVING SKILLS – Three (3) units required from either area. Courses in the Multicultural/Living Skills GE area prepare students to live and work in an increasingly multicultural environment or encourage development as an integrated physiological, social and psychological beings. After successful completion of a course from this area, a student will be able to compare and contrast perspectives of various cultural groups as defined by religion, ethnicity, race, gender, class or other important social categories; or identify “at risk” patterns of physical or academic or social or emotional or financial behavior and apply their knowledge and skills to assess these patterns and make recommendations for altering them; or develop the criteria for personal or professional success in a given area and then create a specific action plan that targets the criteria—along with a timeline for accountability and evaluation.

MULTICULTURAL COURSES:
ANTH 2 Cultural Anthropology*
ANTH 14 Religion/Myth/Ritual*
ANTH 25 Cult/His North Am Indian*
ART 4 World Art *
CMST 20 Intercultural Comm.*
ENGL 10A/B World Lit*

LIVING SKILLS:
AGNR 11 Environ. Ethics
BUAD 10 Intro./ Business
BUAD 45 Human Relations/Job
ECU 1 Human Development
ECU 2 Child/Family/Community
ECU 9 Child Growth & Dev.
FSS 16 Marriage and Family
FSS 18 Adult/Family

6. MULTICULTURAL REQUIREMENTS – Three (3) units required. (Note: A course in this area may be double-counted to also satisfy one of the other area numbers 1-5. Courses which can be double-counted are marked with an asterisk.) Courses in the Multicultural requirement area contain perspectives on people from other cultures and backgrounds as well as an examination of the contributions of non-Western cultures, or the intersection of culture with race, ethnicity, gender, class or other important social categories, such as religion. After successful completion of a course from this area, a student will be able to compare and contrast perspectives of various cultural groups as defined by religion, ethnicity, race, gender, class or other important social categories.

ADJU 24 Multicult Issues/Law Enf
ANTH 2 Cultural Anth
ANTH 14 Rel. Myth/Ritual*
ANTH 25 Cult/His North Am Indian
ART 4 World Art
ASL 1, 2, 3, 4 American Sign Lang
CHIN 1 Mandarin Chinese
CMST 20 Intercultural Comm.
ECU 26 Teach Div. Society

7. COMPUTER LITERACY REQUIREMENT
To earn an associate degree at Shasta College students must demonstrate computer literacy in one of the following ways:

- CIS 1 Computer Literacy with a grade of C or better.
- AGNR 52 Computers in Agriculture and Natural Resources with a grade of C or better.
- Pass the Shasta College computer literacy exam. Contact the Assessment Office for more information.
- Receive credit for CIS 1 through an articulated high school course. Check with your high school or the Shasta College counseling center for more information.
- Possess IC² certification.
- Receive a score of 50 or higher on the CLEP Information Systems and Computer Applications exam.
- Document completion of a computer literacy requirement at another college.
- Minimum of three units to include the coursework options listed below with a grade of C or better:
  - OAS 80 (Outlook), OAS 94 (PowerPoint).

Note: MOS or MCAS certification will substitute for the equivalent software class.
Shasta College 2013-2014
California State Universities – General Education

Shasta College students will meet the General Education requirements for all campuses of the California State University system by completing the following General Education Program. Shasta College may certify a maximum of 39 semester units from Categories A - E. Note: No more than 30 semester units may be certified from Categories B - D. Courses listed more than once may be used to fulfill the requirements of one category only. An additional 9 units of upper division work must be taken at a CSU campus to complete the full 48-unit General Education requirement.

CATEGORY A: Students shall select a minimum of nine (9) units in communications in the English language. Students must select one course from each area.

A1: Oral Communication
CMST 10: Interpersonal Communication
CMST 54: Small Group Communication
CMST 60: Public Speaking

A2: Written Communication
ENGL 1A: College Composition

A3: Critical Thinking
ENGL 1B: Literature & Composition
ENGL 1C: Crit. Reasoning/Reading/Writ

CATEGORY B: Students shall select a minimum of nine (9) units in the physical universe and its life forms and in mathematical concepts and quantitative reasoning. Students shall select at least three units from each area. One of the courses must have a laboratory. Additional courses may be selected from any area. Courses underlined are designated as laboratory courses.

B1/B3: Physical Sciences
ASTR 1: Astronomy
AGPS 24: Soil
CHEM 1A: General Chemistry
CHEM 1B: General Chemistry
CHEM 2A: Introduction to Chemistry
CHEM 2B: Intro to Organic & Bio Chemistry
CHEM 10: Chemistry for Liberal Arts
CHEM 1H: Chemistry Lab for Liberal Arts
CHEM 16: Chemical Problem Solving

B2/B3: Life Sciences
AGAS 19: Principles of Animal Science
AGEH 33: Environ. Horticulture
AGNR 60: Environmental Science
AGNR 61: Environ. Science Lab
ANTH 1: Human Anatomy
ANTH 2: Physical Anthropology
Biology 1: General Biology
BIOL 1: Principles of Biology
Biology 5: Human Biology
Biology 6: Human Biology
Biology 10: General Biology
Biology 10L: General Biology Lab

B4: Mathematical Concepts and Quantitative Reasoning
MATH 2: Pre-Calculus Mathematics
MATH 3A, 3B, 4A: Calculus
MATH 4B: Differential Equations
MATH 6: Linear Algebra
MATH 8: Finite Mathematics

CATEGORY C: Students shall select a minimum of nine (9) units among the arts, literature, philosophy, and foreign languages, with at least one course in the arts and one in the humanities.

C1: Arts
ART 1: Introduction to Art
ART 2: History of Western Art
ART 3: Western Art, Renaissance to Cont.
**ART 4: World Art
**ART 6: History of Modern Art
CMST 30: Oral Interpretation

C2: Humanities
ASL 1 American Sign Language 1
ASL 2 American Sign Language 2
ASL 3 American Sign Language 3
ASL 4 American Sign Language 4
CHIN 1: Mandarin Chinese
ENGL 1B: Literature & Composition
**ENGL 10: World Literature to 1500
**ENGL 10B: World Literature after 1500
ENGL 11A, 11B: Survey of American Lit.
ENGL 12: Intro to Short Fiction
ENGL 13A, 13B: Survey of English Lit.
ENGL 14: Drama as Lit
ENGL 15: Lit. By/About Women
ENGL 16: Poetry
ENGL 17: Intro to Shakespeare

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.
Category D: Students shall select a minimum of nine (9) units in social, political and economic institutions and behavior, and their historical background, with courses taken in at least two disciplines.

D1: Anthropology and Archaeology
*ANTH 2: Cultural Anthropology
ANTH 5: Humanity, Culture & Ecology
**ANTH 14: Religion, Myth, and Ritual
**ANTH 25: Culture & History/No. Am. Indian
**ARCH 3: Principles of Archaeology

D2: Economics
AGAB 54: Agricultural Economics
ECON 1A, 1B: Principles of Economics

D3: Ethnic Studies
*ANTH 25: Culture & Hist/North Am. Indian
*GEOG 7: California Geography
*HIST 25: African American History
*HIST 35: History of Mexican Americans
*PSYC 20: Cross-cultural Psychology
*SOC 25: Sociology of Minorities

D4: Gender Studies
SOC 30: Sociology of Gender

D5: Geography
**GEOG 1B: Cultural Geography
**GEOG 8: World Regional Geography
GEOG 7: California Geography

D6: History
HIST 1A,1B: History of Western Civ.
HIST 2: World Civilization to 1500 C.E.
HIST 3: World Civilization 1500 to Present
HIST 17A,17B: U.S. History
**HIST 36: History of the Far East
**HIST 38: History of World Religion
**HIST 55: History of American West
**HIST 57: Russian History

D7: Interdisciplinary Social or Behavioral Science
AGNR 11: Environmental Ethics
AGPS 25: California Water
*CMST 20: Intercultural Communication
D8: Political Science, Government, and Legal Institutions
ADJU 10: Intro to AOJ
POL 1: Intro. to Political Science
POLS 1: Intro. to American Government
POLS 2: Intro. to Amer. Government
POLS 20: Politics of the Developing World

D9: Psychology
PSYC 1A: General Psychology
PSYC 14: Understanding Human Behavior
PSYC 15: Social Psychology
PSYC 16: Health Psychology
PSYC 17: Abnormal Psychology
PSYC 20: Cross-Cultural Psychology

D10: Sociology and Criminology
SOC 1: Introduction to Sociology
SOC 2: Social Problems
SOC 15: Sociology of Mass Media
SOC 22: Sociology of Aging
SOC 25: Sociology of Minorities
SOC 30: Sociology of Gender

SOC 70: Social Welfare

American History and Government Requirements for Graduation from a CSU Campus
Completion of a course in American History and a course in American Government is a requirement to graduate from any of the 23 CSU universities.
At Shasta College, HIST 17A or HIST 17B, and POLS 2 will satisfy the requirement.

Category E: Students shall select a minimum of three (3) units in lifelong understanding and development of themselves as integrated physiological, social and psychological entities.

E1:
ECE 1: Human Development
ECE 2: Child, Family, Community
ECE 9: Child Growth & Development
FSS 16: Marriage and Family
FSS 18: Adulthood and Aging
FSS 25: Nutrition
FSS 26: Nutrition Through the Life Span
FSS 60: Life Management
HLTH 1: Health and Wellness
HLTH 2: Nutrition and Fitness
HLTH 3: Substance Abuse Awareness
PSYC 1A: General Psychology
PSYC 5: Human Sexuality
PSYC 14: Understanding Human Behavior
PSYC 16: Health Psychology
PSYC 17: Abnormal Psychology
PSYC 20: Cross-Cultural Psychology
STU 1: College Success

Chico State requires two courses to satisfy the U.S. Diversity & Global Cultures requirement. Both courses may be part of the 39-unit General Education requirement.

- **A** Courses with one asterisk (*) meet the U.S. Diversity requirement and are "concerned primarily with the aspirations and history of ethnic subcultures". They are ANTH 25, CMST 20, ENGL 18, ENGL 24, GEOG 7, HIST 25, HIST 35, PSYC 20, PSYC 41, SOC 25.
- **B** Courses with two asterisks (**) meet the Global Cultures requirement and are "concerned primarily with cultures and societies outside Western Heritage". They are ANTH 2, ANTH 14, ARCH 3, HIST 36, HIST 38, ENGL 10A, ENGL 10B, ENGL 20, ART 4, GEOG 1B, GEOG 8, MUS 14, POLS 20.

Courses taken for CSU General Education are applied to categories based on the General Education list for the year they are completed. This is the approved list for courses taken Fall 2013 through Summer 2014. See www.assist.org for prior years.

6/5/13
Shasta College 2013-2014 IGETC
(Intersegmental General Education Transfer Curriculum)

Students who are planning to transfer to the University of California system or who are undecided about whether to transfer to a UC or CSU may satisfy general education requirements with IGETC. The IGETC will permit a student to transfer from a community college to a campus in either the UC or CSU system without the need to take additional lower division general education courses to satisfy campus general education requirements. Transfer students to UC have the option of following IGETC or completing the general education requirement at the campus they plan to attend. Students pursuing majors that require extensive lower division preparation may not find the IGETC option to be advantageous. Check with a counselor before choosing your general education pattern.

IGETC courses must be completed with a "C" grade or better (P is acceptable).

AREA 1 - ENGLISH COMMUNICATION

Group A: English Composition (one course)
ENGL 1A: College Composition

Group B: Critical Thinking/English Composition (one course)
ENGL 1B: Literature and Composition
ENGL 1C: Critical Reasoning, Reading and Writing

FOR CSU ONLY:
Group C: Oral Communication (one course)
CMST 10: Interpersonal Communication
CMST 54: Small Group Communication
CMST 60: Public Speaking

AREA 2 - MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING (one course):

MATH 2: Pre-Calculus
MATH 4A/4B: Calculus/Diff. Equations
MATH 3A: Calculus+
MATH 6: Linear Algebra
MATH 3B: Calculus
MATH 8: Finite Math
MATH 9: Survey of Calculus+

MATH 13: College Algebra
MATH 14: Intro to Statistics
MATH 17: Calc. for Social/Life Sciences

AREA 3 - ARTS AND HUMANITIES (three courses; at least one course from the Arts and one from the Humanities):

ARTS:
ART 1: Introduction to Art
ART 2: History of Western Art
ART 3: Western Art, Renaissance to Cont.
ART 4: World Art

HUMANITIES:
ASL 2 American Sign Language 2
ASL 3 American Sign Language 3
ASL 4 American Sign Language 4
ENGL 111A/B: Survey of American Lit.
ENGL 12: Intro to Short Fiction
ENGL 13A/B: Survey of English Lit.
ENGL 14: Survey of Drama as Lit
ENGL 15: Lit. By and About Women
ENGL 16: Poetry
ENGL 17: Intro to Shakespeare
ENGL 18: African American Literature
ENGL 19: Survey of the Bible as Literature
ENGL 20: World Mythology
ENGL 24: Multicult. Perspectives in Amer Lit

PSYC 1A: General Psychology
PSYC 5: Human Sexuality
PSYC 14: Understand. Human Behavior
PSYC 15: Social Psychology
PSYC 17: Abnormal Psychology
PSYC 20: Cross-cultural Psychology
PSYC 41: Cultural/Soc Context-Childhood
PSYC 46: Human Memory & Learning
SOC 1: Introduction to Sociology
SOC 2: Social Problems
SOC 15: Sociology of Mass Media
SOC 22: Sociology of Aging
SOC 25: Sociology of Minorities
SOC 30: Sociology of Gender

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### AREA 5 - PHYSICAL AND BIOLOGICAL SCIENCES

Two courses, one Physical Science and one Biological Science for a minimum of 7 units; at least one course must include a laboratory (underlined).

<table>
<thead>
<tr>
<th>Physical Sciences</th>
<th>Biological Sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR 1: Astronomy</td>
<td>AGNR 60: Environmental Science</td>
</tr>
<tr>
<td>CHEM 1A: General Chemistry</td>
<td>AGNR 61: Environmental Science Lab</td>
</tr>
<tr>
<td>CHEM 1B: General Chemistry</td>
<td>AGPS 20: Plant Science</td>
</tr>
<tr>
<td>CHEM 2A: Intro to Chemistry</td>
<td>ANAT 1: Human Anatomy</td>
</tr>
<tr>
<td>CHEM 2B: Intro to Org &amp; Bio Chemistry</td>
<td>ANTH 1: Physical Anthropology</td>
</tr>
<tr>
<td>CHEM 6: Intro to Chem Applied Environment</td>
<td>BIOL 1: Principles of Biology</td>
</tr>
<tr>
<td>CHEM 10: Chemistry for Liberal Arts</td>
<td>BIOL 5: Intro to Human Biology+</td>
</tr>
<tr>
<td>CHEM 11: Chemistry Lab/Liberal Arts+</td>
<td>BIOL 6: Intro to Human Biology Lab+</td>
</tr>
<tr>
<td>CHEM 16: Chemical Problem Solving</td>
<td>BIOL 10: General Biology+</td>
</tr>
<tr>
<td>CHEM 70, 71: Organic Chemistry</td>
<td>BOT 1: General Botany</td>
</tr>
<tr>
<td>ESCI 1: Physical Geology</td>
<td>ESCI 2: Historical Geology</td>
</tr>
<tr>
<td>ESCI 3: Mineralogy &amp; Crystal Optics</td>
<td>ESCI 3: Rock Origins &amp; Relationships</td>
</tr>
<tr>
<td>ESCI 4: Rock Origins &amp; Relationships</td>
<td>ESCI 6: Ancient Life</td>
</tr>
<tr>
<td>ESCI 5: Introduction to Geology+</td>
<td>ESCI 7: Intro to Geology of California</td>
</tr>
<tr>
<td>ESCI 7: Intro to Geology of California</td>
<td>ESCI 8: Planetary Geology</td>
</tr>
<tr>
<td>ESCI 9: Earthquakes, Volcanoes</td>
<td>ESCI 10: Environmental Geology</td>
</tr>
<tr>
<td>ESCI 5: Introduction to Geology+</td>
<td>ESCI 12: Earth Science Survey+</td>
</tr>
<tr>
<td>ESCI 15: Oceanography</td>
<td>ESCI 14: Meteorology</td>
</tr>
</tbody>
</table>

### AREA 6 - LANGUAGE OTHER THAN ENGLISH

Proficiency is required by UC. CSU transfers do not need to meet this requirement. Proficiency is defined as two years of high school study in the same language with a "C" grade or better. If you have not satisfied this requirement in high school, you must take one of these courses:

| ASL 1 American Sign Language 1 | GERM 1: Elementary German       | RUSS 1: Elementary Russian       |
| CHIN 1: Mandarin Chinese       | JAPN 1: Elementary Japanese    | SPAN 1: Elementary Spanish       |
| FREN 1: Elementary French      |                                |                                |

### CSU GRADUATION REQUIREMENT IN U.S. HISTORY AND AMERICAN IDEALS

Two courses, one from each group:

**GROUP 1:**
- HIST 17A: U.S. History
- HIST 17B: U.S. History

**GROUP 2:**
- POLS 2: Introduction to American Government

*Transfer credit may be limited by either UC or CSU or both (usually due to duplication of content). Students should consult with a counselor for additional information.*

This is the approved list for courses taken Fall 2013 through Summer 2014. See [www.assist.org](http://www.assist.org) for prior years.

6/5/13
Associate of Arts – University Studies

The Associate of Arts degree, University Studies, is a degree program designed for transfer students who plan to obtain a Bachelor’s degree. Completion of Option 1 or Option 2 will satisfy all-lower division general education requirements for the University of California or the California State University, respectively. Option 3 can be utilized with planning to meet the requirements of an independent or out-of-state university. Option 3 can also be used for majors that have many lower division courses required for the major and in cases where the CSU or UC has approved general education modifications. See www.assist.org and a counselor before selecting your GE Option and Area of Emphasis.

Choose one GE Option, one Emphasis, and transferable electives to total 60 units for the AA degree.

- **General Education – Choose Option 1, 2 or 3.**

  **OPTION 1: IGETC (Intersegmental General Education Transfer Curriculum)**
  Students who are planning to transfer to the University of California system or who are undecided about whether to transfer to a UC or CSU may satisfy general education requirements with IGETC.
  1. Complete the 33 – 37 unit IGETC pattern.
  2. Complete all IGETC courses with a grade of “C” or better.
  3. Complete additional courses from an emphasis to meet the lower division requirements in your major and then electives to reach 60 units. UC transfer students must select all 60 units from courses on the UC transferable course list. (See www.assist.org)
  4. Achieve a minimum grade point average of 2.0. [UC will require a minimum transfer GPA of 2.4. A higher GPA will be required for admission to most campuses and for high demand majors.] All courses in the area of emphasis must be completed with a C or better.

  **OPTION 2: CSU GE (California State Universities – General Education)**
  Students who are planning to transfer to one of the 23 campuses of the California State University system may satisfy general education requirements with the CSU pattern.
  1. Complete the 39-unit CSU GE pattern.
  2. Complete Communication, English, Critical Thinking, and Math requirements (Area A1, A2, A3 and B4) each with a grade of “C” or better.
  3. Recommend completion of HIST 17A or 17B; and POLS 2 prior to transfer. These two courses are CSU graduation requirements and may be included as part of the 39-unit pattern.
  4. Complete additional courses from an emphasis to meet the lower division requirements in your major and then electives to reach 60 units.
  5. Achieve a minimum grade point average of 2.0. [A higher GPA will be required for admission to some campuses and for high demand and impacted majors.] All courses in the area of emphasis must be completed with a C or better.

  **OPTION 3: Independent, Out-of-state universities, and high unit/specialized majors**
  Complete 30 units to satisfy a GE-modified plan as indicated below.

  - **CSU GE Pattern:**
    Select one course from each Category.
    - CATEGORY A1: Oral Communication
    - CATEGORY A2: English Composition
    - CATEGORY B1 or B2: Science course
    - CATEGORY B4: Transfer-level math course
    - CATEGORY C1 or C2: Arts or Humanities
    - CATEGORY D: Social, Political and Economic institutions, and Behavior
    *Multicultural course

  - **IGETC GE Pattern:**
    Select one course from each Area.
    - AREA 1–GROUP A: English Composition
    - AREA 1–GROUP C: Oral Communication
    - AREA 2: Mathematical Concepts
    - AREA 3: Arts or Humanities
    - AREA 4: Social and Behavioral Sciences
    - AREA 5: Physical or Biological Sciences
    *Multicultural course

  Select additional courses from categories A3, B, C, D, or E from two different areas to total 30 or more GE units.

  - **Multicultural requirement**
  - **Computer competency requirement**
  - **Emphasis:** Choose one of the University Studies emphases of 18 or more units to correspond with your choice of transfer major. Note that each university determines its own list of courses required for the major, so completion of an emphasis does not guarantee that all transfer major courses have been completed nor does it guarantee admission to the University. See a Counselor for comprehensive planning.
  - **Course requirements:** All courses in the area of emphasis must be completed with a C or better.

### Areas of Emphasis

#### University Studies: Agriculture Sciences – 18 units

The emphasis in Agriculture Sciences is designed to provide the lower division major courses to transfer to a university and earn a Bachelor’s degree in Agriculture, Agriculture Business, and Horticulture. Select 12 – 18 units (see a counselor to select the courses appropriate for your transfer university):

- AGAB 51 Agriculture Accounting
- AGAB 54 Agriculture Economics
- AGAS 11 Livestock Feeding and Nutrition
- AGAS 19 Principles of Animal Science
- AGPS 20 Plant Science
- AGPS 24 Soils
- CHEM 2A General Chemistry

Select the remaining 0 – 6 transferable units from the following courses:

AG 1, 6, 9A, 58, 94; AGAS 10, 11, 15, 19, 30; AGHE 22, 23, 26, 27, 28, 29, 31, 31.1, 31.2, 31.3, 33, 34, 35, 36, 37, 38, 39, 40, 41, 44, 45, 46, 60, 71, 72, 94; AGEQ 12, 13, 14, 21; AGMA 42, 44; AGNR 1, 6, 11, 12, 50, 51, 52, 53, 55, 60, 61, 64, 65, 66A, 69, 70, 83, 94; AGPS 25, AGSA 50, 56; AGVETT 16; AGVIT 80, 81; CHEM 2B; MATH 14

#### University Studies: Allied Health – 20 units

The emphasis in Allied Health is designed to provide the lower division major courses to transfer to a university and earn a Bachelor’s degree in Nursing or in other allied health fields.

Complete the following:

- ANAT 1 Human Anatomy
- CHEM 2A Introduction to Chemistry
- MICR 1 Microbiology
- PHY 1 Physiology

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Chapter 5 – Degrees and Certificates

**University Studies: Behavioral Science – 18 units**

The Behavioral Sciences focus on the understanding of human beings, their actions and interactions, decision making processes, communication strategies, and the methods of inquiry used in the field. The A.A. in University Studies, Behavioral Sciences emphasis is a good option for students wishing to transfer to a four-year college or university to pursue a baccalaureate degree in anthropology, psychology, social work, and sociology.

Complete the following:
- PSYC 1A: General Psychology
- MATH 14: Statistics
- SOC 1: Intro to Sociology
- BIOL 1, 5, 6, 10, or PHY 1
- ANTH 2: Cultural Anthropology
- ECE 1: Human Development

**University Studies: Biological Sciences – 18 units**

The Biological Sciences emphasis is designed to provide the lower division major preparation for transfer in Biological Sciences.

Complete the following:
- BIOL 1: Principles of Biology
- BOT 1: General Botany
- ZOOL 1: General Zoology
- CHEM 1A: General Chemistry
- CHEM 1B: General Chemistry

**University Studies: Business Administration – 18 units**

The emphasis in Business Administration is designed to provide students with the common core of lower division courses required by most universities to transfer and pursue a baccalaureate degree in Business Administration. This includes business degrees with options such as accounting, finance, human resources management, international business, management, operations management, and marketing. See a counselor before selecting your electives.

Complete the following:
- ACCT 2: Financial Accounting
- ACCT 4: Managerial Accounting
- ECON 1A: Principles of Microeconomics
- ECON 1B: Principles of Macroeconomics

Select 6 units:
- MATH 8, 9, 3A, 14
- BUAD 6, 10
- CIS 1

**University Studies: Child Development – 18 units**

The Child Development emphasis is designed to provide the lower division major courses to transfer to a university and earn a Bachelor's degree in Child Development or Early Childhood Education.

Complete the following 12 units:
- ECE 1: Human Development OR
- ECE 9: Child Growth and Development
- ECE 2: Child, Family, and Community
- ECE 7: Early Childhood Observation and Assessment
- ECE 15: Child Health, Safety and Nutrition

Choose 6 additional units from the following:
- ECE 8, 17, 20, 26, 28, 52

**University Studies: Criminal Justice – 18 units**

The emphasis in Criminal Justice is designed to provide the lower division major courses to transfer to a university and earn a Bachelor's degree in Criminal Justice.

Complete the following:
- ADJU 10: Intro to Administration of Justice
- ADJU 15: Concepts of Criminal Law

Select 12 additional transferable units:
- ADJU 11, 16, 17, 18, 20, 21, 22, 23, 24, 25, 26, 30, 40, 41, 42
- MATH 14
- PSYC 1A
- SOC 1, 2

**University Studies: Earth System Science – 22 units**

Earth System Sciences represents an emerging trend in the sciences and many universities offer a degree or option along this track (i.e. Earth Science, Planetary Science). This academic plan is intended to support the transfer student interested in the bachelor’s degree as it includes courses that define major portions of the Earth System, including geosphere, hydrosphere, atmosphere, and biosphere focused courses, and Earth’s position in space.

Complete the following course:
- ESCI 17: Earth System Science

And select 11 or more units from the following to include at least two courses that focus on different portions of the Earth System (geosphere, hydrosphere, atmosphere, and biosphere):
- AGNR 60
- ASTR 1
- BIOL 1, 10
- ESCI 1, 14, 15, 18

Select the remaining transferable units from the following courses:
- Related Science courses:
  - BIOL 11, 12
  - CHEM 1B
  - ESCI 2, 6, 10
  - NHS 15: Natural History
  - PHYS 2B: General College Physics
- Courses from supporting disciplines:
  - AGNR 1
  - AGNR 83
  - CIS 1
  - GEOG 10
  - MATH 3B, 14

**University Studies: Engineering – 26 units**

The emphasis in Engineering is designed to provide the lower division major courses to transfer to a university and earn a Bachelor's degree in the various fields of engineering. This includes Civil Engineering, Computer Engineering, Electrical Engineering, and Mechanical Engineering. See a counselor for the complete list of courses required for your engineering field and university -- the requirements typically total many more than 26 units and the general education areas are usually modified (see option #3).

Complete the following:
- MATH 3A: Calculus
- MATH 3B: Calculus
- MATH 4A: Calculus
- PHYS 4A: Physics (Mechanics)
- PHYS 4B: Physics (Electricity and Magnetism)

Select 6 units:
- CHEM 1A, ENGR 17, 35, 45, CIS 61, MATH 4B or PHYS 4C

General Education units are modified for this major.

**University Studies: Geology – 20 units**

Geology is a field-based study of earth materials, processes and history. All courses in this plan apply theory to field situations and the degree requires the completion of field-based classes. This approach should adequately prepare the transfer student for further and more intensive field experiences as they work to complete the bachelor's degree at a 4-year school.

Complete the following courses:
- ESCI 1: Physical Geology
- ESCI 2 or 6: Historical Geology or Ancient Life

And select one combination of the following Earth Science field courses to total 3 units: (Field courses include ESCI 26,27,32,33,34,35,36,37,38,42,43,44,45 & 46)
- Any two 30-series ESCI courses
- Any three 40-series ESCI courses
- ESCI 26 or 27 and one 40-series ESCI course.

Select the remaining transferable units from the following list to include at least one additional science course:
- Geology Courses:
  - ESCI 3, 4, 7, 9, 10, 11, 23
  - Courses from supporting disciplines:
    - AGNR 1, 60, 83
    - CHEM 1B
    - CIS 1
    - GEOG 10
    - MATH 3B, 14
    - NHS 15
    - PHYS 2B

Page 5-15
University Studies: Humanities – 18 units

These courses emphasize the study of cultural, literary, humanistic activities and artistic expression of human beings. With careful planning, the Humanities emphasis will satisfy the lower division major courses to transfer to a university and earn a Bachelor’s degree in the various fields of Humanities.

Select 18 transferable units from at least 3 of the following disciplines:

- ART 1, 2, 3, 4, 6, 12, 21A
- ENGL 1B, 10A, 11B, 12, 13AB, 14, 15, 16, 17, 18, 19, 20, 24, 25, 26, 31, 33, 36, 91
- Foreign Lang. (American Sign Language, French, German, Japanese, Russian, Spanish)
- HUM 2, 4, 70
- MUS 1, 2, 3, 4, 5, 10, 11
- PHIL 6, 7, 8
- THTR 1, 5, 8, 9, 12, 13, 30, 31, 34
- CMST 30
- DAN (up to 3 units of Dance may apply to the emphasis)

University Studies: Language Arts – 18 units

With careful planning, the Language Arts emphasis will satisfy the lower division major courses to transfer to a university and earn a Bachelor’s degree in the various fields of Language Arts.

Select 18 transferable units from at least two areas:

- CMST 10, 20, 30, 40, 54, 60
- ENGL 1B, 1C, 10AB, 11AB, 12, 13AB, 14, 15, 16, 17, 18, 19, 20, 24, 25, 26, 31, 33, 36, 91
- Foreign Languages:
  - ASL 1, 1L, 2, 2L, 3, 4
  - FREN 1, 2, 3, 4
  - GERM 1, 2, 3, 4
  - JAPN 1, 2, 3, 4, 19, 20
  - RUSS 1, 2, 3, 4
  - SPAN 1, 2, 3, 4, 19, 20
- JOUR 21, 27, 29

University Studies: Liberal Studies – Teaching Prep – 34 units

The Liberal Studies emphasis prepares students to transfer as a Liberal Studies major to campuses of the California State University system. This is the academic plan is intended to support the transfer student interested in that bachelor’s degree. Courses in this plan produce a foundation to transfer in such studies as weather and climate challenges that face society now and into the future.

Complete the following:

- CMST 60 Public Speaking
- PHSC 1 and/or Physical Science Survey
- ESCI 12 Earth Science Survey
- BIOL 10 General Biology
- BIOL 10L General Biology Laboratory
- MATH 41A and/or B Concepts of Elementary Math
- GEOG 8 World Regional Geography
- HUM 2 Exploring the Humanities
- HIST 2 World Civilization to 1500 C.E.
- HIST 17A US History
- POLS 2 American Government

Choose 0-6 units from:

- ANTH 2
- ECE 1
- EDTE 51, 52, 61, 62, 71, 72, 73
- GEOG 7
- HIST 3, 17B

University Studies: Mathematics – 19 units

The Mathematics emphasis is designed to provide lower division major courses to transfer to a university and pursue a baccalaureate degree in mathematics.

Complete the following:

- MATH 3A Calculus 3A
- MATH 3B Calculus 3B
- MATH 4A Calculus 4A
- MATH 4B Differential Equations
- MATH 6 Linear Algebra
- MATH 14 Intro to Statistics

University Studies: Meteorology/Climatology – 18 units

Many universities offer an Atmospheric Science degree or option and this academic plan is intended to support the transfer student interested in that bachelor’s degree. Courses in this plan produce a foundation to transfer in such studies as weather and climate challenges that face society now and into the future.

Complete the following courses:

- ESCI 14 Meteorology
- ESCI 17 Earth System Science
- ESCI 18 Global Climate

Select the remaining transferable units from the following list to include at least one additional science course:

- Related Science Courses:
  - ASTR 1
  - CHEM 1B
  - ESCI 10, 15
  - AGNR 60, 61
  - NHIS 15
  - PHYS 2B

Courses from supporting disciplines:

- AGNR 1, 83
- CIS 1
- GEOG 10
- MATH 3B, 14

University Studies: Multicultural Studies – 18 units

This emphasis expands a student’s understanding of other cultures and is good preparation for university majors in Multicultural Studies, Ethnic studies, and International relations. With careful planning it could be also be used for students interested in International Business, geography, and secondary teaching. Students in the Multicultural Studies program will be exposed to a diversity of non-western cultures, an increasingly valuable knowledge base in our global society.

Select 18 units from at least 3 different disciplines:

- ANTH 1, 14, 25
- ART 4
- CMST 20
- ENGL 10A, 10B, 18, 20, 24
- GEOG 1B, 5, 7, 8
- HIST 25, 35, 36, 38
- POLS 20, 25
- PSYC 20, 41
- SOC 25

University Studies: Natural Sciences – 18 units

The Natural Sciences emphasis is designed to provide lower division major courses to transfer to a university and pursue baccalaureate degrees in life science and physical science areas.

Select 18 transferable units from the following disciplines:

- AGAS 19
- AGEH 33
- AGNR 60, 61
- AGPS 20
- ANAT 1
- ASTR 1
- BIOL 1, 5, 6, 10, 11, 12
- BOT 1
- CHEM 1A, 1B, 2A, 2B, 10, 11, 70, 70A, 71, 71A
- ESCI 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 17, 18
- FSS 25
- MICR 1
- NHIS 15
- PHSC 1
- PHY 1
- PHYS 2A, 2B, 4A, 4B, 4C
- ZOOI 1

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University Studies: Oceanography – 22 units
This degree plan identifies courses needed for a student to transfer into any of the marine sciences. The associate degree emphasizes a multidisciplinary approach as a foundation that can then be applied to an Oceanography bachelor’s degree or a more specialized bachelor’s degree such as Marine Biology or Marine Fisheries.

Complete the following courses:
- BIOL 1 Principles of Biology
- ESCI 1 Physical Geology
- ESCI 15 Oceanography
- ESCI 16 Coastal Oceanographic Field Studies

Select the remaining 8 units from the following transferable courses to include at least one additional science course:
- AGNR 60/61
- BIOL 12
- CHEM 1B
- ESCI 10, 17, 37, 38
- NHIS 15, 65
- PHYS 2B

Courses from supporting disciplines:
- AGNR 1, 83
- CIS 1
- GEOG 10
- MATH 3B, 14

University Studies: Physical Education – 18 units
The Physical Education emphasis is designed to provide lower division major courses to transfer to a university and pursue baccalaureate degrees in Physical Education – teaching, kinesiology, and pre-physical therapy.

Select 18 transferable units from at least 3 areas:
- ANAT 1
- CHEM 1A, 1B, 2A, 2B
- FSS 26
- HLTH 1, 2, 3
- KINES 1, 2
- MATH 14 or 2
- PEAT 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 23, 24, 25, 26, 29, 30
- PHAT 1
- PHYS 2A, 2B
- PSYC 1A

University Studies: Physical Sciences – 22 units
The Physical Sciences emphasis is designed to provide students with the lower division major courses to transfer to a university and pursue baccalaureate degrees in chemistry, geology, physics, and related areas. See a counselor for the complete list for your choice of transfer university and major.

Complete the following:
- CHEM 1A and 1B
- PHYS 2A + 2B; or PHYS 4A + 4B
- MATH 3A

University Studies: Quantitative Reasoning – 18 units
The quantitative reasoning emphasis is a flexibly designed option which, with proper counseling, provides transfer coursework toward majors in computer science and math.

Select a minimum of 18 units from the following mathematics and computer science courses:
- MATH 2, 3A, 3B, 4A, 4B, 6, 8, 9, 10, 13, 14
- CIS 2, 60, 61, 62, 63, 72

University Studies: Science Teacher – Earth – 20 units
This degree plan prepares the student to transfer as they prepare for a Single Subject Teaching Credential in Science, Earth Science Concentration. Courses in this plan are designed to develop breadth and to demonstrate multidisciplinary aspects across the Earth Sciences.

Complete the following courses:
- ESCI 1 Physical Geology
- ESCI 2 or 6 Historical Geology or Ancient Life

Select the remaining 12 units from the following list to include at least six units from science courses:
- AGNR 1, 83
- CIS 1
- GOGO 10
- MATH 3B, 14

University Studies: Social Sciences – 21 units
The A.A. in University Studies, Social Sciences emphasis is designed to provide students with a strong foundation for the study of humanity from diverse perspectives. It is an excellent starting point for students interested in pursuing baccalaureate degrees in anthropology, history, political science, psychology, sociology.

Select 9 units from 3 different disciplines:
- ANTH 2
- ECON 1A, 1B
- MATH 14
- POLS 1 or 25
- PSYC 1A
- SOC 1

Select the remaining 12 units from the following list:
- ANTH 1, 2, 5, 14, 25
- ARCH 3, 4A
- ECE 1, 2, 9
- ECON 1A, 1B
- FSS 16, 18
- GOGO 1A, 1AL, 1B, 5, 7, 8
- HIST 1A, 1B, 2, 3, 17A, 17B, 25, 35, 36, 38, 40, 55, 57
- MATH 14
- POLS 1, 2, 20, 25
- PSYC 1A, 5, 14, 15, 16, 17, 20, 25, 41, 46
- SOC 1, 2, 15, 22, 25, 30, 70

University Studies: World Languages – 18 units
The World Languages emphasis is recommended for students pursuing intermediate fluency in a world language to facilitate communication in professional settings or to begin the first two years of a language or literature major and transfer to a university.

Select 13 units (or through level 4) of a foreign language:
- ASL 1, 2, 3, 4
- FREN 1, 2, 3, 4
- GERM 1, 2, 3, 4
- JAPN 1, 2, 3, 4
- RUSS 1, 2, 3, 4
- SPAN 1, 2, 3, 4

Select the remaining 0 – 5 units from:
- ASL 1, 1L, 2, 2L, 3, 4
- ENGL 10AB, 25
- FREN 1, 2, 3, 4
- GERM 1, 2, 3, 4
- JAPN 1, 2, 3, 4
- RUSS 1, 2, 3, 4
- SPAN 1, 2, 3, 4
Associte of Science General Studies

The Associate of Science degree, General Studies, is for students desiring a two year degree to prepare to enter the workforce or continue in their current career. The choice of emphasis allows the student to explore an area of interest while providing sufficient depth in a field of knowledge to contribute to lifelong interest.

Complete the Shasta College GE pattern, one Emphasis from below, and AS degree-applicable electives (#1-199) to total 60 units. All courses in the area of emphasis must be completed with a C or better.

### Areas of Emphasis

#### General Studies: Agriculture Trades – 18 units

The Agriculture emphasis allows students to explore all areas of agriculture, including animal science, agriculture business, horticulture, horse practices, sustainable or holistic agriculture, mechanical equipment, natural resources, veterinary practices, and viticulture.

Select 18 units from at least three of the following areas:

- **AG**: 1, 6, 9A, 56
- **AGAS**: 10, 11, 15, 19, 30
- **AGAB**: 51, 53, 54
- **AGEH**: 22, 23, 26, 27, 28, 29, 31, 31.1, 31.2, 31.3, 33, 34, 35, 36, 38, 39, 40, 41, 44, 45, 46, 60, 71, 72, 122, 125, 130
- **AGEQ**: 12, 13, 14, 21, 109, 111, 113
- **AGMA**: 42, 44
- **AGNR**: 1, 6, 11, 12, 50, 51, 52, 53, 55, 60, 61, 64, 65, 66A, 69, 70, 83, 173, 174, 176
- **AGPS**: 20, 24, 25, 126
- **AGSA**: 50, 56
- **AGVET**: 16
- **AGVIT**: 80, 81

#### General Studies: Business - Basic Business – 18 units

The Basic Business emphasis allows students to explore many areas of business, including accounting, business law, management, marketing, real estate, and specialized areas such as hospitality, and casino management.

Choose 3 units from the following:

- **ACCT**: 2, 101, 194

Choose 9-15 units from the following:

- **BUAD**: 6, 8, 10, 12, 15, 40, 41, 42, 44, 45, 46, 66, 71, 72, 80, 91, 92, 108, 120

Choose 0-6 units from the following:

- **BUAD**: 16, 77, 176
- **CIS**: 1
- **DSS**: 10, 63
- **HOSP**: 10, 20, 35, 40, 45, 50, 60, 65
- **REAL**: 30
- **ECON**: 1A, 1B

#### General Studies: Climatological and Meteorological Studies – 18 units

Many natural processes studied across a broad spectrum of scientific disciplines influence climate and weather on Earth. This degree plan reflects that fact by incorporating multidisciplinary courses such as Earth System Science and Oceanography while being centered on a core of physics, meteorology, and global climate. Electives in the plan can support spatial associations, oceanography while being centered on a core of physics, meteorology, and global climate. Electives in the plan can support spatial associations, environmental considerations, geologic and astronomical influences, as well as at least one chemistry and one physics course are recommended for the degree, as well as the completion of MATH 102 for the GE pattern.

Complete the following Earth Science courses:

- **ESCI 14**: Meteorology
- **ESCI 17**: Earth System Sciences
- **ESCI 18**: Global climate: Past, Present and Future

Select one of the following science courses to total 4 units:

- **AGNR**: 50, 54
- **ESCI**: 10, 15
- **PHYS**: 2B

Select any of the following courses to total 4 units:

- **ASTR**: 1
- **CIS**: 1
- **GEOG**: 10
- **MATH**: 14
- **AGNR**: 1, 83

#### General Studies: Coastal Oceanographic Studies – 20 units

This degree is designed to focus the student’s studies on coastal marine environments. The plan includes core and supporting classes that provide the background necessary to apply basic scientific principles in support of field- and lab-based coastal research including data collection and analysis, various scientific methodologies in the field and in the lab, relevant modern scientific theory, and scientific problem solving. At least one chemistry and one physics course are recommended for the degree, as well as the completion of MATH 102 for the GE pattern.

Complete the following Earth Science courses:

- **ESCI 1**: Physical Geology
- **ESCI 15**: Oceanography
- **ESCI 16**: Coastal Oceanographic Field Studies

Select one course from each of the following science course listings to total 7 units:

- **ESCI**: 1, 15
- **PHYS**: 12, 17, 10, 17

Select any of the following courses to total 3 units:

- **AGNR**: 1, 83
- **CIS**: 1
- **GEOG**: 10
- **MATH**: 14
- **NHIS**: 15

#### General Studies: EMS – Emergency Medical Response – 18 Units

This degree is directed at students who will be working as Emergency Medical Technicians. Additionally, this degree could be used as a general preparation program for those students who will be attending a Paramedic certification program.

Complete the following:

- **FAID**: 175

And select 13 units from the list below:

- **ANAT**: 1
- **BIOL**: 5, 6
- **FAID**: 132, 133
- **FIRS**: 104, 120
- **FSS**: 25
- **MICR**: 1
- **PHY**: 1

#### General Studies: Fire – Fire Investigation – 18 Units

While available to anyone, this degree is designed for students who intend on working as fire investigators. Additionally, this degree is applicable for students who are, or will be working in Fire Prevention, Plans Checking, or similar functions within a municipal fire department. Once a student has completed this degree, it is hoped that they will continue their education and pursue a transfer level AA degree with a final target being undergraduate and graduate degrees in Chemistry, Physics, Engineering, Systems Analysis, or similar disciplines.

Complete the following:

- **FIRS**: 71, 86, 189

Select 10 units from the list below:

- **ADJU**: 16, 20
- **CHEM**: 2A
- **FIRS**: 191
- **FTWL**: 101
- **FTWP**: 114
- **PHYS**: 2A

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Chapter 5 – Degrees and Certificates

General Studies: Fire – Fire Service Command, Company Officer – 18 Units

While available to anyone, this degree is designed for students who have been working as Firefighter/Engineers (paid or volunteer) and intend on becoming Engine Captains. Additionally, this degree supports wildland firefighters who are, or will be working at the Crew/Engine/Dozer/Squad Boss levels, or similar supervisory positions. Once a student has completed this degree, it is hoped that they will continue their education and pursue a transfer level AA degree with a final target being undergraduate and graduate degrees in team development, group dynamics/psychology, fire administration or similar disciplines.

Complete the following:
- FIRS 85, 87
- And select 14 units from the list below:
  - FIRS 100,108,135,136
  - FTWO 114, 121,135
  - FTWL 102, 103

General Studies: Fire – Fire Service Leadership – 18 Units

While available to anyone, this degree is designed for students who have been working as Firefighter/Engineers (paid or volunteer) and intend on promoting to supervisory positions. Additionally, this degree supports wildland firefighters who are or will be working at the Crew/Engine/Dozer Boss, Squad Boss, or similar supervisory positions. Once a student has completed this degree, it is hoped that they will continue their education and pursue a transfer level AA degree with a final target being undergraduate and graduate degrees in management, leadership, organizational dynamics, industrial psychology, cognitive engineering or similar disciplines.

Complete the following:
- FIRS 180
- And select 15.5 units from the list below:
  - ADJU 42
  - CMST maximum of 3 units
  - FIRS 113
  - FTWO 115, 134
  - PHIL maximum of 3 units
  - PSYC 14

NOTE: Student may use a maximum of 3 units from the BUAD courses that are listed below to satisfy the 12.5 units.
- BUAD 45, 61, 82, 83, 84, 85, 86, 87, 88, 89, 90

General Studies: Fire–Fire/Rescue Technologies – 18 Units

While available to anyone, this degree is designed for students who have been working as Firefighters (paid or volunteer) and intend on transferring or upgrading to a Technical Rescue or Urban Search and Rescue Team. Once a student has completed this degree, it is hoped that they will continue their education and pursue a transfer level AA degree with the final target being undergraduate and graduate degrees in Materials Science, Engineering, Health and Safety, Physics, or similar disciplines.

Complete the following:
- FIRS 79, 86
- And select 12 units from the list below:
  - FIRS 106, 145, 146, 147, 148, 149
  - FTWL 101, 102, 103

Courses that will also be accepted from other accredited colleges:
- Rescue Systems 2
- Confined Space Rescue Operations
- Trench Rescue
- Low Angle Rescue Operational

General Studies: Fire – Wildland Fire Behavior – 18 Units

While available to anyone, this degree is designed for students who have been working as wildland firefighters and intend on working within the Plans Section of the Incident Command System (specifically the Situation Unit and Fire Behavior positions). Once a student has completed this degree, it is hoped that they will continue their education and pursue a transfer level AA degree with a final target being undergraduate and graduate degrees in Meteorology, Physics, or similar disciplines.

Complete the following:
- ESCI 14
- FTWO 113, 132, 144
- Select 9.5 units from the list below:
  - CHEM maximum of 3 units
  - FTWL 101, 103
  - MATH maximum of 3 units at or above the MATH 102 level
  - PHYS maximum of 3 units

General Studies: Fire – Wildland Fire Reconnaissance – 18 Units

While available to anyone, this degree is designed for students who have been working as wildland firefighters and intend on working within the Plans Section of the Incident Command System (specifically the Situation Unit and Field Observer positions). Additionally, this degree is applicable to students who are working within the Incident Command System as Division Supervisors, Strike Team Leaders, Line Scouts, Lookouts or Squad Bosses. Once a student has completed this degree, it is hoped that they will continue their education and pursue a transfer level AA degree with a final target being undergraduate and graduate degrees in Geographical Information Systems, Geography, Cartography, or similar disciplines.

Select 18 units from the list below:
- BOT 1
- ESCI 14
- FIRS 156
- FTWL 110
- FTWO 112, 128, 132
- GEOG 11

General Studies: Food and Beverage and Lodging Management – 18 units

The Food and Beverage and Lodging management emphasis allows students to explore many areas of the hospitality industry, including culinary arts, restaurant management, casino management, and beverage management.

Select 12-18 units from the following courses:
- CULA 45, 46, 48, 49, 50, 55, 59, 60, 65, 66, 73, 74, 75, 76, 78, 80, 88, 159, 161, 172
- DSS 10, 63
- HOSP 10, 20, 35, 40, 45, 50, 60, 65

Select the remaining 0 – 6 units from the following:
- ACCT 2, 4, 101, 102, 103, 104, 194
- BUAD 6, 8, 10, 40, 42, 66, 71, 72, 80, 81-90, 91, 106, 120, 166
- CIS 113
- OAS 10, 11, 12

General Studies: Geologic Field Studies – 20 units

This degree plan places a field emphasis around classes that provide the background necessary to apply basic scientific principles centered on the geological sciences. Classes support modern geologic theory and its application to field problems as well as lab experiences that produce a foundation for successful fieldwork. At least one chemistry and one physics course are recommended for the degree, as well as the completion of MATH 102 for the GE pattern.

Complete the following Earth Science courses:
- ESCI 9 Physical Geology
- ESCI 23 Introduction to Geology in the Field
- And one geology course with a historical component: ESCI 2, 6, 7, or 10

Select one of the following Earth Science courses:
- ESCI 9 Geologic Hazards
- ESCI 11 Economic Geology

Select one combination of the following Earth Science field courses to total 4 units:
- Field courses include ESCI 26,27,32,33,34,35,36,37,38,42,43,44,45,46
- Any two 30-series in ESCI courses and any one 40 series ESCI course OR
- ESCI 26 or 27 and any two 40-series ESCI courses

Select any of the following courses to total 3 units:
- AGNR 1, 83
- CIS 1
- GEOG 10
- MATH 14
- NHIS 15

General Studies: Health – 18 units

The Health emphasis allows students to explore health-related topics such as nutrition, physical fitness, substance abuse, wellness, and medical-related areas in medical terminology, first aid, EMT training. Students who have completed LVN and CNA certificate programs can use this emphasis to complete an associate degree.

Select 18 units from at least two areas*:
- DAN (activity)* 10,15,20,21,30,31,40,41,50
- FAID 130, 132, 133, 175, 178
- HLTH 25
- KINES 1, 2
- OAS 110, 111
- PE 4, 35, 36

*(General Studies: Health requirements continued on next page)
General Studies: Human Development – 18 units

The Human Development emphasis permits students to explore the areas of early childhood education, teacher preparation, and family studies in order to develop foundational concepts and skills in working with people of all ages. Students will recognize that each human life, characterized by multiple influences and interrelated domains, is worthy of study, both individually and within a variety of contexts.

Select 18 units from at least two of the following areas:

- **General Studies: Language Arts – 18 units**
  
  Written and spoken English language, literature, and world languages. The emphasis in language arts allows students to explore the areas of both foundational concepts and skills in working with people of all ages.

- **General Studies: Humanities – 18 units**
  
  As an introduction to fine arts, literature, music, theater, communication, cultural expressions of the world’s peoples as a foundation for lifelong learning or as introduction to the related fields of anthropology, psychology, sociology, economics, geography, history, and political science.

- **General Studies: Industrial Technologies – 18 units**

  The Industrial Technology emphasis permits the student to explore the trades and acquire skills in a variety of technical fields: automotive and diesel technology, construction, computerized drafting, computer electronics, heavy equipment operation, aviation ground school, machine tooling, and welding.

- **General Studies: Office and Computer Technologies – 18 units**

  The office and computer technologies emphasis allows students to explore many areas of office management, and computer and information management, including clerical skills, legal assisting, medical coding and billing, medical transcription, Computer Networking, A+, and Web design.

- **General Studies: Public Safety and Services – 18 units**

  This emphasis allows the student to explore the broad areas of life and physical sciences as a foundation for lifelong learning.

- **General Studies: Social Sciences – 18 units**

  This emphasis allows students to explore the social and behavioral sciences as a foundation for lifelong learning, or as introduction to the related fields of anthropology, psychology, sociology, economics, geography, history, and political science.

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Administration of Justice
Associate in Science for Transfer:

PROGRAM DESCRIPTION: This course of study prepares students for transfer to complete work for a bachelor’s degree in criminal justice or economic crime investigation. Students will be able to describe the individual functions and components of the modern criminal justice system; use introductory concepts of legal research to locate, analyze, and discuss the content of statutory and case law; and explain the underlying cause of antisocial and criminal behavior. Proper selection of curriculum electives further enables students to study other academic disciplines, such as political science, sociology, and public administration. This program is appropriate for students considering law school as well as certain careers in law enforcement.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this degree, the student should be able to:
1. Identify and apply communication skills when interacting with all people.
2. Identify the need for understanding diverse populations in the criminal justice field and establish strategies for effectively communicating with those diverse populations.
3. Identify the cultural differences found in most communities and apply methods of effectively bridging those differences.
4. Demonstrate and apply critical thinking skills in dealing with ethical decision making within the criminal justice system.
5. Demonstrate the ability to locate resources which enable the resolution of problems within the community and the participants of the criminal justice system.
6. Recognize the major impact ethics and morality has on the citizens the law enforcement profession serves and the daily interaction with others within the criminal justice system.
7. Develop effective writing skills to properly document law enforcement priorities.
8. Demonstrate an understanding of the theory and application of law enforcement rules, regulations, and applicable laws.
9. Demonstrate the ability to make the correct decision during critical life-threatening situations.

REQUIREMENTS:
In addition to the 37-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Science in Administration of Justice for Transfer Degree. Students must also obtain a minimum grade point average of 2.0 and a C or better in each major course.

REQUIRED CORE:

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJU 10</td>
<td>Introduction to Administration of Justice</td>
<td>3</td>
</tr>
<tr>
<td>ADJU 15</td>
<td>Concepts of Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>LIST A (Choose two courses from the following):</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>ADJU 16</td>
<td>Legal Aspects of Evidence (3)</td>
<td></td>
</tr>
<tr>
<td>ADJU 17</td>
<td>Principles and Procedures of the Justice System (3)</td>
<td></td>
</tr>
<tr>
<td>ADJU 18</td>
<td>Community Relations (3)</td>
<td></td>
</tr>
<tr>
<td>ADJU 20</td>
<td>Principles of Investigation (3)</td>
<td></td>
</tr>
<tr>
<td>ADJU 22</td>
<td>Juvenile Procedures (3)</td>
<td></td>
</tr>
<tr>
<td>ADJU 40</td>
<td>Introduction to Corrections (3)</td>
<td></td>
</tr>
<tr>
<td>LIST B (Choose two courses from the following):</td>
<td>6-7</td>
<td></td>
</tr>
<tr>
<td>MATH 14*</td>
<td>Introduction to Statistics (4)</td>
<td></td>
</tr>
<tr>
<td>PSYC 1A*</td>
<td>General Psychology (3)</td>
<td></td>
</tr>
<tr>
<td>SOC 1*</td>
<td>Introduction to Sociology (3)</td>
<td></td>
</tr>
</tbody>
</table>

*May be used to fulfill CSU General Education requirements. See a counselor.
#May be used to fulfill IGETC requirements. See a counselor.

ASSOCIATE IN SCIENCE IN ADMINISTRATION OF JUSTICE FOR TRANSFER DEGREE REQUIREMENTS:

<table>
<thead>
<tr>
<th>Category</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td>18-19</td>
</tr>
<tr>
<td>General Education</td>
<td>37-39*</td>
</tr>
<tr>
<td>General Electives</td>
<td>10-12*</td>
</tr>
<tr>
<td>Degree Total Will Not Exceed 60 Units</td>
<td></td>
</tr>
</tbody>
</table>

*Number will vary depending on units that double count.

Business Administration
Associate in Science for Transfer:

PROGRAM DESCRIPTION: The Associate in Science in Business Administration for Transfer degree is designed to provide students with the common core of lower division courses required to transfer and pursue a baccalaureate degree in Business Administration. This includes business degrees with options such as accounting, finance, human resources management, international business, management, operations management, and marketing. The Associate in Science in Business Administration for Transfer degree aligns with the CSU Bachelor of Science in Business Administration.

This degree is approved through the California Community College Chancellor’s Office Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this degree, the student should be able to:
1. Express the accounting equation; identify and perform the processes of the accounting cycle; and prepare and interpret the basic financial statements for service and merchandising organizations in accordance with generally accepted accounting principles.
2. Identify and illustrate fundamental accounting concepts, classifications, cost systems, cost-volume-profit relationships, budgeting and profit planning to support planning, control and decision making activities of management.
3. Prepare and process payroll records and payroll tax returns in compliance with applicable federal and state laws and regulations.
4. Apply the Internal Revenue Code and related Treasury Regulations as they relate to individual, partnership and corporation income taxes; prepare simple individual income tax returns.
5. Utilize their ability to identify and apply business and finance concepts to advance into upper division coursework as business majors in the fields of accounting, finance, marketing, management and information technology and services.

REQUIREMENTS:
In addition to the 37-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Science in Business Administration for Transfer degree. Students must also obtain a minimum grade point average of 2.0 and a C or better in each major course.

REQUIRED CORE:

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 2</td>
<td>Introduction to Financial Accounting (3)</td>
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</tr>
<tr>
<td>ACCT 4</td>
<td>Introduction to Managerial Accounting (3)</td>
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<tr>
<td>BUAD 6</td>
<td>Business Law I (3)</td>
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<tr>
<td>ECON 1A*</td>
<td>Principles of Economics (Micro) (3)</td>
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<tr>
<td>ECON 1B*</td>
<td>Principles of Economics (Macro) (3)</td>
<td></td>
</tr>
<tr>
<td>LIST A (Choose one course):</td>
<td>3-4</td>
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</tr>
<tr>
<td>MATH 8*#</td>
<td>Finite Mathematics (3)</td>
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<tr>
<td>MATH 9*#</td>
<td>Survey of Calculus (4)</td>
<td></td>
</tr>
<tr>
<td>MATH 14*#</td>
<td>Introduction to Statistics (4)</td>
<td></td>
</tr>
<tr>
<td>LIST B (Choose two courses):</td>
<td>6-8</td>
<td></td>
</tr>
<tr>
<td>Any List A course not used above</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUAD 10</td>
<td>Introduction to Business (3)</td>
<td></td>
</tr>
<tr>
<td>or BUAD 66</td>
<td>Business Communications (3)</td>
<td></td>
</tr>
<tr>
<td>CIS 1</td>
<td>Computer Literacy Workshop (3)</td>
<td></td>
</tr>
</tbody>
</table>

*May be used to fulfill CSU General Education requirements. See a counselor.
#May be used to fulfill IGETC requirements. See a counselor.

ASSOCIATE IN SCIENCE IN BUSINESS ADMINISTRATION FOR TRANSFER DEGREE REQUIREMENTS:

<table>
<thead>
<tr>
<th>Category</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td>24-26</td>
</tr>
<tr>
<td>General Education</td>
<td>37-39*</td>
</tr>
<tr>
<td>General Electives</td>
<td>4-8*</td>
</tr>
<tr>
<td>Degree Total Will Not Exceed 60 Units</td>
<td></td>
</tr>
</tbody>
</table>

*Number will vary depending on units that double count.
**Associate in Arts for Transfer:**

**PROGRAM DESCRIPTION:** Communication classes provide students with skills that are essential for other classes and programs at Shasta College and beyond. The Associate in Arts in Communication Studies for Transfer program teaches communication theory and competencies that are crucial for success in both personal and business relationships. Students learn analytical and critical thinking skills that are essential life skills. Good oral communication skills have been documented by research to be an important factor in the health of personal relationships, and these skills have even been linked to one’s physical and psychological health. Communication courses enable students to lead richer, more satisfying and productive lives by improving their grasp of core theories and practical skills. The results are often immediate and dramatic, improving both personal and professional relationships in both large and small groups. The Associate in Arts in Communication Studies for Transfer degree aligns with the CSU Bachelor of Arts in Communication Studies.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

**PROGRAM LEARNING OUTCOMES:**

1. Identify the role communication plays in academic, social and professional endeavors.
2. Present well-designed, well-researched, well-developed and supported information and persuasive presentations.
3. Demonstrate the tools of advocacy for issues of justice and fairness, with integrity and civility.
4. Demonstrate the skills of critical thinking, recognize common fallacies of thought, demonstrate active listening, conflict management and win-win problem solving essential for both personal relationships and team work.
5. Identify crucial issues affecting intercultural communication, and the adaptations necessary for successful interactions between cultures.

**REQUIREMENTS:**

In addition to the 37-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Arts in Communication Studies for Transfer Degree. Students must also obtain a minimum grade point average of 2.0 and a C or better in each major course.

**REQUIRED CORE:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST 60*</td>
<td>3</td>
</tr>
<tr>
<td>CMST 10*</td>
<td>3</td>
</tr>
<tr>
<td>CMST 40*</td>
<td>3</td>
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<tr>
<td>CMST 54*</td>
<td>3</td>
</tr>
<tr>
<td>CMST 20*</td>
<td>3</td>
</tr>
<tr>
<td>CMST 30*</td>
<td>3</td>
</tr>
<tr>
<td>CMST 75</td>
<td>3</td>
</tr>
</tbody>
</table>

**LIST A (Choose six units from the following):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST 60*</td>
<td>3</td>
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<tr>
<td>CMST 10*</td>
<td>3</td>
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<tr>
<td>CMST 40*</td>
<td>3</td>
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<td>CMST 54*</td>
<td>3</td>
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<tr>
<td>CMST 20*</td>
<td>3</td>
</tr>
<tr>
<td>CMST 30*</td>
<td>3</td>
</tr>
<tr>
<td>CMST 75</td>
<td>3</td>
</tr>
</tbody>
</table>

**LIST B (Choose six units from the following):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 2</td>
<td>3</td>
</tr>
<tr>
<td>ECE 7</td>
<td>3</td>
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<tr>
<td>ECE 8</td>
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<tr>
<td>ECE 9</td>
<td>3</td>
</tr>
<tr>
<td>ECE 15</td>
<td>3</td>
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<tr>
<td>ECE 17</td>
<td>3</td>
</tr>
<tr>
<td>ECE 20</td>
<td>3</td>
</tr>
<tr>
<td>ECE 28</td>
<td>3</td>
</tr>
</tbody>
</table>

**LIST C (Choose three units from the following):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 2</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1A*</td>
<td>3</td>
</tr>
<tr>
<td>SOC 1*</td>
<td>3</td>
</tr>
</tbody>
</table>

*May be used to fulfill IGETC Transfer Degree requirements. See a counselor. #May be used to fulfill IGETC Elective requirements. See a counselor.

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**Associate in Science for Transfer:**

**PROGRAM DESCRIPTION:** The Associate of Science Early Childhood Education Transfer degree is designed to provide students with a common core of eight early childhood education courses (approved by the Curriculum Alignment Project) that permit students to transfer smoothly to participating CSU’s to complete a Bachelor’s degree in child development or early childhood education.

The degree is designed to facilitate students’ successful transfer to certain California State University (CSU) campuses that prepare them for advanced study in a variety of graduate programs, as well as a variety of careers such as teaching, Child Development Specialist, Program Directors, and Child Life Specialists. With a BA in ECE/Child Development, students are eligible for the Master Teacher and Site Supervisor levels of the CA Child Development Permit, using the Alternative Qualifications category.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

**PROGRAM LEARNING OUTCOMES:**

1. Exhibit skill in identifying the needs, the characteristics and multiple influences on the development of children birth to age eight.
2. Design, execute and evaluate environments and activities that support positive developmental play and learning outcomes for young children.
3. Establish and maintain safe and healthy learning environments for young children.
4. Observe, document, and use authentic assessment tools as a vehicle for child and program assessment and curriculum design.
5. Utilize ethical standards and professional behaviors that deepen understanding, knowledge, and commitment regarding the ECE profession.
6. Build family and community relationships and understand and value the importance and complex characteristics of families and communities in young children’s development.
7. Evaluate developmentally effective approaches to create positive relationships and supportive interactions as the foundation in working with children and families from diverse societies.
8. Upon completion of a program of study in Early Childhood Education students will, through planned and sequenced field experiences, develop the knowledge, skills and professional dispositions necessary to promote the development and learning of young children across the entire developmental period of early childhood in multiple early childhood age groups and in the variety of settings that offer early care and education.

**REQUIREMENTS:**

In addition to the 37-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Science in Early Childhood Education for Transfer degree. Students must also obtain a minimum grade point average of 2.0 and a C or better in each major course.

**REQUIRED CORE:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST 60*</td>
<td>3</td>
</tr>
<tr>
<td>CMST 10*</td>
<td>3</td>
</tr>
<tr>
<td>CMST 40*</td>
<td>3</td>
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<tr>
<td>CMST 54*</td>
<td>3</td>
</tr>
<tr>
<td>CMST 20*</td>
<td>3</td>
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<tr>
<td>CMST 30*</td>
<td>3</td>
</tr>
<tr>
<td>CMST 75</td>
<td>3</td>
</tr>
</tbody>
</table>

**LIST A (Choose six units from the following):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 2</td>
<td>3</td>
</tr>
<tr>
<td>ECE 7</td>
<td>3</td>
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<tr>
<td>ECE 8</td>
<td>3</td>
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<tr>
<td>ECE 9</td>
<td>3</td>
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<tr>
<td>ECE 15</td>
<td>3</td>
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<td>ECE 17</td>
<td>3</td>
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<tr>
<td>ECE 20</td>
<td>3</td>
</tr>
<tr>
<td>ECE 28</td>
<td>3</td>
</tr>
</tbody>
</table>

**LIST B (Choose six units from the following):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 2</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1A*</td>
<td>3</td>
</tr>
<tr>
<td>SOC 1*</td>
<td>3</td>
</tr>
</tbody>
</table>

*May be used to fulfill CSU General Education requirements. See a counselor.

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In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.
Kinesiology

**Associate in Arts for Transfer:**

**PROGRAM DESCRIPTION:** The Associate in Arts in Kinesiology for Transfer provides students with the opportunity to meet the requirements for transfer to the California State University system in the Kinesiology major. The degree is designed to prepare students for a variety of career options in the field of Kinesiology such as teaching, exercise science, sports medicine, and physical therapy. Current and prospective community college students are encouraged to meet with a counselor to develop an educational plan that best meets their goals and needs.

**PROGRAM LEARNING OUTCOMES:**

Upon successful completion of this degree, the student should be able to:

1. Identify and apply the concepts, theoretical principles, and historical and current trends in the field of Kinesiology.
2. Understand how exercise in the form of physical activity contributes to the physiological responses and adaptations of the human body.
3. Apply critical thinking, writing, reading, oral communication, and quantitative and qualitative analysis to skill and movement-related concepts.
4. Identify and apply the scientific principles of movement, exercise, and sport including the knowledge and skill in the listed activity course families of fitness, aquatics, individual sport and team sport.
5. Transfer to the California State University level programs with a comprehensive foundation in Kinesiology courses.

**REQUIREMENTS:**

In addition to the 37-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Arts in Kinesiology for Transfer Degree. Students must also obtain a minimum grade point average of 2.0 and a C or better in each major course.

**REQUIRED CORE:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 1*#</td>
<td>Human Anatomy with Lab</td>
<td>5</td>
</tr>
<tr>
<td>KINES 1</td>
<td>Foundations of Kinesiology</td>
<td>3</td>
</tr>
<tr>
<td>PHY 1*#</td>
<td>Physiology with Lab</td>
<td>5</td>
</tr>
<tr>
<td>Movement Based Courses: (minimum of 3)</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Select a maximum of one course from any three of the following areas for a minimum of three units.

**Aquatics:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 30A</td>
<td>Beginning Swimming (1) OR</td>
<td></td>
</tr>
<tr>
<td>PE 30B</td>
<td>Intermediate Swimming (1) OR</td>
<td></td>
</tr>
<tr>
<td>PE 31</td>
<td>Aqua Aerobics (1) OR</td>
<td></td>
</tr>
<tr>
<td>PE 32</td>
<td>Water Polo (1) OR</td>
<td></td>
</tr>
<tr>
<td>PE 37</td>
<td>Springboard Diving (1)</td>
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</tr>
</tbody>
</table>

**Combatives:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 60</td>
<td>Self Defense (1)</td>
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</table>

**Fitness and Conditioning:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 11</td>
<td>Fundamental Conditioning (1) OR</td>
<td></td>
</tr>
<tr>
<td>PE 12A</td>
<td>Beg. Weight Training and Fitness (1) OR</td>
<td></td>
</tr>
<tr>
<td>PE 12B</td>
<td>Inter. Weight Training and Fitness (1) OR</td>
<td></td>
</tr>
<tr>
<td>PE 15</td>
<td>Aerobic Dance (1) OR</td>
<td></td>
</tr>
<tr>
<td>PE 16</td>
<td>Aerobic Exercise (1) OR</td>
<td></td>
</tr>
<tr>
<td>PE 17</td>
<td>Yoga (1)</td>
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</table>

**Individual Sports:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 51A</td>
<td>Beginning Tennis (1) OR</td>
<td></td>
</tr>
<tr>
<td>PE 51B</td>
<td>Intermediate Tennis (1) OR</td>
<td></td>
</tr>
<tr>
<td>PE 62</td>
<td>Golf (1) OR</td>
<td></td>
</tr>
</tbody>
</table>

**Team Sports:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 69</td>
<td>Football (1) OR</td>
<td></td>
</tr>
<tr>
<td>PE 70A</td>
<td>Beginning Volleyball (1) OR</td>
<td></td>
</tr>
<tr>
<td>PE 70B</td>
<td>Intermediate Volleyball (1) OR</td>
<td></td>
</tr>
<tr>
<td>PE 71</td>
<td>Softball (1) OR</td>
<td></td>
</tr>
<tr>
<td>PE 72</td>
<td>Baseball (1) OR</td>
<td></td>
</tr>
<tr>
<td>PE 74</td>
<td>Soccer (1) OR</td>
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</tr>
<tr>
<td>PE 75</td>
<td>Basketball (1)</td>
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</table>

**LIST A (Choose one course):** 7-9

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1A*#</td>
<td>General Chemistry (5) OR</td>
<td></td>
</tr>
<tr>
<td>CHEM 2A*#</td>
<td>Introduction to Chemistry (5)</td>
<td></td>
</tr>
<tr>
<td>KINES 2</td>
<td>Sports Emergency Care (3)</td>
<td></td>
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<tr>
<td>MATH 14*#</td>
<td>Introduction to Statistics (4)</td>
<td></td>
</tr>
<tr>
<td>PHYS 2A*#</td>
<td>General Physics (4)</td>
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</tr>
</tbody>
</table>

Psychology

**Associate in Arts for Transfer:**

**PROGRAM DESCRIPTION:** This program introduces students to psychology as the scientific study of human behavior and mental processes and the practical application of psychology to personal and social issues. The Associate in Arts in Psychology for Transfer degree is designed to provide students with a common core of lower division courses required to transfer and pursue a baccalaureate (4-year) degree in psychology in the CSU system.

**PROGRAM LEARNING OUTCOMES:**

Upon successful completion of this degree, the student should be able to:

1. List and describe the major concepts, vocabulary, theoretical perspectives, and empirical findings of psychology.
2. Describe and apply basic research methods in psychology.
3. Practice critical thinking to solve problems related to behavior and mental processes.
4. Link psychological concepts and principles to relevant practical applications.

**REQUIREMENTS:**

In addition to the 37-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Arts in Psychology for Transfer Degree. Students must also obtain a minimum grade point average of 2.0 and a C or better in each major course.

**REQUIRED CORE:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>MATH 14*#</td>
<td>Introduction to Statistics</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 1A*#</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 25</td>
<td>Introduction to Research Methods</td>
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</table>

**LIST A (Choose one course):** 3-4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1*#</td>
<td>Principles of Biology (4) OR</td>
<td></td>
</tr>
<tr>
<td>BIOL 10 &amp; 10L*#</td>
<td>General Biology and General Biology Lab (3/1)</td>
<td></td>
</tr>
<tr>
<td>BIOL 5*#</td>
<td>Introduction to Human Biology</td>
<td>3</td>
</tr>
</tbody>
</table>

**LIST B (Choose one course):** 3-4

Any List A course not used above (3-4)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1B*</td>
<td>Literature and Composition (3) OR</td>
<td></td>
</tr>
<tr>
<td>PSYC 15*#</td>
<td>Social Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 1*#</td>
<td>Intro to Sociology</td>
<td>3</td>
</tr>
</tbody>
</table>

**LIST C (Choose one course):** 3-4

Any List A or List B course not used above

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 5*#</td>
<td>Human Sexuality</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 14*#</td>
<td>Understanding Human Behavior</td>
<td></td>
</tr>
<tr>
<td>PSYC 16*</td>
<td>Health Psychology</td>
<td></td>
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<tr>
<td>PSYC 17*#</td>
<td>Abnormal Psychology</td>
<td></td>
</tr>
<tr>
<td>PSYC 20*#</td>
<td>Cross-Cultural Psychology</td>
<td></td>
</tr>
<tr>
<td>PSYC 41</td>
<td>Cultural/Social Context of Childhood</td>
<td></td>
</tr>
<tr>
<td>PSYC 46*#</td>
<td>Human Learning &amp; Memory</td>
<td></td>
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</tbody>
</table>

*May be used to fulfill CSU General Education requirements. See a counselor.

**ASSOCIATE IN ARTS IN PSYCHOLOGY FOR TRANSFER DEGREE REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Component</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>Major</td>
<td></td>
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<tr>
<td>General Education</td>
<td>23-25</td>
</tr>
<tr>
<td>General Electives</td>
<td>2-9</td>
</tr>
</tbody>
</table>

Degree Total Will Not Exceed 60 Units

*Number will vary depending on units that double count.
Sociology

Associate in Arts for Transfer:

PROGRAM DESCRIPTION: Sociology is the systematic and scientific study of society and social behavior. The sociologist looks beyond individual and unique events to the predictable broad patterns and regular occurrences of social life that influence individuals. Studies range from the profound impact of post-industrial societies on family life, crime, mass communications, gender, race, ethnicity and intergenerational relations to the study of emotions and the values that govern daily social encounters.

The sociology major is designed to provide undergraduate preparation leading to careers in social work, politics, law, public administration, the nonprofit sector, international development, marketing, urban and environmental planning, public relations, personnel, criminal justice, counseling and other social service professions. The Associate in Arts in Sociology for Transfer degree will also prepare a student for advanced studies in several areas, including sociology, social work, environmental studies, education, public health and urban planning. This degree prepares students for a CSU Baccalaureate Degree in Sociology.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this degree, the student should be able to:
1. Articulate the sociological perspective on human behavior.
2. Compare and contrast the major theoretical orientations in sociology.
3. Articulate the role of theory and social research methods in sociology.
4. Describe research methodology and critically evaluate sociological data.
5. Integrate content knowledge and cognitive skills, i.e., logical thinking, problem-solving, and critical reasoning, when completing exams, term papers, and additional class assignments.
6. Apply sociological principles that contribute to the foundation for life-long personal growth, development of effective interpersonal and social skills, education, employment and everyday life.

REQUIREMENTS:
In addition to the 37-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Arts in Sociology for Transfer Degree. Students must also obtain a minimum grade point average of 2.0 and a C or better in each major course.

REQUIRED CORE:

SOC 1*# Introduction to Sociology 3
LIST A
SOC 2*# Social Problems 3
MATH 14*# Introduction to Statistics 4
LIST B (Choose six units from the following):
PSYC 15 Social Psychology (3 units)
SOC 25*# Sociology of Minorities (3 units)
SOC 30*# Sociology of Gender (3 units)
LIST C (Choose three units from the following):
Any List A or List B course not used above
ANTH 2*# Cultural Anthropology (3 units)
GEOG 18*# Cultural Geography (3 units)
PSYC 1A*# General Psychology (3 units)
SOC 15*# Sociology of Mass Media (3 units)
SOC 22*# Sociology of Aging (3 units)
SOC 70* Social Welfare (3 units)

ASSOCIATE IN ARTS IN SOCIOMETRY FOR TRANSFER DEGREE REQUIREMENTS:

Major 19
General Education 37-39*
General Electives 11-17*
Degree Total Will Not Exceed 60 Units

*Number will vary depending on units that double count.

Studio Arts

Associate in Arts for Transfer:

Pending Chancellor's Office Approval

PROGRAM DESCRIPTION: The AA-T in Studio Arts program provides a solid foundation in the fundamentals of art, including conceptual awareness of current issues in art, technical competencies, visual aptitudes, and skills in many areas of human interaction, including relationship building, intercultural competency, critical thinking, information competency, teamwork and leadership. Students develop an understanding of the principles of art and design while investigating concepts and applying these elements to two dimensional compositions and three dimensional forms. The Art program is academically grounded in the liberal arts tradition of cultural studies, history, philosophy, and technical processes. It provides a hands-on, learn-by-doing environment that gives students experiences and skills to complement many career paths. The AA-T in Studio Arts will align with the CSU Bachelor of Fine Arts and Bachelor of Arts Degrees.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this degree, the student should be able to:
1. Describe and successfully apply the elements and principles of art and design to two dimensional compositions or three dimensional forms
2. Select appropriate tools and techniques in dealing with a variety of media to demonstrate informed, skilled and sensitive handling in the execution of two dimensional imagery and three dimensional forms.
3. Investigate, develop and employ conceptual themes which clearly and consistently reflect the student’s point of view.
4. Effectively identify and utilize resources for art history research.
5. Articulate in writing his/her objective and subjective understanding of two and three-dimensional works.
6. Orally evaluate the works of fellow students and implement suggestions made through the evaluation of his/her work by others.
7. Transfer to a California State University with a major in Studio Arts.

REQUIREMENTS:
In addition to the 37-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Arts in Studio Arts for Transfer Degree. Students must also obtain a minimum grade point average of 2.0 and a C or better in each major course.

REQUIRED CORE:

ART 3*# History of Western Arts Since 1400 3
ART 12 Beginning Form, Design and Color 3
ART 15 Three Dimensional Design 3
ART 21A Beginning Freehand Drawing 3

LIST A – Art History (Choose one course from the following):
ART 2# History of Western Art Through Gothic Period (3)
ART 4*# World Art (3)
ART 6*# History of Modern Art (3)

LIST B – Studio Arts (Choose three courses from the following):
ART 13 Intermediate Form, Design and Color (3)
ART 21B Intermediate Figure Drawing (3) OR
ART 31A Beginning Figure Drawing (3)
ART 29A Beginning Painting (3)
ART 35A Beginning Ceramics (3)
ART 45 Beginning Glass (3)
ART 50A Beginning Printmaking (3)
ART 55A Beginning Sculpture (3)
ART 60A Beginning Darkroom Photography (3)
ART 70A Beginning Digital Photography (3) OR
ART 80A Graphic Design (3)

ART 29B Intermediate Painting (3) OR
ART 35B Intermediate Ceramics (3) OR
ART 46 Glass Blowing (3) OR
ART 55B Intermediate Sculpture (3) OR
ART 60B Intermediate Darkroom Photography (3) OR
ART 70B Intermediate Digital Photography (3)

*May be used to fulfill CSU General Education requirements. See a counselor.
#May be used to fulfill IGETC requirements. See a counselor.

ASSOCIATE IN ARTS IN STUDIO ARTS FOR TRANSFER DEGREE REQUIREMENTS:

Major 24
General Education 37-39*
General Electives 3-6*
Degree Total Will Not Exceed 60 Units

*Number will vary depending on units that double count.

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.
Theatre Arts

Associate in Arts for Transfer:

PROGRAM DESCRIPTION: The Theatre Arts program is academically grounded in the liberal arts tradition of literature, performance, cultural studies, history, philosophy, and technical skills. It also provides a hands-on, learn-by-doing environment that gives students experiences and skills to complement many career paths. Employers find theatre trained applicants become valuable employees because they have developed excellent communication and problem-solving skills, confidence, and the ability to work cooperatively with a diverse team of people.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this degree, the student should be able to:
1. Describe the basic elements of dramatic structure and analyze the dramatic components in a theatrical production.
2. Select appropriate monologues and prepare them as audition pieces.
3. Investigate the themes and dramaturgy of the Greek, Roman, Medieval, Renaissance, Elizabethan, Jacobean and Restoration periods of Theatre history and compare and contrast those periods through discussion, papers, and performance analysis.
4. Identify and apply the major components of stagecraft in the implementation of scenery, lighting, costume, make-up, special effects, and production management.
5. Investigate the social, political, and spiritual objectives of theatrical performance through discussions and papers that deal with gender, politics and religion.
6. Evaluate dramatic scripts relative to historical context and contemporary relevance.
7. Develop cooperation skills in working with people from diverse cultures.
8. Transfer to a California State University with a major in Theatre Arts.

REQUIREMENTS:
In addition to the 37-39 unit general education pattern for CSU or IGETC, students must complete the core courses listed below for the Associate in Arts in Theatre Arts for Transfer Degree. Students must also obtain a minimum grade point average of 2.0 and a C or better in each major course.

REQUIRED CORE:

<table>
<thead>
<tr>
<th>THTR 1*#</th>
<th>Introduction to Theatre Arts OR</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>THTR 8*#</td>
<td>Theatre History I</td>
<td>3</td>
</tr>
<tr>
<td>THTR 12</td>
<td>Acting I</td>
<td>2</td>
</tr>
<tr>
<td>THTR 16</td>
<td>Acting Lab</td>
<td>1</td>
</tr>
<tr>
<td>Three units from the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>THTR 23</td>
<td>Mainstage Production I</td>
<td></td>
</tr>
<tr>
<td>THTR 26</td>
<td>Mainstage Production II</td>
<td></td>
</tr>
<tr>
<td>THTR 41</td>
<td>Theatre Lab</td>
<td></td>
</tr>
<tr>
<td>THTR 42</td>
<td>Technical Stage Production</td>
<td></td>
</tr>
<tr>
<td>THTR 50</td>
<td>Stage Production</td>
<td></td>
</tr>
<tr>
<td>THTR 70</td>
<td>Repertory Theatre – I</td>
<td></td>
</tr>
<tr>
<td>THTR 74</td>
<td>Repertory Theatre – Technical</td>
<td></td>
</tr>
</tbody>
</table>

LIST A (Choose at least three courses for a 9 unit minimum) 9

Note: There is a 3-unit maximum in Rehearsal and Performance courses, and if you used them in the core, then you cannot use them in List A. There is a 3-unit maximum in Technical Theatre Practicum courses, and if you used them in the core then you cannot use them in List A.

THTR 30  Stagecraft (3)
THTR 31  Introduction to Theatrical Design (3)
THTR 34  Makeup (2) AND
THTR 38  Makeup Lab (1)
THTR 81  Playwriting and Script Analysis (3)

Any Rehearsal and Performance or Technical Theatre Practicum course listed in Core but not used for Core requirements (1-3)

*May be used to fulfill CSU General Education requirements. See a counselor.
#May be used to fulfill IGETC requirements. See a counselor.

ASSOCIATE IN ARTS IN THEATRE ARTS FOR TRANSFER DEGREE REQUIREMENTS:

<table>
<thead>
<tr>
<th>Major</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education</td>
<td>37-39*</td>
</tr>
<tr>
<td>General Electives</td>
<td>6-8*</td>
</tr>
</tbody>
</table>

Degree Total Will Not Exceed 60 Units

*Number will vary depending on units that double count.
**Accounting Clerk/Bookkeeper**

**Certificate:**

**PROGRAM DESCRIPTION:** Completion of the Certificate Program will prepare the student for entry-level position in accounts receivable, accounts payable, payroll, and general ledger.

This certificate is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this certificate.

**PROGRAM LEARNING OUTCOMES:**

- Upon successful completion of this certificate, the student should be able to:
  1. Express the accounting equation; identify and perform the processes of the accounting cycle; and prepare and interpret the basic financial statements for service and merchandising organizations in accordance with generally accepted accounting principles.
  2. Use integrated accounting software in performing the processes of the accounting cycle and preparing the basic financial statements for service and merchandising organizations in accordance with generally accepted accounting principles.
  3. Prepare and process payroll records and payroll tax returns in compliance with applicable federal and state laws and regulations.
  4. Demonstrate the use of skills relevant for problem solving, decision making and solving ethical dilemmas in the business environment including critical thinking, effective written and oral communication, working effectively in teams and the proficient use of computers for information search, retrieval, problem solving and communication.
  5. Identify and explain the current economic indicators regarding inflation, unemployment, monetary and fiscal policy and their effects on consumers and small businesses.

**GAINFUL EMPLOYMENT INFORMATION:** For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at [http://www.shastacollege.edu/bait_acct_gainful_employment/](http://www.shastacollege.edu/bait_acct_gainful_employment/)

**CERTIFICATE REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Basic Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 102</td>
<td>Basic Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 103</td>
<td>PC Accounting</td>
<td>2</td>
</tr>
<tr>
<td>ACCT 104</td>
<td>Payroll Accounting</td>
<td>2</td>
</tr>
<tr>
<td>BUAD 10</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 66</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 106</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 166</td>
<td>Business English</td>
<td>3</td>
</tr>
<tr>
<td>OAS 10</td>
<td>Excel for Windows-I</td>
<td>1</td>
</tr>
<tr>
<td>OAS 51</td>
<td>Introduction to Keyboarding and Word</td>
<td>3</td>
</tr>
<tr>
<td>OAS 64</td>
<td>Computerized Ten-Key</td>
<td>.5</td>
</tr>
<tr>
<td>OAS 166</td>
<td>Records Management</td>
<td>2</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE** 28.5

- Student may take ACCT 2 in place of ACCT 101 or ACCT 102

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**Administration of Justice**

**Associate in Science:**

**PROGRAM DESCRIPTION:** The Administration of Justice Program (AOJ) is designed to provide professional courses in AOJ fields for the pre-service student, and for the criminal justice employee preparing for promotional exams or to upgrade or maintain skills and knowledge. At Shasta College, you will receive occupational training for both the entrance and promotional levels of AOJ agencies and allied services. With additional general education courses, you will also be able to fulfill the requirements to transfer to a four-year college with junior standing. A variety of agencies exist at the federal, state and local levels of government; and also through private industry.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

**PROGRAM LEARNING OUTCOMES:**

- Upon successful completion of this degree, the student should be able to:
  1. Demonstrate their knowledge of the evolution of the justice system, its objectives, role and trends through discussion and examinations.
  2. Demonstrate their knowledge of the basics of California criminal law and the core principles that drive the police and course, through discussion and examinations.
  3. Demonstrate their knowledge of the basics of evidence collection, chain of evidence and submission of evidence and legal requirements for the handling of evidence through discussion and examinations.
  4. Demonstrate their knowledge of the California Court Criminal System, law enforcement report writing and court testimony through examination and discussion.
  5. Demonstrate their knowledge in the basics of criminal investigation and how the process leads to submission to the District Attorney, court system and corrections, through examination and discussion.
  6. Demonstrate their knowledge of how policy/community relations intertwine into community relations through examination and discussion.

**DEGREE REQUIREMENTS:**

**CORE COURSES:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJU 10</td>
<td>Introduction to Administration of Justice</td>
<td>3</td>
</tr>
<tr>
<td>ADJU 15</td>
<td>Concepts of Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>ADJU 16</td>
<td>Legal Aspects of Evidence</td>
<td>3</td>
</tr>
<tr>
<td>ADJU 17</td>
<td>Principles and Procedures of the Justice System</td>
<td>3</td>
</tr>
<tr>
<td>ADJU 18</td>
<td>Community Relations</td>
<td>3</td>
</tr>
<tr>
<td>ADJU 20</td>
<td>Principles of Investigation</td>
<td>3</td>
</tr>
<tr>
<td>ADJU 23</td>
<td>Career Planning for Administration of Justice</td>
<td>3</td>
</tr>
<tr>
<td>ADJU 26</td>
<td>Courtroom Testimony/Report Writing</td>
<td>3</td>
</tr>
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</table>

**RESTRICTED ELECTIVES:** (Choose six units) 6

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJU 11</td>
<td>Traffic Control and Investigation</td>
<td>3</td>
</tr>
<tr>
<td>ADJU 21</td>
<td>Police Field Operations</td>
<td>3</td>
</tr>
<tr>
<td>ADJU 22</td>
<td>Juvenile Procedures</td>
<td>3</td>
</tr>
<tr>
<td>ADJU 24</td>
<td>Multi-Cultural Issues/Law Enforcement</td>
<td>3</td>
</tr>
<tr>
<td>ADJU 25</td>
<td>Substantive Law</td>
<td>3</td>
</tr>
<tr>
<td>ADJU 30</td>
<td>Wildlife Law Enforcement</td>
<td>3</td>
</tr>
<tr>
<td>ADJU 40</td>
<td>Introduction to Corrections</td>
<td>3</td>
</tr>
<tr>
<td>ADJU 41</td>
<td>Fundamentals of Crime and Delinquency</td>
<td>3</td>
</tr>
<tr>
<td>ADJU 42</td>
<td>Interviewing and Counseling</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1</td>
<td>Computer Literacy Workshop</td>
<td>3</td>
</tr>
</tbody>
</table>

**ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td>30</td>
</tr>
<tr>
<td>Additional General Education</td>
<td>18</td>
</tr>
<tr>
<td>General Electives</td>
<td>12</td>
</tr>
<tr>
<td>Degree Total</td>
<td>60*</td>
</tr>
</tbody>
</table>

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the normal requirement would increase by 6 units.

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.
Associate in Science: **Agriculture – Agricultural Business**

**PROGRAM DESCRIPTION:** The Agricultural-Business major is designed for students interested in working in the area of agricultural-related business. Career opportunities in agricultural business may include careers with the U.S. Department of Agriculture or Resource Conservation Service or a career in ranch or farm management, banking, agricultural credit, agricultural insurance, consulting firms, or agricultural product distribution and sales. The employment opportunities are many. “Agri” Business is the largest business sector in the world as statistics show that it takes at least 16 people to keep one farmer in business. These people are involved in all phases of agriculture from the production and marketing of everything from the fertilizer and seed, equipment and machinery to the crops, feed, production loans, and crop insurance and so on. In the state of California, agriculture is the #1 commodity which further increases our student’s employment opportunities. This degree is designed to give students a broad understanding of the agriculture industry, as it is much easier for a student who has solid foundation in agriculture to be successful in the world of agricultural business as “agri” business differs from other business sectors as much of the time the commodities that are marketed and sold are perishable.

This program also prepares students for transfer to an Agriculture Business program at a four-year university. Students who plan to transfer should talk to a counselor or advisor to select appropriate general education and elective courses that will meet the requirements of the chosen university program.

Students planning to transfer to a college or university should consult a counselor or Agriculture faculty regarding transfer requirements. **TRANSFER REQUIREMENTS MAY BE DIFFERENT FROM A.S. DEGREE REQUIREMENTS.** Sixty (60) units are required for the AS Degree. All graduation requirements must be met.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

**PROGRAM LEARNING OUTCOMES:**

Upon successful completion of this degree, the student should be able to:

1. Demonstrate proficiency in accounting procedures using a double-entry bookkeeping system.
2. Organize and prepare reports, presentations, and other information pertaining to managerial procedures.
3. Describe the economic significance of California Agriculture and its relationship to the global economy.
4. Explain supply and demand as it relates to local and regional agriculture business industries.
5. Demonstrate the ability to make logical business decisions based on the analysis of business trends locally, regionally, and globally.
6. Demonstrate proficiency using computers, the Internet, and other technology as they relate to agri-business.
7. Recognize world markets and describe their effect on local agriculture economies.

**DEGREE REQUIREMENTS:**

**CORE COURSES:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 1</td>
<td>Career Planning for Agriculture</td>
<td>2</td>
</tr>
<tr>
<td>AG 6</td>
<td>Career Placement – Ag and Natural Resources</td>
<td>1</td>
</tr>
<tr>
<td>AG 9A</td>
<td>Agriculture and Natural Resources Leadership I</td>
<td>1</td>
</tr>
<tr>
<td>AG 54</td>
<td>Worksite Learning-Agriculture OR</td>
<td>1</td>
</tr>
<tr>
<td>AG 58</td>
<td>Student Entrepreneur Projects</td>
<td>1</td>
</tr>
<tr>
<td>AGAB 53</td>
<td>Introduction to Agriculture Business</td>
<td>3</td>
</tr>
<tr>
<td>AGAS 11</td>
<td>Livestock Feeding and Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>AGAS 19</td>
<td>Principles of Animal Science</td>
<td>3</td>
</tr>
<tr>
<td>AGMA 44</td>
<td>Intro. to Const. Skills for Ag and Nat. Resources</td>
<td>3</td>
</tr>
<tr>
<td>AGPS 20*</td>
<td>Plant Science</td>
<td>4</td>
</tr>
<tr>
<td>AGPS 24*</td>
<td>Soils</td>
<td>3</td>
</tr>
<tr>
<td>AGSA 56</td>
<td>Intro. to Sustainable Ag and Farm Management</td>
<td>3</td>
</tr>
</tbody>
</table>

**RESTRICTED ELECTIVES:** (Choose nine units)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGAB 51</td>
<td>Agriculture Accounting (3)</td>
<td></td>
</tr>
<tr>
<td>AGAB 54*</td>
<td>Agriculture Economics (3)</td>
<td></td>
</tr>
<tr>
<td>ECON 1B*</td>
<td>Principles of Economics (3) OR</td>
<td></td>
</tr>
<tr>
<td>BUAD 76</td>
<td>Sales (3) OR</td>
<td></td>
</tr>
<tr>
<td>BUAD 77</td>
<td>Principles of Marketing (3)</td>
<td></td>
</tr>
</tbody>
</table>

**ADDITIONAL GENERAL EDUCATION REQUIRED:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMST 60*</td>
<td>Public Speaking (3) OR</td>
<td>3</td>
</tr>
<tr>
<td>CMST 54*</td>
<td>Small Group Communication (3)</td>
<td></td>
</tr>
<tr>
<td>ENGL 1A*</td>
<td>College Composition</td>
<td>4</td>
</tr>
<tr>
<td>MATH 102*</td>
<td>Intermediate Algebra (5) OR</td>
<td>3-5</td>
</tr>
<tr>
<td>MATH 13*</td>
<td>College Algebra (3) OR</td>
<td></td>
</tr>
<tr>
<td>MATH 14*</td>
<td>Introduction to Statistics (4)</td>
<td></td>
</tr>
<tr>
<td>AREA 3:</td>
<td>Humanities</td>
<td>3</td>
</tr>
<tr>
<td>AREA 5/6:</td>
<td>Multicultural/Living Skills</td>
<td></td>
</tr>
</tbody>
</table>

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

**Agriculture – Environmental Horticulture**

**PROGRAM DESCRIPTION:** The Environmental Horticulture Degree is designed to prepare students to complete lower division coursework at Shasta College for transfer to a B.S. degree in Agriculture with an option in crops horticulture and land resource management at CSU Chico. This degree would also prepare students to transfer to other CSUs but students should consult with Ag faculty or counselor regarding specific transfer requirements. Students interested in more details about this degree should contact the Horticulture Dept at 242-2210.

While completing degree requirements, students will also receive training adequate for job placement in areas of landscape management, wholesale and retail nursery and related horticultural fields. This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

**PROGRAM LEARNING OUTCOMES:**

Upon successful completion of this degree, the student should be able to:

1. Demonstrate safe and efficient use of both nursery and landscape tools, equipment and supplies.
2. Demonstrate the ability to communicate with clients, assess landscape for ecological and economic sustainability, measure and analyze a property, draft a landscape and a residential irrigation design, develop management schedules, and implement practices based on client needs.
3. Design and implement a nursery operation, select and make production schedules for greenhouse crops, and propagate, grow and market nursery crops.
4. Identify 150 landscape trees, shrubs and ground covers and select species suitable for different landscape situations.
5. Describe and implement both conventional and sustainable methods for use in the landscape relating to cultural practices, weed control, soil amendments, plant selection and care.
6. Obtain all course work necessary for transfer to a 4-year degree program in horticulture or related field.
7. Explain and apply basic principles of botany to horticulture practices.
8. Safely conduct landscape construction activities in the correct construction sequence. Including the proper installation of: a landscape sprinkler system, a low-volume (drip) irrigation system, concrete and brick pavers and landscape plants and sod.
9. Explain and apply the concepts of job estimating and laws as they pertain to landscape construction and maintenance.

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.*
10. Demonstrate landscape maintenance activities and equipment operation in a safe manner. Including the ability to test and evaluate soil fertility, select and apply fertilizers at the proper rate. Recognize common turf grass species and select proper maintenance techniques for each type of turf grass and to prune landscape trees and shrubs.

**DEGREE REQUIREMENTS:***

**CORE COURSES:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 6</td>
<td>Career Placement – Ag and Natural Resources</td>
<td>1</td>
</tr>
<tr>
<td>AGEH 22</td>
<td>Nursery Practices and Plant Propagation</td>
<td>2</td>
</tr>
<tr>
<td>AGEH 23</td>
<td>Nursery Practices and Management</td>
<td>2</td>
</tr>
<tr>
<td>AGEH 27, 28 &amp; 29</td>
<td>Plant Identification and Taxonomy</td>
<td>3</td>
</tr>
<tr>
<td>AGEH 33*</td>
<td>Environmental Horticulture</td>
<td>3</td>
</tr>
<tr>
<td>AGPS 20*</td>
<td>Plant Science</td>
<td>3</td>
</tr>
<tr>
<td>AGER 35</td>
<td>Landscape Design</td>
<td>3</td>
</tr>
<tr>
<td>AGAB 54*</td>
<td>Agriculture Economics</td>
<td>3</td>
</tr>
<tr>
<td>AGEH 38</td>
<td>Landscape and Turf Management</td>
<td>3</td>
</tr>
<tr>
<td>AGMA 44</td>
<td>Introduction to Construction Skills for Ag/Nat Res.</td>
<td>3</td>
</tr>
<tr>
<td>AGPS 25*</td>
<td>Soils</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 2A*</td>
<td>Introduction to Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CMST 54* or A1*</td>
<td>Small Group Communication</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1A*</td>
<td>College Composition</td>
<td>4</td>
</tr>
<tr>
<td>HIST 17A* or 17B*</td>
<td>U.S. History and Government</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1A*</td>
<td>Introduction to Statistics</td>
<td>4</td>
</tr>
<tr>
<td>POLS 2*</td>
<td>Introduction to American Government</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 1* or C2*</td>
<td>Elementary Spanish</td>
<td>3-5</td>
</tr>
</tbody>
</table>

**RECOMMENDED COURSES** (Not Required):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGAS 19</td>
<td>Principles of Animal Science (3)</td>
<td></td>
</tr>
<tr>
<td>AGEH 31</td>
<td>Landscape Irrigation (3)</td>
<td></td>
</tr>
<tr>
<td>AGNR 52</td>
<td>Computers in Ag and Natural Resources (3)</td>
<td></td>
</tr>
<tr>
<td>CHEM 2B</td>
<td>Introduction to Organic and Biochemistry (5)</td>
<td></td>
</tr>
</tbody>
</table>

Students planning to transfer to a four-year college or university should consult a counselor or an academic advisor regarding transfer requirements. **TRANSFER REQUIREMENTS MAY BE DIFFERENT FROM AS DEGREE REQUIREMENTS.***

*May be used to fulfill General Education requirements. See a counselor.

**ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td>51-53</td>
</tr>
<tr>
<td>Additional General Education</td>
<td>9-12**</td>
</tr>
<tr>
<td>General Electives</td>
<td>0</td>
</tr>
<tr>
<td>Degree Total</td>
<td>63-65*</td>
</tr>
</tbody>
</table>

*Note: CSU Chico does not require Area C for high unit program.

**Agriculture – Equine Science:**

**Associate in Science:**

**PROGRAM DESCRIPTION:** This curriculum is designed to provide training in a wide variety of jobs available in the equine industry, including horse training, grooming and care, horse packing, stable management, and others. Classes for this major will be offered during the evening program. Students interested in this major should secure a worksite position early in the program to confirm their desire for working in this industry as well as gaining practical experience.

Students planning to transfer to a college or university should consult a Counselor or Agriculture Faculty Advisor regarding transfer requirements. **TRANSFER REQUIREMENTS MAY BE DIFFERENT FROM ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS.***

Students who do not qualify for advanced levels of mathematics are strongly encouraged to enroll in MATH 100 Technical Applications of Math as preparation for degree requirements. Sixty (60) units are required for an A.S. degree. All graduation requirements are met.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and **filling an application for graduation with Admissions and Records,** the student’s transcript will reflect completion of this degree.

**GAINFUL EMPLOYMENT INFORMATION:** For information about graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at [http://www.shastacollege.edu/bait_ag_gainful_employment](http://www.shastacollege.edu/bait_ag_gainful_employment).

Continued on next page...
Agriculture – Equipment Operations & Maintenance

Certificate:

PROGRAM DESCRIPTION: This curriculum is designed to provide employable skills essential to several occupations and emphasizes the “learning-by-doing” method of instruction on modern up-to-date equipment.

This certificate is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

PROGRAM LEARNING OUTCOMES:

1. Be able to identify all common species of trees and shrubs native to the Western US by their scientific and common names and to discuss general uses, site characteristics, and geographic distributions of these species.
2. Be able to apply knowledge of the Silvicultural treatments used to regulate stand, Composition, regenerate stands, increase growth rates, and improve timber quality.
3. Be able to apply skills in the safe use and maintenance of tools and equipment.
4. Be able to apply computer skills using Forestry-related software.
5. Be able to select and implement an appropriate protocol following the method of instruction on modern up-to-date equipment.
6. Be able to use heavy equipment to move soil to grade.
7. Be able to apply computer skills using Forestry-related software.
8. Be able to evaluate basic theory, concepts, and ecological principles as they apply to Forestry, Wildlife, Water Resources, and Ecosystem Restoration.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/bait_heop_gainful_employment

CERTIFICATE REQUIREMENTS:

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<tr>
<td>AGM 44</td>
<td>Intro. to Const. Skills for Ag and Nat. Res.</td>
<td>OR 3</td>
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<tr>
<td>WELD 70</td>
<td>Beginning Welding</td>
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<td>AGNR 66A</td>
<td>Watershed Restoration Practicum I</td>
<td>1</td>
</tr>
<tr>
<td>AGPS 24</td>
<td>Soils (3) OR</td>
<td>3 - 3.5</td>
</tr>
<tr>
<td>DIES 48</td>
<td>Hydraulics (3.5)</td>
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<tr>
<td>CONS 45</td>
<td>Career Planning/Leadership for Heavy Equip.</td>
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<tr>
<td>CONS 46</td>
<td>Equipment Operations and Maintenance</td>
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<tr>
<td>CONS 47</td>
<td>Project Construction for Equipment Operations</td>
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<tr>
<td>CONS 48</td>
<td>Surveying for Equipment Operators</td>
<td>2</td>
</tr>
<tr>
<td>CONS 55</td>
<td>Equipment Operations Skills Development OR</td>
<td>1-2</td>
</tr>
<tr>
<td>CONS 94</td>
<td>Worksite Learning for Construction Technology</td>
<td></td>
</tr>
<tr>
<td>MATH 100*</td>
<td>Technical Applications of Mathematics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>*Math Placement Level 3 or higher</td>
<td></td>
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<tr>
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<td>Current CPR/First Aid Certification (Required)</td>
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TOTAL UNITS FOR CERTIFICATE 21 – 22.5

Suggested Courses: CONS 149, AUTO 1, DIES 166, DIES 170, ENGR 118, CMST 54, WELD 170, English, Computers

*May be used to fulfill General Education requirements. See a counselor.

Page 5-29
Ag – Forest Science and Technology Degree (continued):

ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:

<table>
<thead>
<tr>
<th>Major</th>
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Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

Agriculture – Horticulture and Landscaping
Also see Agriculture-Environmental Horticulture for Transfer Degree information

Associate in Science:

PROGRAM DESCRIPTION: The Green Industry is a huge industry with many different career opportunities. Nursery sales exceed $55 billion nationally. California sells $13.26 billion in nursery and floral products annually and the Landscape Industry continues to grow rapidly as population increases both statewide and locally. This degree will prepare students for jobs in both landscape and nursery areas. Job opportunities continue to outnumber the number of graduates in our local area. Career choices include city and county parks; state and federal organizations; garden centers, independent, local and national chains; landscape maintenance business; floral design and arrangement; landscape design and installation and nursery and landscape management positions. Courses include directed practical experience in a modern horticulture facility that includes a floral lab room, 7,000 square feet of greenhouses and 20,000 square feet of landscaping. Many landscaping operations are also done on the beautiful 300-acre college campus.

Students should contact their counselor or environmental horticulture faculty advisor to choose electives for the particular career they are planning to enter. Particular attention should be paid to course prerequisites.

Students planning to transfer to a college or university should consult a counselor or Horticulture Faculty Advisor regarding transfer requirements. TRANSFER REQUIREMENTS MAY BE DIFFERENT FROM A.S. DEGREE REQUIREMENTS.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

PROGRAM LEARNING OUTCOMES:

Upon successful completion of the certificate, the student will:
1. Demonstrate safe and efficient use of both nursery and landscape tools, equipment and supplies.
2. Demonstrate the ability to communicate with clients, assess landscape for ecological and economic sustainability, measure and analyze a property, draft a landscape and a residential irrigation design, develop management schedules, and implement practices based on client needs.
3. Design and implement a nursery operation, select and make production schedules for greenhouse crops, and propagate, grow and market nursery crops.
4. Identify 150 landscape trees, shrubs and ground covers and select species suitable for different landscape situations.
5. Demonstrate skills to assess site or plant cultural issues and make recommendations for enhancing the health of the landscape planting or nursery plants using integrated pest management.
6. Describe and implement both conventional and sustainable methods for use in the landscape relating to cultural practices, weed control, soil amendments, plant selection and care.
7. Be prepared to take the California Pesticide Applicators Certificate Exam with the California Department of Pesticide Regulation.
8. Explain and apply basic principles of botany to horticulture practices.
9. Safely conduct landscape construction activities in the correct construction sequence: Including the proper installation of: a landscape sprinkler system, a low-volume (drip) irrigation system, concrete and brick pavers and landscape plants and sod.
10. Explain and apply the concepts of job estimating and laws as they pertain to landscape construction and maintenance.
11. Demonstrate landscape maintenance activities and equipment operation in a safe manner. Including the ability to test and evaluate soil fertility, select and apply fertilizers at the proper rate. Recognize common turf grass species and select proper maintenance techniques for each type of turf grass and to prune landscape trees and shrubs.
12. Demonstrate a strong work and personal ethic.
13. Demonstrate skills needed to take the Landscape Industries Certified Technician Exam.

DEGREE REQUIREMENTS:

Some of these classes require math skills. Students are encouraged to begin taking math classes early in the program.

CORE COURSES:

| AG 6   | Career Placement – Ag and Natural Resources | 1 |
| AGEH 22 | Nursery Practices and Plant Propagation | 2 |
| AGEH 23 | Nursery Practices and Management | 2 |
| AGEH 26 | Integrated Pest Management in Environ. Hort. | 3 |
| AGEH 27 | Plant Identification and Taxonomy | 1 |
| AGEH 28 | Plant Identification and Taxonomy | 1 |
| AGEH 29 | Plant Identification and Taxonomy | 1 |
| AGEH 31.1 | Landscape Irrigation - Design | 1 |
| AGEH 31.2 | Landscape Irrigation - Installation | 1 |
| AGEH 31.3 | Landscape Irrigation – Troubleshoot and Schedule | 1 |
| AGH 33* | Environmental Horticulture | 3 |
| AGH 35 | Landscape Design | 3 |
| AGH 38 | Landscape and Turf Management | 3 |
| AGH 94 | Horticulture Worksite Learning | 3 |
| AGMA 44 | Introduction to Const. Skills for Ag and Nat. Res. | 3 |
| AGNR 52 | Computers in Agriculture/Natural Resources | 3 |
| AGNR 66A | Watershed Restoration Practicum I | 1 |
| AGNR 66B | Watershed Restoration Practicum II | 1 |
| AGNR 83 | Introduction to Global Positioning Systems (GPS) | 3 |
| AGPS 24* | Soils | 3 |
| CHEM 2A* | Introduction to Chemistry | 5 |

*May be used to fulfill General Education requirements. See a counselor.

ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:

<table>
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<tr>
<th>Major</th>
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<td>General Electives</td>
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<tr>
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</tbody>
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*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

Certificate:

PROGRAM DESCRIPTION: The Green Industry is a huge industry with many different career opportunities. Nursery sales exceed $55 billion nationally. California sells $13.26 billion in nursery and floral products annually and the Landscape Industry continues to grow rapidly as population increases both statewide and locally. This certificate will prepare students for jobs in both landscape and nursery areas. Career choices include city and county parks; state and federal organizations; garden centers, independent, local and national chains; landscape maintenance business; floral design and arrangement; landscape design and installation and nursery and landscape management positions. Courses include directed practical experience in a modern horticulture facility that includes a floral lab room, 7,000 square feet of greenhouses and 20,000 square feet of landscaping. Many landscaping operations are also done on the beautiful 300-acre college campus.

Students should contact their counselor or environmental horticulture faculty advisor to choose electives for the particular career they are planning to enter. Particular attention should be paid to course prerequisites.

This certificate is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this certificate.

Ag – Horticulture Certificate listed on next page
Ag – Horticulture Certificate (continued):

PROGRAM LEARNING OUTCOMES:
Upon successful completion of the certificate, the student should be able to:

1. Demonstrate safe and efficient use of both nursery and landscape tools, equipment and supplies
2. Demonstrate the ability to communicate with clients, assess landscape for ecological and economic sustainability, measure and analyze a property, draft a landscape and a residential irrigation design, develop management schedules, and implement practices based on client needs.
3. Design and implement a nursery operation, select and make production schedules for greenhouse crops, and propagate, grow and market nursery crops.
4. Identify 150 landscape trees, shrubs and ground covers and select species suitable for different landscape situations.
5. Demonstrate skills to assess site or plant cultural issues and make recommendations for enhancing the health of the landscape planting or nursery plants using integrated pest management.
6. Describe and implement both conventional and sustainable methods for use in the landscape relating to cultural practices, weed control, soil amendments, plant selection and care.
7. Be prepared to take the California Pesticide Applicators Certificate Exam with the California Department of Pesticide Regulation.
8. Explain and apply basic principles of botany to horticulture practices.
9. Safely conduct landscape construction activities in the correct construction sequence: Including the proper installation of: a landscape sprinkler system, a low-volume (drip) irrigation system, concrete and brick pavers and landscape plants and sod.
10. Explain and apply the concepts of job estimating and laws as they pertain to landscape construction and maintenance.
11. Demonstrate landscape maintenance activities and equipment operation in a safe manner. Including the ability to test and evaluate soil fertility, select and apply fertilizers at the proper rate. Recognize common turf grass species and select proper maintenance techniques for each type of turf grass and to prune landscape trees and shrubs.
12. Demonstrate a strong work and personal ethic.
13. Demonstrate skills needed to take the Landscape Industries Certified Technician Exam

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/bait_hort_gainful_employment

CERTIFICATE REQUIREMENTS:

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<thead>
<tr>
<th>Course Code</th>
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<th>Units</th>
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<tbody>
<tr>
<td>AG 8</td>
<td>Career Placement – Ag and Natural Resources</td>
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</tr>
<tr>
<td>AGEH 22</td>
<td>Nursery Practices and Plant Propagation</td>
<td>2</td>
</tr>
<tr>
<td>AGEH 23</td>
<td>Nursery Practices and Management</td>
<td>2</td>
</tr>
<tr>
<td>AGEH 26</td>
<td>Integrated Pest Management in Environ. Hort.</td>
<td>3</td>
</tr>
<tr>
<td>AGEH 27, 28, 29</td>
<td>Plant Identification and Taxonomy</td>
<td>3</td>
</tr>
<tr>
<td>AGEH 31.1</td>
<td>Landscape Irrigation – Design</td>
<td>1</td>
</tr>
<tr>
<td>AGEH 31.2</td>
<td>Landscape Irrigation – Installation</td>
<td>1</td>
</tr>
<tr>
<td>AGEH 31.3</td>
<td>Landscape Irrigation – Troubleshoot/Schedule</td>
<td>1</td>
</tr>
<tr>
<td>AGEH 33</td>
<td>Environmental Horticulture</td>
<td>3</td>
</tr>
<tr>
<td>AGEH 35</td>
<td>Landscape Design</td>
<td>3</td>
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<td>AGEH 38</td>
<td>Landscape and Turf Management</td>
<td>3</td>
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<td>AGEH 94</td>
<td>Horticulture Worksite Learning</td>
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<tr>
<td>AGMA 44</td>
<td>Intro. to Const. Skills for Ag &amp; Natural Res.</td>
<td>3</td>
</tr>
<tr>
<td>AGNR 52</td>
<td>Computers in Agriculture/Natural Resources</td>
<td>3</td>
</tr>
<tr>
<td>AGNR 66A</td>
<td>Watershed Restoration Practicum I</td>
<td>1</td>
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<td>AGNR 66B</td>
<td>Watershed Restoration Practicum II</td>
<td>1</td>
</tr>
<tr>
<td>AGNR 83</td>
<td>Intro. to Global Positioning Systems (GPS)</td>
<td>1</td>
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<tr>
<td>AGPS 24</td>
<td>Soils</td>
<td>3</td>
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<tr>
<td>ENGL 190</td>
<td>Reading &amp; Writing II** (see below for alternative)</td>
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<tr>
<td>MATH 100</td>
<td>Tech. Appl. of Math or Math Placement Level 3</td>
<td>3</td>
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</tbody>
</table>

**Students may choose one of the following alternatives: ENGL 190 OR BUAD 165 OR a combination of ENGL 191, and two units selected from the following courses: ENGL 192, ENGL 193 or ENGL 194 for a total of 4 units.

TOTAL UNITS FOR CERTIFICATE: 45

In addition to the core courses, students will need to complete additional hours of work experience in order to take the Contractor or Designers Certification Exam with the Irrigation Association. Shasta College plans on making these opportunities available through Horticulture Worksite Learning (AGEH 94). Those students taking the Certified Irrigation Contractors exam would also need skills in layout, staking, business, management, and codes.

**Students may choose one of the following alternatives: ENGL 190 OR BUAD 165 OR a combination of ENGL 191, and two units selected from the following courses: ENGL 192, ENGL 193 or ENGL 194 for a total of 4 units.

TOTAL UNITS FOR CERTIFICATE: 45
Ag – Horticulture – Landscape and Turf Management Certificate (continued):

PROGRAM LEARNING OUTCOMES:
Upon successful completion of the certificate, the student should be able to:

1. Demonstrate the ability to communicate with clients, assess landscape for ecological and economic sustainability, measure and analyze a property, draft a landscape and a residential irrigation design, develop management schedules, and implement practices based on client needs.
2. Demonstrate safe and efficient use of landscape tools, equipment and supplies.
3. Demonstrate landscape maintenance activities and equipment operation in a safe manner. Including the ability to test and evaluate soil fertility, select and apply fertilizers at the proper rate. Recognize common turf grass species and select proper maintenance techniques for each type of turf grass and to prune landscape trees and shrubs.
4. Explain and apply the concepts of job estimating and laws as they pertain to landscape maintenance and utilize this information to calculate job costs.
5. Demonstrate a strong work and personal ethic.
6. Be prepared to take the California Pesticide Applicators Certificate Exam

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/bait_hort_gainful_employment/

CERTIFICATE REQUIREMENTS:

AGEH 23 Integrated Pest Management in Environ. Hort. 3
AGEH 31.1 Landscape Irrigation – Design 1
AGEH 31.2 Landscape Irrigation – Installation 1
AGEH 31.3 Landscape Irrigation – Troubleshoot/Schedule 1
AGEH 35 Landscape Design 3
AGEH 38 Landscape and Turf Management 3
AGEH 75 Water Gardening 1
AGEH 94 Horticulture Worksite Learning 1
AGMA 44 Intro. to Const. Skills for Ag and Natural Res. 3
AGPS 24 Soils OR
CONS 46 Equipment Operations and Maintenance 3

TOTAL UNITS FOR CERTIFICATE: 17

Agriculture – Horticulture – Retail Nursery Sales Certificate:

PROGRAM DESCRIPTION: This curriculum is designed to help prepare the student for the certification exam administered by the California Association of Nurseries and Garden Centers, and entry into the world of Ornamental Horticulture. The requirement of work experience is an important part of this certification. See details on the CANGC.org website.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of the certificate, the student should be able to:

1. Demonstrate the ability to communicate with clients, assess landscape for ecological and economic sustainability, measure and analyze a property and implement practices based on client needs.
2. Demonstrate safe and efficient use of nursery tools, equipment and supplies.
3. Identify 150 landscape trees, shrubs and ground covers and select species suitable for different landscape situations.
4. Design and implement a nursery operation, select and make production schedules for greenhouse crops, and propagate, grow and market nursery crops.
5. Demonstrate a strong work and personal ethic.
6. Be prepared to take the California Pesticide Applicators Certificate Exam with the California Department of Pesticide Regulation.

REQUIREMENTS FOR CERTIFICATE:

AGEH 23 Integrated Pest Management 2
AGEH 26 Integrated Pest Management in Environ. Hort. 3
AGEH 27 Plant Identification and Taxonomy 1
AGEH 28 Plant Identification and Taxonomy 1
AGEH 29 Plant Identification and Taxonomy 1
AGEH 35 Landscape Design 3
AGEH 38 Landscape and Turf Management 3
AGEH 94 Horticulture Worksite Learning 1-3

TOTAL UNITS FOR CERTIFICATE: 15 – 17

Agriculture – Natural Resources

Associate in Science:

PROGRAM DESCRIPTION: This curriculum is designed to provide technician-level training for students interested in working in such areas as wildlife, forestry, range, and outdoor recreation. Typical employers include local, county, and U.S. Government agencies, as well as private companies. Particular attention should be paid to course prerequisites and to whether a class is taught during the fall or spring semester, or both.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this degree, the student will:

1. Have sufficient coursework and field experience to pursue seasonal technician jobs or to transfer to a University in a Natural Resources-related field.
2. Be able to use a taxonomic key or field guide to correctly identify unknown species of plants, birds, mammals, and aquatic invertebrates to the level of genus.
3. Be able to select and use an appropriate protocol following the scientific method to collect, statistically analyze, evaluate, and document original research data.
4. Be able to accurately navigate in the field using maps, compass, a Global Positioning System (GPS). Students will also be able to use GPS for field data collection and Geographic Information Systems (GIS) for data mapping and display.
5. Be able to evaluate basic theory, concepts, and ecological principles as they apply to Forestry, Wildlife, Water Resources, and Ecosystem Restoration and use his/her cumulative skills to think critically and to work out possible solutions to address problems facing Natural Resources managers today and in the future.

DEGREE REQUIREMENTS:

CORE COURSES:

AGNR 1* Introduction to Natural Resources 3
AGNR 6 Native Plant Identification 3
AGNR 12 Environmental Policy and Law 2
AGNR 50 Natural Resource Measurements 4
AGNR 52 Computers in Agriculture/Natural Resources 3
AGNR 60* Environmental Science (GE-Natural Science) 3
AGNR 64* Watershed Management and Ecology 3
AGNR 65 Forest Ecology 3
AGNR 66A Watershed Restoration Practicum I 1
AGNR 70 Wildlife Management and Conservation 3
AGNR 94 Natural Resources Worksite Learning 1
AGMA 44 Intro. to Const. Skills for Ag and Natural Res. 3
AGPS 24* Soils 3
GEOG 9 Map and Geospatial Principles 3

*May be used to fulfill General Education requirements. See a counselor.

Continued on next page…
Ag – Natural Resources Degree (continued):

ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:

<table>
<thead>
<tr>
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*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

Certificate:

PROGRAM DESCRIPTION: The Natural Resources curriculum is designed to meet the demand for trained personnel in a broad range of Natural Resource/Environmental Science fields in addition to numerous private organizations.

This certificate is approved through the California Community College Chancellor's Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this certificate.

PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student will:

1. Be qualified to pursue seasonal job employment with the Federal Government, a State Agency, or a Private company in a field related to Forestry & Natural Resources.
2. Be able to use a specified protocol following the scientific method to collect, analyze, evaluate, and document original research data.
3. Be able to accurately navigate in the field using maps, compass, a Global Positioning System (GPS). Students will also be able to use GPS for field data collection and Geographic Information Systems (GIS) for data mapping and display.
4. Be able to evaluate basic theory, concepts, and ecological principles as they apply to Forestry, Wildlife, Water Resources, and Ecosystem Restoration and will use his/her cumulative skills to think critically and to work out possible solutions to address problems facing Natural Resources managers today and in the future.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/bait_nr_gainful_employment/.

CERTIFICATE REQUIREMENTS:

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<th>AGNR 1</th>
<th>Introduction to Natural Resources</th>
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<tr>
<td>AGNR 6</td>
<td>Native Plant Identification</td>
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<td>AGNR 50**</td>
<td>Natural Resources Measurements</td>
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<td>Watershed Restoration Practicum I</td>
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<tr>
<td>AGNR 70</td>
<td>Wildlife Conservation and Management</td>
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<tr>
<td>GEG 9</td>
<td>Map and Geospatial Principles</td>
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| **TOTAL UNITS FOR CERTIFICATE: 17**

**These courses also count towards the Watershed Restoration Certificate.

Agriculture – Pest Control Advisor Preparation

Certificate:

PENDING CHANCELLOR'S OFFICE APPROVAL

PROGRAM DESCRIPTION: Pest Control Advisors (PCAs) are licensed professional production consultants who serve California agriculture, natural resource and horticulture producers. PCAs specialize in pest management, but they are also an important resource to producers in a wide range of production concerns related to plant health. This certificate satisfies the core-course requirements specified for option "b." in preparing to take the Pest Control Advisor's exam with the California Department of Pesticide Regulation. The following courses need to be completed with a 2.0 grade point average or better. Note: In addition to completing the course work, the Department of Pesticide Regulation requires PCA exam applicants to have completed 24 months of technical work experience before taking the exam.

PROGRAM LEARNING OUTCOMES:

Upon successful completion of the certificate, the student should be able to:

1. Demonstrate the ability to communicate with clients, assess pest damage for ecological and economic sustainability, determine thresholds and implement IPM practices based on client/crop needs.
2. Explain and apply basic principles of soils, cation exchange capacity, entomology and botany to horticulture practices and pesticide mode of action.
3. Be prepared to take the California Pesticide Applicators Certificate Exam with the California Department of Pesticide Regulation.
4. Demonstrate application of pesticides in a safe manner, include selecting proper PPE, mixing, calibration and application.

REQUIREMENTS FOR CERTIFICATE:

To prepare for the PCA exam, students will need to complete 42 units of the required curricula specified in the core-curricula areas below with a 2.0 grade point or better in each course.

CATEGORY 1: PHYSICAL AND BIOLOGICAL SCIENCES:

12

AGNR 60 Environmental Science (3)
AGNR 65 Forest Ecology (3)
AGPS 20 Plant Science (4)
BIOL 1# Principles of Biology (4)
BIOL 10 General Biology Lecture (3)
BIOL 10L General Biology Lab (1)
BIOL 12 Field Biology (3)
BOT 1# General Botany (4)
CHEM 2B# Intro to Organic Chemistry and Biochemistry (5)
CHEM 6 Intro to Chemistry Applied to the Environment (4)
CHEM 26 Fundamentals of Gen, Organic, and Biochem (4)
CHEM 70 or 71# Organic Chemistry (4)
MICR 1# Microbiology (5)
ZOOL 1# General Zoology

CATEGORY 2: CROP HEALTH:

AGEH 31# Landscape Irrigation 3
AGNR 70 Wildlife Conservation and Management 3
AGPS 24 Soils 3

CATEGORY 3: PEST MANAGEMENT AND METHODS:

AGEH 26 Integrated Pest Management 3
AGEH 61 Plant Protection Materials 3

CATEGORY 4: PRODUCTION SYSTEMS:

AGEH 27, 28 & 29 Plant Identification (1 each for a total of 3)
AGE 27, 28 &29 Plant Identification (1 each for a total of 3)
AGEH 33 Environmental Horticulture (3)
AGEH 38 Landscape and Turf Management (3)
AGEH 60 Master Gardener Training (3)
AGEH 71/72 Organic Gardening (1 each)
AGN 4 Introduction to Range Sciences (3)
AGNR 53 Forest Protection and Restoration (3)
AGNR 55 Introduction to Forest Operations (3)
AGVIT 81 Vineyard Care (1)

**TOTAL UNITS FOR CERTIFICATE: 42**

RESTRICTED ELECTIVES: 9

Complete an additional 9 units from Categories 2-4 above

#Indicates at least one prerequisite is required.

Page 5-33
Agriculture – Sustainable Agriculture Science

Associate in Science:

PROGRAM DESCRIPTION: The Sustainable Agriculture Science Degree at Shasta College provides training for ranching, farming, agriculture production and related careers in vocational education, sales, services and distribution of agriculture-related products. In the core courses, students will receive a broad-based knowledge of agriculture, ag-business management, and both sustainable and traditional agricultural production practices. A hands-on approach provides students with realistic training and education in livestock husbandry, crop production, farm and land management and equipment operations and repair.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this degree, the student should be able to:
1. Describe the development and dissemination of modern agricultural technologies and land use practices.
2. Explain the principles of crop rotation and demonstrate the ability to develop a simple crop rotation plan.
3. To frame problems and ask critical questions concerning agricultural sustainability.
4. Address complex agricultural problems by using systems thinking and other approaches.
5. Describe the principles and practices used to enhance and maintain biological diversity in an agricultural environment.
6. Evaluate the role of soil fertility in an ecological production system.

DEGREE REQUIREMENTS:

CORE COURSES:
AG 1 Career Planning for Agriculture 2
AG 6 Career Placement – Ag and Natural Resources 1
AG 9A Agriculture and Natural Resources Leadership I 1
AG 94 Worksite Learning OR 1
AG 58 Student Enterprise Projects 1
AGAS 53 Introduction to Agriculture Business 3
AGAS 11 Livestock Feeding and Nutrition 3
AGAS 19* Principles of Animal Science 3
AGMA 44 Intro. to Cons. Skills for Ag and Natural Resources 3
AGPS 20* Plant Science 4
AGPS 24* Soils 3
AGSA 56 Intro. to Sustainable Ag and Farm Management 3

TOTAL UNITS FOR CORE 27

OPTION 1 – General Agr. Science Concentration (Choose eight units)
AGAB 51 Agriculture Accounting (3)
AGAB 54* Agriculture Economics (3)
AGMA 42 Farm Power and Machinery (3)
CHEM 2A* Introduction to Chemistry (required) (5)
CHEM 2B* Introduction to Organic and Biochemistry (5)
AGPS 46 Equipment Operations and Maintenance (3)

OPTION 2 – Agriculture Education Concentration (Choose nine units)
AGAS 30 Livestock Production (3)
AGEH 22 Nursery Practices and Plant Propagation (2)
AGEH 23 Nursery Practices and Management (2)
AGEH 26 Integrated Pest Management in Environmental Hort. (3)
AGEH 13 Horse Husbandry (3) OR
AGAS 21 Horse Management (3)
AGMA 42 Farm Power and Machinery (3)
CONS 46 Equipment Operations and Maintenance (3)
WELD 73 Structural Steel Metal Fabrication (3)

OPTION 3 – Farm, Ranch, and Wildland Management Concentration (Choose a total of nine units with at least one course from each area)

(Area 1) WILDLAND MANAGEMENT CURRICULUM
AGNR 4 Introduction to Wildland and Range Ecology (3)
AGNR 12 Environmental Policy and Law (2)
AGNR 64* Watershed Management and Ecology (3)
AGNR 65 Forest Ecology (3)
AGNR 70 Wildlife Conservation and Management (3)

(Area 2) FARM AND RANCH MANAGEMENT CURRICULUM
AGAB 51 Agriculture Accounting (3)
AGAB 30 Livestock Production (3)
AGEH 26 Integrated Pest Management in Envir.Hort. (3)
AGEH 31* Landscape Irrigation (3) OR
AGPS 25* California Water (3)
AGHE 33* Environmental Horticulture (3)
AGEQ 21 Horse Management (3)
AGMA 42 Farm Power and Machinery (3)
AGVIT 80 Vineyard Design and Construction (1)
AGVIT 81 Vineyard Care (1)
WELD 73 Structural Steel Metal Fabrication (3)

Additional General Education Required for A.S. Degree:
ENGL 1A* College Composition 4
CMST 60* Public Speaking (3) OR
CMST 54* Small Group Communication (3) 3-5

MATH 102* Intermediate Algebra (5)
MATH 13* College Algebra (3) OR
MATH 14* Introduction to Statistics (4)

Computer Literacy test OR
AGNR 52 Computers in Ag and Natural Resources (3)

AREA 2: Social and Behavioral Science for some Options 0-3
AREA 3: Humanities 3
AREA 5: Multicultural/Living Skills 3

1. Students planning to transfer to a college or university should consult a counselor or Agriculture faculty regarding transfer requirements. TRANSFER REQUIREMENTS MAY BE DIFFERENT FROM A.S. DEGREE REQUIREMENTS.
2. 60 units and all graduation requirements are required for the AS Degree.

*Note: Calculation assumes a student will double-count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS
Major 46-51
Additional General Education 6-9
General Electives 0-9

Degree Total 60*

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.

Applied Geographic Information Systems

Associate in Science:

PROGRAM DESCRIPTION: The Associate of Science degree in Applied Geographic Information Systems (AGIS) provides students with skills, knowledge and experience in the application of GIS. Students complete courses in the technical aspects of GIS and information technologies, along with courses in fields to which GIS is commonly applied, including earth and social sciences, natural resources and engineering. Students gain knowledge of maps, geographic data, and imagery, while developing skills in data collection, analysis and map creation. As students progress through the program the applied field courses provide direction for learning about the application of GIS, which gives direction to GIS project work. Worksite learning allows students to gain GIS workplace experience in their chosen field and to develop contacts among the community of GIS professionals. Successful students will have strong computer and critical thinking skills.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this degree, the student should be able to:
1. Explain and summarize key GIS concepts, applications and societal implications.
2. Perform GIS data acquisition, capture, editing, and attributing.

Continued on next page...
Applied Geographic Information Systems Degree (continued):

3. Manage GIS data through file management, database design, georeferencing and conversion.
4. Perform GIS analysis using queries, overlay functions, and models.
5. Produces a portfolio of maps demonstrating effective communication, design aesthetics, application of GIS tools and use of cartographic standards.
6. Employs best practices for GIS project design, planning, and implementation.
7. Effectively engages with community through projects, volunteer activities, user meetings and worksite learning.
8. Articulates key opportunities and challenges related to the application of GIS for a chosen application discipline.
9. Performs customization of GIS applications through programming and web map services.
10. Demonstrates effective written and oral communication as it pertains to a chosen application discipline.

DEGREE REQUIREMENTS:

CORE:
- GEOG 5* Digital Planet: GIS and Society 3
- GEOG 9 Map and Geospatial Principles 3
- GEOG 10 Introduction to Geographic Information Systems 3
- GEOG 12 GIS Data Design and Capture 3
- GEOG 13 GIS Spatial Analysis 3
- GEOG 14 GIS Cartography and Visualization 3
- GEOG 15 Intro to Remote Sensing 3
- GEOG 25 GIS Projects 1
- GEOG 94 GIS Worksite Learning 2

INFORMATION TECHNOLOGIES:
Choose 6 units from the following courses:
- CIS 2* Introduction to Computer Science (3)
- CIS 20 Access for Windows I (1)
- CIS 21 Access for Windows II (1)
- CIS 23 Database Management Systems (3)
- CIS 52 Install and Configure Server 2012 (1)
- CIS 53 Administering Server 2012 (1)
- CIS 54 Configure Advanced Server 2012 Services (1)
- CIS 61* C++ Programming (3)
- CIS 62* Java Programming (3)
- CIS 64 Web Programming using Java/ PHP/Flash (3)
- GEOG 21 GIS-CAD Integration (1)
- GEOG 24 Customizing GIS (1)

APPLICATION DISCIPLINES:
Choose 6 to 8 units from the following courses:
- AGRN 1* Intro to Natural Resources (3)
- AGRN 50 Natural Resource Measurements (3)
- ENGR 1A Measurements and Plane Surveying (3)
- ENGR 27 Map and Computer-aided Drafting (3)
- ESCI 5* Introduction to Geology (4)
- ESCI 10* Environmental Geology (4)
- GEOG 1A\1AL Physical Geography (3/1)
- GEOG 1B* Cultural Geography (3)

*May be used to fulfill General Education requirements. See a counselor.

ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:

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<th>Major</th>
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*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. The student may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.
Art Degree (continued):

**PROGRAM LEARNING OUTCOMES:**
Upon successful completion of this degree, the student should be able to:

1. Describe and successfully apply the elements and principles of art and design to two-dimensional compositions or three dimensional forms.
2. Select appropriate tools and techniques in dealing with a variety of media then demonstrate informed, skilled and sensitive handling in the execution of two-dimensional imagery and three-dimensional forms.
3. Investigate, develop and employ conceptual themes which clearly and consistently reflect the student’s point of view.
4. Effectively identify and utilize resources for art historical research.
5. Articulate his/her (objective and subjective) understanding of two and three dimensional works in writing.
6. Orally evaluate the works of fellow students and implement suggestions made through the evaluation of his/her work by others.

**DEGREE REQUIREMENTS:**

**CORE COURSES:**
- ART 2* History of Western Art Through the Gothic Period 3
- ART 3* Western Art, Renaissance to Contemporary 3
- ART 12 Beginning Form, Design and Color 3
- ART 13 Intermediate Form, Design and Color 3
- ART 21A Beginning Freehand Drawing 3
- ART 21B Intermediate Freehand Drawing 3

*May be used to fulfill General Education requirements.

**RESTRICTED ELECTIVES:** (Choose nine units) 9

- ART 15 Three Dimensional Design (3)
- ART 17 Shades, Shadows and Perspectives (3)
- ART 26A Beginning Watercolor (3)
- ART 26B Intermediate Watercolor (3)
- ART 26C Advanced Intermediate Watercolor (3)
- ART 26D Advanced Watercolor (3)
- ART 29A Beginning Painting (3)
- ART 29B Intermediate Painting (3)
- ART 29C Advanced Intermediate Painting (3)
- ART 29D Advanced Painting (3)
- ART 31A Beginning Figure Drawing (3)
- ART 31B Intermediate Figure Drawing (3)
- ART 31C Advanced Intermediate Figure Drawing (3)
- ART 31D Advanced Figure Drawing (3)
- ART 35A Beginning Ceramics (3)
- ART 35B Intermediate Ceramics (3)
- ART 45 Beginning Glass (3)
- ART 46 Glass Blowing (3)
- ART 50A Beginning Printmaking (3)
- ART 50B Intermediate Printmaking (3)
- ART 50C Advanced Printmaking (3)
- ART 55A Beginning Sculpture (3)
- ART 55B Intermediate Sculpture (3)
- ART 55C Advanced Sculpture (3)
- ART 57 Sculptural Glass (3)
- ART 60A Beginning Darkroom Photography (3)
- ART 60B Intermediate Darkroom Photography (3)
- ART 60C Advanced Intermediate Darkroom Photography (3)
- ART 60D Advanced Darkroom Photography (3)
- ART 70A Beginning Digital Photography (3)
- ART 70B Intermediate Digital Photography (3)
- ART 70C Advanced Intermediate Digital Photography (3)
- ART 70D Advanced Digital Photography (3)

**ASSOCIATE IN ARTS DEGREE REQUIREMENTS:**

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*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

Automotive Technology

**Associate in Science:**

**PROGRAM DESCRIPTION:** The Automotive Technology Program is designed to prepare students for employment and advancement in the automotive field. Curriculum requirements have been developed for certification by the National Institute for Automotive Service Excellence (ASE) program. The curriculum has been planned to provide technical knowledge and laboratory experiences related to a wide range of automotive applications.

This degree is approved through the California Community College Chancellor's Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

**PROGRAM LEARNING OUTCOMES:**
Upon successful completion of this degree, the student should be able to:

1. Inspect, diagnose, disassemble, repair, replace and service components/systems in student’s area of specialization.
2. Work safely and responsibly within all shop safety and environmental guidelines and standards.
3. Demonstrate competency in accessing and applying technical service information.

**DEGREE REQUIREMENTS:**

**CORE COURSES:**
- AUTO 1 Vehicle Electrical Systems 3
- AUTO 10 Automotive Electronics 3
- AUTO 20 Engine Performance 4
- AUTO 21 Advanced Engine Performance 3
- AUTO 94 Automotive Worksite Learning 2
- AUTO 130 Automotive Steering & Suspension 3
- AUTO 131 Automotive Wheel Alignment 2
- AUTO 147 Automotive Braking Systems 3
- AUTO 150 Introduction to Engine Maching 3
- AUTO 152 Engine Machining Laboratory 3
- AUTO 161 Manual Drive Trains & Axles 4
- AUTO 162 Automatic Transmissions and Transaxles 4
- AUTO 163 Automotive Heating & Air Conditioning 3
- ENGL 1A* College Composition 4
- INDE 1 Career Planning for Industrial Technology 1
- MATH 110* Essential Math 3

*May be used to fulfill General Education requirements. See a counselor.

**ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:**

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*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

**Certificate:**

**PROGRAM DESCRIPTION:** The objective is to allow the student to gain entry level skills specific to the automotive industry.

This certificate is approved through the California Community College Chancellor's Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this certificate.

**PROGRAM LEARNING OUTCOMES:**
Upon successful completion of this certificate, the student should be able to:

1. Inspect, diagnose, disassemble, repair, replace and service components/systems in student’s area of specialization.
2. Work safely and responsibly within all shop safety and environmental guidelines and standards.
3. Demonstrate competency in accessing and applying technical service information.

Continued on next page...
Chapter 5 – Degrees and Certificates

Automotive Technology Certificate (continued):

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/bait_auto_gainful_employment/.

CERTIFICATE REQUIREMENTS:

<table>
<thead>
<tr>
<th>Course Code</th>
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<tr>
<td>AUTO 10</td>
<td>Automotive Electronics</td>
<td>3</td>
</tr>
<tr>
<td>AUTO 20</td>
<td>Engine Performance</td>
<td>4</td>
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<tr>
<td>AUTO 21</td>
<td>Advanced Engine Performance</td>
<td>3</td>
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<tr>
<td>AUTO 94</td>
<td>Automotive Workshop Learning</td>
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<tr>
<td>AUTO 130</td>
<td>Automotive Steering &amp; Suspension</td>
<td>3</td>
</tr>
<tr>
<td>AUTO 131</td>
<td>Automotive Wheel Alignment</td>
<td>2</td>
</tr>
<tr>
<td>AUTO 147</td>
<td>Automotive Braking Systems</td>
<td>3</td>
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<tr>
<td>AUTO 150</td>
<td>Introduction to Engine Machining</td>
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<tr>
<td>AUTO 152</td>
<td>Engine Machining Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>AUTO 161</td>
<td>Manual Drive Trains &amp; Ailes</td>
<td>3</td>
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<tr>
<td>AUTO 162</td>
<td>Automotive Transmissions and Transaxles</td>
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<tr>
<td>AUTO 163</td>
<td>Automotive Heating &amp; Air Conditioning</td>
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<td>INDE 1</td>
<td>Career Planning for Industrial Technology</td>
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TOTAL UNITS FOR CERTIFICATE: 11

Automotive Technology – Automotive Chassis

Certificate:

PROGRAM DESCRIPTION: Introduction to automotive chassis systems: Principles of automotive brake and suspension systems, wheel balance, tire service, suspension and headlamp alignment; maintenance, troubleshooting procedures, and proper use of alignment and balancing machines, brake lathes and other diagnostic equipment; diagnosis, disassembly, inspection, and rebuilding of suspension and brake systems; emphasis on proper use of manuals and safe use of tools and equipment; preparation for CA State Brake and Lamp licensing exams.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student's transcript.

PROGRAM LEARNING OUTCOMES:

1. Perform undercar inspections and repair suspension, hydraulic, and active braking systems.
2. Diagnose vehicle alignment concerns.
3. Identify the basic electrical circuits and diagnose automotive electrical systems.
4. Apply the basic principles of physics as they work in the automotive industry.

CERTIFICATE REQUIREMENTS:

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tr>
<td>AUTO 1</td>
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<td>AUTO 130</td>
<td>Automotive Steering &amp; Suspension</td>
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<td>AUTO 131</td>
<td>Automotive Wheel Alignment</td>
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</tr>
<tr>
<td>AUTO 147</td>
<td>Automotive Braking Systems</td>
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</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE: 11

Automotive Technology – Automotive Electrical-Electronics

Certificate:

PROGRAM DESCRIPTION: A study of basic electrical theory and the function, diagnosis, and repair of modern automotive electrical systems. Emphasis is placed on the use of instrumentation in the diagnosis of electrical circuits and component failures.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

PROGRAM LEARNING OUTCOMES:

1. Identify the basic electrical circuits and diagnose automotive electrical systems.
2. Apply the basic principles of physics as they work in the automotive industry.

CERTIFICATE REQUIREMENTS:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tr>
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<td>Introduction to Engine Machining</td>
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<tr>
<td>AUTO 152</td>
<td>Engine Machining Laboratory</td>
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</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE: 6

Automotive Technology – Automotive Engine Repair

Certificate:

PROGRAM DESCRIPTION: A study of the principles of automotive engines, fuel and ignition systems, tool and equipment safety, maintenance procedures, use of diagnostic equipment, minor head and block machining, diagnosis, disassembly, inspection, and rebuilding of engines, fuel systems and ignition systems. Also includes introduction to electric and hybrid vehicle principles and maintenance.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

PROGRAM LEARNING OUTCOMES:

1. Demonstrate an understanding of four-stroke engine theory, basic safe machining practices, and engine assembly.

REQUIREMENTS FOR CERTIFICATE:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>AUTO 152</td>
<td>Engine Machining Laboratory</td>
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</table>

TOTAL UNITS FOR CERTIFICATE: 6
Automotive Technology – Automotive Heating – Air Conditioning

Certificate:

PROGRAM DESCRIPTION: Study of automotive air conditioning systems: Principles and systems necessary for the installation, design, function, and repair of air conditioning units; maintenance, troubleshooting procedures, proper use of air conditioning charging station and recovery/recycle equipment; emphasis on proper use of manuals and safe use of tools and equipment.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:
1. Demonstrate knowledge of the overall operation of an automotive air conditioning system.
2. Transmission and differential.
3. Utilize appropriate diagnostic equipment, documentation, and troubleshooting principles on various power train systems.
4. Diagnose vehicle power train concerns.
5. Identify the basic electrical circuits and diagnose automotive electrical systems.
6. Apply the basic principles of physics as they work in the automotive industry.

CERTIFICATE REQUIREMENTS:
AUTO 161 Manual Drive Trains & Axles 3
AUTO 162 Automatic Transmissions and Transaxes 4

TOTAL UNITS FOR CERTIFICATE 7

Automotive Technology – Automotive Powertrain

Certificate:


This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:
1. Demonstrate knowledge of the overall operation of an automotive power train.
2. Transmission and differential.
3. Utilize appropriate diagnostic equipment, documentation, and troubleshooting principles on various power train systems.
4. Diagnose vehicle power train concerns.
5. Identify the basic electrical circuits and diagnose automotive electrical systems.
6. Apply the basic principles of physics as they work in the automotive industry.

CERTIFICATE REQUIREMENTS:
AUTO 161 Manual Drive Trains & Axles 3
AUTO 10 Automotive Electronics 3
AUTO 163 Automotive Heating & Air Conditioning 3

TOTAL UNITS FOR CERTIFICATE 9

Business

Associate in Science:

PROGRAM DESCRIPTION: This degree prepares you to enter the workforce and have the skills you need to move up the career ladder. Your beginning career opportunities include entry-level marketing, management, entrepreneur, customer service representative and retail sales. The courses offered in this degree teach the skills necessary to be successful in business. Many courses are offered during the day and evening at one of our extended education campuses, and online.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filling an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this degree, the student should be able to:
1. Explain the criteria for the formation and enforcement of business and consumer contracts, including the specialty areas of sales and agency.
2. Demonstrate the use of skills relevant for problem-solving, decision-making, and resolving ethical dilemmas in the business environment including critical thinking, effective written and oral communication, working effectively in teams and the proficient use of computers for information search, retrieval, problem solving and communication.
3. Identify and explain the current economic indicators regarding inflation, unemployment, monetary and fiscal policy and their effects on consumers and small businesses.
4. Express the accounting equation; identify and perform the processes of the accounting cycle; and prepare and interpret the basic financial statements for service and merchandising organizations in accordance with generally accepted accounting principles.
5. Utilize their ability to identify and apply business and finance concepts to advance into upper division course work as business majors in the fields of accounting, finance, marketing, management and information technology and services.

DEGREE REQUIREMENTS:

CORE COURSES:
ACCT 101 Basic Accounting I 3
ACCT 102 Basic Accounting II 3
ACCT 103 PC Accounting 2

BUAD 6 Business Law I OR 3
BUAD 8 Business Law II

BUAD 10* Introduction to Business 3
BUAD 40 Entrepreneurship and Small Business OR 3
BUAD 176 Principles of Retailing

BUAD 41 Supervision and Leadership 3
BUAD 45* Human Relations on the Job 3
BUAD 66* Business Communications 3
BUAD 71 Introduction to e-Commerce 1

BUAD 76 Sales OR 3
BUAD 77 Principles of Marketing

BUAD 106 Business Mathematics 3
CIS 1 Computer Literacy Workshop 3
ECON 1B* Principles of Economics (MACRO) 3
OAS 10 Excel for Windows – I

*May be used to fulfill General Education requirements. See a counselor.

ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
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<td>Additional General Education</td>
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</tr>
<tr>
<td>Degree Total</td>
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</tbody>
</table>

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.
Business Administration – Accounting Concentration

**PROGRAM DESCRIPTION:** This degree prepares you to enter the workforce in an entry level accounting, bookkeeping, or clerk position with many private sector and government organizations. This degree also provides an excellent knowledge base for those planning to pursue an advanced degree in accounting, business, economics, or law (ACCT 2 and ACCT 4 are recommended for these students).

This degree is approved through the California Community College Chancellor’s Office. Upon successful completion of all degree requirements and **filing an application for graduation with Admissions and Records**, the student’s transcript will reflect completion of this degree.

**PROGRAM LEARNING OUTCOMES:**
Upon successful completion of this degree, the student should be able to:
1. Express the accounting equation; identify and perform the processes of the accounting cycle; and prepare and interpret the basic financial statements for service and merchandising organizations in accordance with generally accepted accounting principles.
2. Identify and illustrate fundamental accounting concepts, classifications, cost systems, cost-volume-profit relationships, budgeting and profit planning to support planning, control and decision making activities of management.
3. Use integrated accounting software in preparing the processes of the accounting cycle and preparing the basic financial statements for service and merchandising organizations in accordance with generally accepted accounting principles.
4. Prepare and process payroll records and payroll tax returns in compliance with applicable federal and state laws and regulations.
5. Apply the Internal Revenue Code and related Treasury Regulations as they relate to individual, partnership and corporation income taxes; prepare simple individual income tax returns.
6. Explain the criteria for the formation and enforcement of business and consumer contracts, including the specialty areas of sales and agency.
7. Demonstrate the use of skills relevant for problem solving, decision making and solving ethical dilemmas in the business environment including critical thinking, effective written and oral communication, working effectively in teams and the proficient use of computers for information search, retrieval, problem solving and communication.

**DEGREE REQUIREMENTS:**

**CORE COURSES:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Basic Accounting I OR</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 4</td>
<td>Introduction to Financial Accounting</td>
<td>3</td>
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<tr>
<td>ACCT 102</td>
<td>Basic Accounting-II OR</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 103</td>
<td>PC Accounting</td>
<td>2</td>
</tr>
<tr>
<td>ACCT 104</td>
<td>Payroll Accounting</td>
<td>2</td>
</tr>
<tr>
<td>ACCT 194</td>
<td>Income Tax</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 6</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 10*</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 15</td>
<td>Business and Society</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 45*</td>
<td>Human Relations on the Job</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 66*</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1</td>
<td>Computer Literacy Workshop</td>
<td>3</td>
</tr>
<tr>
<td>OAS 51</td>
<td>Introduction to Keyboarding and Word</td>
<td>3</td>
</tr>
<tr>
<td>OAS 64</td>
<td>Computerized Ten-Key</td>
<td>0.5</td>
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**ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:**

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<th>Category</th>
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<td>Degree Total</td>
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</table>

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

Business Administration – Business Entrepreneurship

**Certificate:**

**PROGRAM DESCRIPTION:** Students completing this certificate will have the foundation necessary to begin building a small business.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and **filing an application for graduation with Admissions and Records**, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

**PROGRAM LEARNING OUTCOMES:**
Upon successful completion of this certificate, the student should be able to:
1. Present an outline of a well-structured business plan, beginning with the Title Page and ending with an Appendix. There are a total of 11 topics discussed in class.

**CERTIFICATE REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
<td>Basic Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 10*</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 40*</td>
<td>Entrepreneurship and Small Business</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 42*</td>
<td>Financing a Small Business</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 71</td>
<td>Introduction to e-Commerce</td>
<td>1</td>
</tr>
<tr>
<td>BUAD 120</td>
<td>Starting a Small Business</td>
<td>1</td>
</tr>
<tr>
<td>CIS 1</td>
<td>Computer Literacy Workshop</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE:** 17

Business Retailing

**Certificate:**

**PROGRAM DESCRIPTION:** This program is designed to enable students to find entry-level positions in the retail selling areas as sales personnel.

This certificate is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of the listed requirements and **filing an application for graduation with Admissions and Records**, the student’s transcript will reflect completion of this certificate.

**PROGRAM LEARNING OUTCOMES:**
Upon successful completion of this certificate, the student should be able to:
1. Express the accounting equation; identify and perform the processes of the accounting cycle; and prepare and interpret the basic financial statements for service and merchandising organizations in accordance with generally accepted accounting principles.
2. Recognize, acknowledge and apply the functions and responsibilities of retail management.
3. Develop and apply a business retailing strategy leading to a business plan.

**GAINFUL EMPLOYMENT INFORMATION:** For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/bait_buad_gainful_employment/

**REQUIREMENTS FOR CERTIFICATE:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 101</td>
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<td>3</td>
</tr>
<tr>
<td>BUAD 10*</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 45*</td>
<td>Human Relations on the Job</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 42*</td>
<td>Financing a Small Business</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 71</td>
<td>Introduction to e-Commerce</td>
<td>1</td>
</tr>
<tr>
<td>BUAD 76</td>
<td>Sales</td>
<td>1</td>
</tr>
<tr>
<td>BUAD 80*</td>
<td>Principles of Customer Service</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 94*</td>
<td>Business Worksite Learning</td>
<td>1</td>
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<tr>
<td>BUAD 106</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 176</td>
<td>Principles of Retailing</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1</td>
<td>Computer Literacy Workshop</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE:** 29
Computer and Information Systems - Systems Management

Associate in Science:  

PROGRAM DESCRIPTION: This degree combines the core business courses with courses in the Information Technology (IT) skills area. It prepares you to enter the workforce in an entry level IT related position with many public and private organizations, or to start your own IT related business. The degree also prepares you to transfer to a four-year institution and complete a bachelor’s degree in an IT related area.  

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.  

PROGRAM LEARNING OUTCOMES:  
Upon successful completion of this degree, the student should be able to:  
1. Demonstrate at a fundamental level of knowledge and understanding of business practices including finance, accounting, marketing, management, human relations, e-commerce, legal and ethical considerations.  
2. Given a set of requirements design, develop, and debug a computer program that satisfies the requirements.  
3. Demonstrate competence using office software including database, spreadsheet, and word processing.  
4. Given a set of requirements design and build a web page that meets the requirements.  
5. Build and troubleshoot a computer network involving three computers, an ethernet switch, and IP addressing.  

DEGREE REQUIREMENTS:  
CORE COURSES: 

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 80A</td>
<td>Graphic Design</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 10 *</td>
<td>Introduction to Business (fulfills GE requirement)</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 66 *</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 71</td>
<td>Introduction to e-Commerce</td>
<td>1</td>
</tr>
<tr>
<td>BUAD 72</td>
<td>e-Commerce Marketing</td>
<td>1</td>
</tr>
<tr>
<td>BUAD 80</td>
<td>Principles of Customer Service</td>
<td>3</td>
</tr>
<tr>
<td>CIS 2 *</td>
<td>Introduction to Computer Science</td>
<td>4</td>
</tr>
<tr>
<td>CIS 20</td>
<td>Access for Windows</td>
<td>1</td>
</tr>
<tr>
<td>CIS 23</td>
<td>Fundamentals of SQL</td>
<td>3</td>
</tr>
<tr>
<td>CIS 60 *</td>
<td>Visual Basic Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS 62 *</td>
<td>Java Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS 64</td>
<td>Web Programming Using JAVA/PHP/FLASH</td>
<td>3</td>
</tr>
<tr>
<td>CIS 73</td>
<td>Photoshop</td>
<td>1</td>
</tr>
<tr>
<td>CIS 83</td>
<td>Web Design Using Dreamweaver</td>
<td>2</td>
</tr>
<tr>
<td>CIS 86</td>
<td>HTML</td>
<td>3</td>
</tr>
<tr>
<td>CIS 92</td>
<td>Computer Security</td>
<td>3</td>
</tr>
<tr>
<td>OAS 10</td>
<td>Excel for Windows – 1</td>
<td>1</td>
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</tbody>
</table>

*May be used to fulfill General Education requirements. See a counselor.  

ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:  

<table>
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<tr>
<th>Requirement</th>
<th>Units</th>
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<tbody>
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<td>General Electives</td>
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<tr>
<td>Degree Total</td>
<td>60*</td>
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</tbody>
</table>

Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 5 units.

Computer and Information Systems – Cisco Networking  

Certificate:  

PROGRAM DESCRIPTION: This certificate program is awarded to students who have successfully completed the Introduction to Computer Science course and the CCNA sequence of courses. Students learn entry level networking skills that will help prepare them for a career in the Information Technology (IT) field. The program prepares students to take the Cisco CCNA certification exam.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

PROGRAM LEARNING OUTCOMES:  
Upon successful completion of this certificate, the student should be able to:  
1. Demonstrate competence in the area of Cisco Networking. To demonstrate competence in this area the student will be able to build networks with the following features: three computers on a LAN using a switch; a router with passwords, interfaces, routing protocol configured; a switch with two VLANs and STP protocol; PPP encapsulation and PAP/CHAP authentication protocols between two routers connected with a serial link.
2. Convert an IP Address and subnet mask from a dotted decimal notation into a binary format. Using the values in a binary format the student will then be able to demonstrate the function of the subnet mask in isolating the network address.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/bait_cis_gainful_employment/.

CERTIFICATE REQUIREMENTS:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 2</td>
<td>Introduction to Computer Science</td>
</tr>
<tr>
<td>CIS 31</td>
<td>CCNA1–Networking/Home and Small Business</td>
</tr>
<tr>
<td>CIS 32</td>
<td>CCNA2–Working at a Small to Med. Business/ISP</td>
</tr>
<tr>
<td>CIS 33</td>
<td>CCNA3–Routing and Switching in the Enterprise</td>
</tr>
<tr>
<td>CIS 34</td>
<td>CCNA4–Designing/Supporting Computer Networks</td>
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</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE 16

Chapter 5 – Degrees and Certificates  

This degree combines the core business courses with courses in the Information Technology (IT) skills area. It prepares you to enter the workforce in an entry level IT related position with many public and private organizations, or to start your own IT related business. The degree also prepares you to transfer to a four-year institution and complete a bachelor’s degree in an IT related area.  

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.  

PROGRAM LEARNING OUTCOMES:  
Upon successful completion of this degree, the student should be able to:  
1. Demonstrate at a fundamental level of knowledge and understanding of business practices including finance, accounting, marketing, management, human relations, e-commerce, legal and ethical considerations.  
2. Given a set of requirements design, develop, and debug a computer program that satisfies the requirements.  
3. Demonstrate competence using office software including database, spreadsheet, and word processing.  
4. Given a set of requirements design and build a web page that meets the requirements.  
5. Build and troubleshoot a computer network involving three computers, an ethernet switch, and IP addressing.  

DEGREE REQUIREMENTS:  
CORE COURSES:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 71</td>
<td>Introduction to e-Commerce</td>
</tr>
<tr>
<td>BUAD 72</td>
<td>e-Commerce Marketing</td>
</tr>
<tr>
<td>BUAD 80</td>
<td>Principles of Customer Service</td>
</tr>
<tr>
<td>CIS 2</td>
<td>Introduction to Computer Science</td>
</tr>
<tr>
<td>CIS 20</td>
<td>Access for Windows</td>
</tr>
<tr>
<td>CIS 23</td>
<td>Fundamentals of SQL</td>
</tr>
<tr>
<td>CIS 60 *</td>
<td>Visual Basic Programming</td>
</tr>
<tr>
<td>CIS 66</td>
<td>Networking/Home and Small Business</td>
</tr>
<tr>
<td>CIS 83</td>
<td>Web Design Using Dreamweaver</td>
</tr>
<tr>
<td>CIS 92</td>
<td>Computer Security</td>
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</tbody>
</table>

The primary focus of this field is to design, install, and maintain computer and networking systems. The program focuses on three primary areas of study–Cisco networking, Microsoft networking, and computer maintenance. The program prepares students to take certification exams including Cisco CCNA, CompTia A+, and Microsoft MCTS. Specific skills that are taught include switch and router installation, wireless network installation, server installation, communication technologies, host computer installation and troubleshooting, and basic electronics. Throughout the entire curriculum interpersonal skills are taught and emphasized as a vitally important part of the skill set of a successful IT technician.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

PROGRAM LEARNING OUTCOMES:  
Upon successful completion of this degree, the student should be able to:  
1. Demonstrate competence in the area of Cisco Networking. To demonstrate competence in this area the student will be able to build networks with the following features: three computers on a LAN using a switch; a router with passwords, interfaces, routing protocol configured; a switch with two VLANs and STP protocol; PPP encapsulation and PAP/CHAP authentication protocols between two routers connected with a serial link.
2. Demonstrate competence in the area of A+ computer maintenance. To demonstrate competence in this area the student will be able to accurately identify and explain the function of the CPU, harddrive, RAM, CDROM drive, and video card of a PC.
3. Demonstrate competence in the area of Microsoft Networking. To demonstrate competence in this area the student will be able to: Install Windows Seven Professional; to Manage Users, Computers and Groups in Windows 2008 Server; to Implement, Manage and Maintain Name Resolution; to Plan and Implement Server Roles and Server Security; to Plan and Implement an Active Directory Infrastructure; to Create and Implement an Active Directory Infrastructure; to Create the Logical Design for Network Infrastructure Security.  

Continued on next page...
Chapter 5 – Degrees and Certificates

CIS – Network Administration Degree (continued):

4. Demonstrate competence in the area of human relations and presentation skills. To demonstrate competence in these areas, the student must effectively work with other students in a team setting and effectively present a team network design project to a design review committee consisting of other students.

5. Demonstrate competence in the area of web page design and development. To demonstrate competence in these areas, the student will develop and publish a 3-page web site to a server. The site must include the following elements: (1) appropriate overall design elements; (2) working hyperlinks among pages, to an outside site(s), and to an e-mail address; (3) a table; and (4) a form.

6. Demonstrate competence in the area of basic electronics. To demonstrate competence in this area, the student will accurately test electronic components such as LED, 7Segment display, pushbutton, speaker and photo sensor, and correctly build circuits with the electronic components and program a microcontroller to manipulate the built circuits.

DEGREE REQUIREMENTS:

CORE COURSES:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 2</td>
<td>Introduction to Computer Science</td>
<td>4</td>
</tr>
<tr>
<td>CIS 23</td>
<td>Fundamentals of SQL</td>
<td>3</td>
</tr>
<tr>
<td>CIS 31</td>
<td>Cisco CCNA 1</td>
<td>3</td>
</tr>
<tr>
<td>CIS 32</td>
<td>Cisco CCNA 2</td>
<td>3</td>
</tr>
<tr>
<td>CIS 33</td>
<td>Cisco CCNA 3</td>
<td>3</td>
</tr>
<tr>
<td>CIS 34</td>
<td>Cisco CCNA 4</td>
<td>3</td>
</tr>
<tr>
<td>CIS 50</td>
<td>Windows 8 – Configuration</td>
<td>1</td>
</tr>
<tr>
<td>CIS 51</td>
<td>Managing and Maintaining Windows 8</td>
<td>1</td>
</tr>
<tr>
<td>CIS 52</td>
<td>Install and Configure Server 2012</td>
<td>1</td>
</tr>
<tr>
<td>CIS 53</td>
<td>Administrating Server 2012</td>
<td>1</td>
</tr>
<tr>
<td>CIS 54</td>
<td>Configure Advanced Server 2012 Server</td>
<td>1</td>
</tr>
<tr>
<td>CIS 55</td>
<td>Exchange Server 2010, Configuring</td>
<td>1</td>
</tr>
<tr>
<td>CIS 72</td>
<td>Fundamentals of Linux</td>
<td>3</td>
</tr>
<tr>
<td>CIS 90</td>
<td>A+ Certification Preparation/Cisco IT Essentials I</td>
<td>4</td>
</tr>
<tr>
<td>CIS 92</td>
<td>Computer Security</td>
<td>3</td>
</tr>
<tr>
<td>INDE 138</td>
<td>Fundamentals of Electronics</td>
<td>3</td>
</tr>
</tbody>
</table>

Other courses needed to fulfill the requirements for the Network Administration Degree are the following:

- CIS 2 Introduction to Computer Science (4 units)
- CIS 23 Fundamentals of SQL (3 units)
- CIS 31 Cisco CCNA 1 (3 units)
- CIS 32 Cisco CCNA 2 (3 units)
- CIS 33 Cisco CCNA 3 (3 units)
- CIS 34 Cisco CCNA 4 (3 units)
- CIS 50 Windows 8 – Configuration (1 unit)
- CIS 51 Managing and Maintaining Windows 8 (1 unit)
- CIS 52 Install and Configure Server 2012 (1 unit)
- CIS 53 Administrating Server 2012 (1 unit)
- CIS 54 Configure Advanced Server 2012 Server (1 unit)
- CIS 55 Exchange Server 2010, Configuring (1 unit)
- CIS 72 Fundamentals of Linux (3 units)
- CIS 90 A+ Certification Preparation/Cisco IT Essentials I (4 units)
- CIS 92 Computer Security (3 units)
- INDE 138 Fundamentals of Electronics (3 units)

*May be used to fulfill General Education requirements. See a counselor.

ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
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<td>Additional General Education</td>
<td>18</td>
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<tr>
<td>General Electives</td>
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<tr>
<td><strong>Degree Total</strong></td>
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</tbody>
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Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

Certificate:

PROGRAM DESCRIPTION: This certificate program is very similar to the CIS degree program with the CCNA option. The primary difference is that the general education classes are not required as part of the certificate program. In addition, the elective courses for the degree program are not required in the certificate program. These omissions will result in a narrower skill set for completers of this program versus the CIS degree program. However, the essential skills to prepare students for a career in the IT field as a computer and network technician are still taught as part of this program.

This certificate is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this certificate.

PROGRAM LEARNING OUTCOMES:

Upon successful completion of this degree, the student should be able to:

1. Demonstrate competence in the area of Cisco Networking. To demonstrate competence in this area the student will be able to build networks with the following features: three computers on a LAN using a switch; a router with passwords, interfaces, routing protocol configured; a switch with two VLANs and STP protocol; PPP encapsulation and PAP/CHAP authentication protocols between two routers connected with a serial link.

2. Demonstrate competence in the area of A+ computer maintenance. To demonstrate competence in this area the student will be able to: accurately identify and explain the function of the CPU, harddrive, RAM, CDROM drive, and video card of a PC.

3. Demonstrate competence in the area of Microsoft Networking. To demonstrate competence in this area the student will be able to: Install Windows Seven Professional; to Manage Users, Computers and Groups in Windows 2008 Server; to Implement, Manage and Maintain Name Resolution; to Plan and Implement Server Roles and Server Security; to Plan and Implement an Active Directory Infrastructure; to Create the Logical Design for an Active Directory Infrastructure; to Create the Logical Design for Network Infrastructure Security.

4. Demonstrate competence in the area of web page design and development. To demonstrate competence in these areas the student will develop and publish a 3-page web site to a server. The site must include the following elements: (1) appropriate overall design elements; (2) working hyperlinks among pages, to an outside site(s), and to an e-mail address; (3) a table; and (4) a form.

5. Demonstrate competence in the area of basic electronics. To demonstrate competence in this area the student will accurately test electronic components such as LED, 7Segment display, pushbutton, speaker and photo sensor, and correctly build circuits with the electronic components and program a microcontroller to manipulate the built circuits.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/bait_cis_gainful_employment/

CERTIFICATE REQUIREMENTS:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 41*</td>
<td>Leadership and Supervision</td>
<td>3</td>
</tr>
<tr>
<td>BUAD 45*</td>
<td>Human Relations on the Job</td>
<td>3</td>
</tr>
<tr>
<td>CIS 2</td>
<td>Introduction to Computer Science</td>
<td>4</td>
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<tr>
<td>CIS 23</td>
<td>Fundamentals of SQL</td>
<td>3</td>
</tr>
<tr>
<td>CIS 31</td>
<td>Cisco CCNA 1</td>
<td>3</td>
</tr>
<tr>
<td>CIS 32</td>
<td>Cisco CCNA 2</td>
<td>3</td>
</tr>
<tr>
<td>CIS 33</td>
<td>Cisco CCNA 3</td>
<td>3</td>
</tr>
<tr>
<td>CIS 34</td>
<td>Cisco CCNA 4</td>
<td>3</td>
</tr>
<tr>
<td>CIS 50</td>
<td>Windows 8 – Configuration</td>
<td>1</td>
</tr>
<tr>
<td>CIS 51</td>
<td>Managing and Maintaining Windows 8</td>
<td>1</td>
</tr>
<tr>
<td>CIS 52</td>
<td>Install and Configure Server 2012</td>
<td>1</td>
</tr>
<tr>
<td>CIS 53</td>
<td>Administrating Server 2012</td>
<td>1</td>
</tr>
<tr>
<td>CIS 54</td>
<td>Configure Advanced Server 2012 Server</td>
<td>1</td>
</tr>
<tr>
<td>CIS 55</td>
<td>Exchange Server 2010, Configuring</td>
<td>1</td>
</tr>
<tr>
<td>CIS 72</td>
<td>Fundamentals of Linux</td>
<td>3</td>
</tr>
<tr>
<td>CIS 90</td>
<td>A+ Certification Preparation/Cisco IT Essentials I</td>
<td>4</td>
</tr>
<tr>
<td>CIS 92</td>
<td>Computer Security</td>
<td>3</td>
</tr>
<tr>
<td>INDE 138</td>
<td>Fundamentals of Electronics</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE**: **35**

Computer and Information Systems – Web Design

Certificate:

PROGRAM DESCRIPTION: This program is designed to be an introduction to the basics of designing and building simple Web pages. The curriculum assists students, small business owners, office and IT workers, and hobbyists to design and maintain a presence on the Web.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate, the student should be able to:

1. Use a computer and the internet for daily needs.
2. Build dynamic web pages for personal and business use.
3. Incorporate graphics and photos into web pages.
4. Understand e-commerce basics and how to design a marketable website.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/bait_cis_gainful_employment/

Continued on next page…
CIS – Web Design Certificate (continued):

CERTIFICATE REQUIREMENTS:  
ART 80A  Graphic Design  3  
BUAD 71  Introduction to E-Commerce  1  
CIS 2  Introduction to Computer Science  4  
CIS 64  Web Programming Using Java/PHP/Flash  3  
CIS 73  Photoshop  1  
CIS 83  Web Design Using Dream Weaver  2  
CIS 86  HTML  3  

TOTAL UNITS FOR CERTIFICATE  17

Computer and Information Systems – Windows Server

Certificate:

PROGRAM DESCRIPTION: This certificate will prepare students for employment in the field of information technology networking. Jobs in this sector include computer network technician, network administrator, network manager, data files manager, back-up operator, network security technician, etc.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:

1. Plan an effective Windows Server Active Directory deployment.

CERTIFICATE REQUIREMENTS:
BUAD 45  Human Relations  3  
CIS 2  Introduction to Computer Science  4  
CIS 50  Windows 8 Configuring  1  
CIS 51  Managing and Maintaining Windows 8  1  
CIS 52  Install and Configure Server 2012  1  
CIS 53  Administering Server 2012  1  
CIS 54  Configure Advanced Server 2012 Server 1  
CIS 55  Exchange Server 2010, Configuring  1  

TOTAL UNITS FOR CERTIFICATE  13

Computer Maintenance

Certificate:

PROGRAM DESCRIPTION: The Computer Maintenance Certificate Program provides the exposure and training necessary to maintain and troubleshoot common microcomputer systems to the board level. This program provides hands-on training in basic electronics, DOS installation and operation, PC repair and computer management.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:

1. Identify and troubleshoot common problems with computer parts and how to solve the associated problems.
2. Describe the different types of memory, how each operate and installation procedure.
3. Install a Microsoft operating system and configure the computer as a typical workstation.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/bait_cis_gainful_employment/.

Construction Technology

Associate in Science:

PROGRAM DESCRIPTION: The curriculum prepares students for entry-level employment in the carpentry trade. This program provides hands-on training in basic electronics, DOS installation and operation, PC repair and computer management.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:

1. Explain and demonstrate the use of appropriate personal protective equipment.
2. Identify other construction hazards on your job site, including hazardous material exposures, environmental elements, welding and cutting hazards, confined spaces, and fires.
3. Perform construction math with and without a calculator including adding, subtraction, multiply and divide whole numbers, fractions, percentages as well as decimals in the field.
4. Identify power tools commonly used in the construction trades.
5. Recognize relate and identify basic construction drawing components, standard methods.
6. Identify power tools commonly used in the construction trades.

DEGREE REQUIREMENTS:

ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:

<table>
<thead>
<tr>
<th>Major</th>
<th>33</th>
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<tbody>
<tr>
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<td>General Electives</td>
<td>6</td>
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<tr>
<td>Degree Total</td>
<td>60*</td>
</tr>
</tbody>
</table>

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test if students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

Certificate:

PROGRAM DESCRIPTION: The curriculum prepares students for entry-level employment in the carpentry trade. This program provides hands-on training in basic electronics, DOS installation and operation, PC repair and computer management.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript. 

Continued on next page...
**Chapter 5 – Degrees and Certificates**

### Construction Technology Certificate (continued):

**PROGRAM LEARNING OUTCOMES:**
Upon successful completion of this certificate, the student should be able to:
1. Explain and demonstrate the use of appropriate personal protective equipment.
2. Identify other construction hazards on your job site, including hazardous material exposures, environmental elements, welding and cutting hazards, confined spaces, and fires.
3. Perform construction math with and without a calculator including adding, subtracting, multiply and divide whole numbers, fractions, percentages as well as decimals in the field.
4. Identify power tools commonly used in the construction trades.
5. Recognize relate and identify basic construction drawing terms, components, symbols and different classifications of construction drawings.
6. Calculate the quantities of lumber and wood products using industry-standard methods.

**GAINFUL EMPLOYMENT INFORMATION:** For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at [http://www.shastacollege.edu/bait_cons_gainful_employment/](http://www.shastacollege.edu/bait_cons_gainful_employment/).

### CERTIFICATE REQUIREMENTS:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CONS 52</td>
<td>Residential Estimating</td>
<td>3</td>
</tr>
<tr>
<td>CONS 54</td>
<td>Survey of the Building Industry</td>
<td>3</td>
</tr>
<tr>
<td>CONS 56</td>
<td>Essentials of Construction</td>
<td>3</td>
</tr>
<tr>
<td>CONS 160</td>
<td>Carpentry Practices</td>
<td>5</td>
</tr>
<tr>
<td>CONS 161</td>
<td>Electrical, Plumbing and Mechanical Systems</td>
<td>5</td>
</tr>
<tr>
<td>CONS 178</td>
<td>Building Codes and Standards</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 119</td>
<td>Blueprint and Specification Reading (Architectural)</td>
<td>2</td>
</tr>
<tr>
<td>MATH 100</td>
<td>Technical Applications of Mathematics</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE** 27

### Customer Service Academy Certificate:

**PROGRAM DESCRIPTION:** The Customer Service Academy will equip you with the ability to manage or improve many workplace issues that, if addressed, will lead to improved business productivity. The topics range from conflict resolution to team building to communicating with people (both employees and customers). This is a short list of the ten (10) topics included in the academy. You can register for one or all of the academy topics, depending on the challenging issues you face either personally or professionally. Each course topic requires 9 hours of study and awards .5 units of elective academic credit.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office, therefore, completion of the certificate will not be listed on the student’s transcript.

**PROGRAM LEARNING OUTCOMES:**
Upon successful completion of this certificate, the student should be able to:
1. List ways in which to communicate more effectively to both internal and external customers.
2. Recognize conflict styles and manage conflict situations utilizing conflict resolution skills.
3. List ways to maintain/change your attitude in order to provide superior customer service.
4. Embrace change within organizations and apply skills to cope with change.
5. Self-assess individual attitude, stress, communication style, personality style and apply skills to work with team members who possess different styles.

**REQUIREMENTS FOR CERTIFICATE:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 81</td>
<td>Stress Management in the Workplace</td>
<td>.5</td>
</tr>
<tr>
<td>BUAD 82</td>
<td>Managing Organizational Change</td>
<td>.5</td>
</tr>
<tr>
<td>BUAD 83</td>
<td>Conflict Resolution</td>
<td>.5</td>
</tr>
<tr>
<td>BUAD 84</td>
<td>Attitude in the Workplace</td>
<td>.5</td>
</tr>
<tr>
<td>BUAD 85</td>
<td>Customer Service in the Workplace</td>
<td>.5</td>
</tr>
<tr>
<td>BUAD 86</td>
<td>Decision Making and Problem Solving</td>
<td>.5</td>
</tr>
<tr>
<td>BUAD 87</td>
<td>Team Building</td>
<td>.5</td>
</tr>
<tr>
<td>BUAD 88</td>
<td>Communicating with People</td>
<td>.5</td>
</tr>
<tr>
<td>BUAD 89</td>
<td>Time Management</td>
<td>.5</td>
</tr>
<tr>
<td>BUAD 90</td>
<td>Values and Ethics</td>
<td>.5</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE** 5

### Dental Hygiene Associate in Science:

**PROGRAM DESCRIPTION:** The Dental Hygiene Program is designed to train students to work as dental hygienists who have specific knowledge of the dental hygiene profession, a sophisticated level of thinking ability, and the positive character traits (i.e., responsibility, discipline, and initiative) necessary to succeed at any level in the workplace.

All courses in the program will employ an integrated teaching strategy that will include development of critical skills, competence in oral and written English communication, and competence in applied math for problem solving. In addition, all courses will provide a broad understanding of “all aspects of the field (industry).” The program will be articulated with various transfer institutions so that those students who choose to transfer for further study may do so.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filling an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

**PREREQUISITE COURSES:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 1*</td>
<td>Anatomy</td>
<td>5</td>
</tr>
<tr>
<td>PHY 1*</td>
<td>Physiology (with Lab)</td>
<td>5</td>
</tr>
<tr>
<td>MICR 1*</td>
<td>Microbiology</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 1A*</td>
<td>College Composition</td>
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<tr>
<td>CHEM 2A*</td>
<td>Introduction to Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 2B*</td>
<td>Introduction to Organic and Biochemistry</td>
<td>5</td>
</tr>
<tr>
<td>SOC 1*</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 1A*</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>CMST 10*</td>
<td>Public Speaking OR</td>
<td>3</td>
</tr>
<tr>
<td>CMST 10*</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>FSS 25*</td>
<td>Nutrition</td>
<td>3</td>
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</tbody>
</table>

**TOTAL PREREQUISITE UNITS** 41
Final selection of qualified applicants is competitive. Please contact the Health Sciences Division for information regarding the selection criteria used to evaluate qualified applicants.

**DEGREE REQUIREMENTS:**

**CORE COURSES:**
- DNTL 10 Oral Biology 3
- DNTL 11 Oral Radiology 3
- DNTL 12 Head and Neck Anatomy 2
- DNTL 13 Dental Health Education/Seminar 2
- DNTL 14 Introduction to Clinic 4
- DNTL 20 Local Anesthesia and Nitrous Oxide 2
- DNTL 21 General and Oral Pathology 4
- DNTL 23 Patient Management and Geriatrics 2
- DNTL 24 Clinical Practice I 4
- DNTL 25 Clinic I Seminar 2
- DNTL 26 Nutrition in Dentistry 1
- DNTL 30 Periodontology I 3
- DNTL 31 Pharmacology 2
- DNTL 32 Dental Materials 2
- DNTL 33 Advanced Clinical Topics 2
- DNTL 34 Clinical Practice II 4
- DNTL 35 Clinic II Seminar 4
- DNTL 40 Periodontology II 1
- DNTL 41 Practice and Financial Management 1
- DNTL 42 Clinic III Seminar 2
- DNTL 43 Clinical Practice III 4
- DNTL 44 Community Oral Health 3
- DNTL 45 Ethics and Jurisprudence 2

**TOTAL MAJOR UNITS:** 56

*May be used to fulfill General Education requirements.

<table>
<thead>
<tr>
<th>ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:</th>
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<tbody>
<tr>
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*May be used to fulfill General Education requirements. See a counselor.

**ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:**

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<th>Major</th>
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<td>General Electives</td>
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</tr>
<tr>
<td><strong>Degree Total</strong></td>
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</tr>
</tbody>
</table>

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

**Diesel Technology**

**Associate in Science:**

**PROGRAM DESCRIPTION:** This curriculum prepares the student for entry into the mechanic trade related to heavy equipment and diesel engines. Award of apprenticeship credit for completion of the program will depend on the employer, local union regulations, aptitude of student, as well as the curriculum completed. The Diesel Technology major requires technical courses to satisfy the minimum requirements for the major. Students are encouraged to take as many technical courses and related electives as their program will permit. When necessary, auto mechanic courses and diesel courses may be interchanged to satisfy major requirements.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

**PROGRAM LEARNING OUTCOMES:**

Upon successful completion of this degree, the student should be able to:

1. Explain the basic theory of the subject matter or system for the course of instruction based on industry standards.
2. Analyze a scenario based upon an equipment system failure/problem/complaint.
3. Employ a systematic approach to troubleshooting a system malfunction and prepare a solution.
4. Demonstrate the correct tools/supplies required to diagnose/repair a malfunction.
5. Verify if the path of repair was correct by testing and/or completing a work order/report.

**GAINFUL EMPLOYMENT INFORMATION:** For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/bait_dies_gainful_employment/

**CERTIFICATE REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Major</th>
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<tbody>
<tr>
<td>DIES 48</td>
<td>Hydraulics</td>
</tr>
<tr>
<td>DIES 49</td>
<td>Advanced Hydraulics</td>
</tr>
<tr>
<td>DIES 94</td>
<td>Worksite Learning For Diesel Technology</td>
</tr>
<tr>
<td>DIES 160</td>
<td>Diesel Engine Electronic Control</td>
</tr>
<tr>
<td>DIES 161</td>
<td>Diesel Technology Field Training</td>
</tr>
<tr>
<td>DIES 162</td>
<td>Heavy Duty Power Train</td>
</tr>
<tr>
<td>DIES 164</td>
<td>Diesel Performance Analysis</td>
</tr>
<tr>
<td>DIES 166</td>
<td>Diesel Engines</td>
</tr>
<tr>
<td>DIES 170</td>
<td>Heavy Duty Braking Systems</td>
</tr>
<tr>
<td>ENGL 90</td>
<td>Reading &amp; Writing II ** (see below for alternatives)</td>
</tr>
<tr>
<td>INDE 1</td>
<td>Career Planning for Industrial Tech.</td>
</tr>
<tr>
<td>MATH 100</td>
<td>Technical Applications of Mathematics</td>
</tr>
<tr>
<td>WELD 70</td>
<td>Beginning Welding</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE:** 45.5 – 48.5
**Dietary Service Supervisor**

**Certificate:**

**PROGRAM DESCRIPTION:** The Dietary Service Supervisor program is designed to prepare students to work in a supervisory role in the food and nutrition services area of the healthcare industry. Graduates of the Shasta College DSS program can lawfully use the title of Dietetic Service Supervisor, as described in CA State Law, Title 22.

This certificate is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this certificate.

**PROGRAM LEARNING OUTCOMES:**
1. Identify the location of applicable laws and regulations and determine compliance to regulatory requirements (state and federal). Determine acceptable standards of care in dietary services. Includes but not limited to California Code of Regulations, Title 22; Federal Code of Regulations; Business and Professions Code of Dietitians and Dietetic Technicians, Registered; and Food and Drug Administration Food Code.
2. Identify the role and limitations (no scope of practice) of the Dietary Service Supervisor under law (Title 22) for the Operation of Food Service.
3. Participate with the Registered Dietitian in the timely review and revision of the facility’s policies and procedures to ensure that they are in compliance with regulations and standards of practice. Identify location of Diet Manuals.
4. Assist in the orientation of new employees. Assist in the ongoing, planned staff development of seasoned employees to ensure that they are competent to carry out the functions of the dietary service and trained in approved policies.
5. Assist in the development of Quality Assurance Programs to monitor staff practices for compliance, to determine training needs, and to evaluate resident/patient satisfaction.
6. Assist in the development of planned menu (and disaster menus) to meet the nutritional needs of resident/patients in accordance with the recommended dietary allowances. Ensure that therapeutic menus and standardized recipes are followed, as approved by R.D.
7. Ensure that food is served by methods that conserve nutritive value, flavor and appearance. Ensure that food is prepared in a form designed to meet individual needs and substitutions are of similar nutritive value.
8. Ensure that residents/patients receive and consume foods in the appropriate form as prescribed by the physician who is lawfully authorized to prescribe. Ensure that there is accommodation of food preferences, maintenance of current profile cards are maintained, and provide assistive devices as needed.
9. Ensure that food is stored, prepared, distributed, and served under sanitary conditions to prevent food borne illness. This includes the sanitation oversight of areas assigned to other departments such as the cleaning & sanitizing of internal components of the ice machine & nurse pantry refrigerators, trash disposal systems.
10. Ensure that the department runs smoothly (including the food ordering and storage according to applicable state requirements), staffing schedules, employee health, labor relations, safety programs and other duties as assigned by administration.

**GAINFUL EMPLOYMENT INFORMATION:** For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at www.shastacollege.edu/specs_dss_gainfulemployment.

**REQUIREMENTS FOR CERTIFICATE:***

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CULA 50</td>
<td>Sanitation and Safety</td>
<td>2</td>
</tr>
<tr>
<td>DSS 10</td>
<td>Food Production Management</td>
<td>3</td>
</tr>
<tr>
<td>DSS 63</td>
<td>DSS Operations and Management</td>
<td>3</td>
</tr>
<tr>
<td>DSS 94</td>
<td>DSS Certificate Worksite Learning</td>
<td>3</td>
</tr>
<tr>
<td>FSS 25</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>FSS 27</td>
<td>Nutrition and Disease</td>
<td>2</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE** 16

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**Early Childhood Education**

**Associate in Science:**

**PROGRAM DESCRIPTION:** The Early Childhood Education Program prepares students to become teachers and directors in programs providing care and education opportunities for young children. The college courses focus on training for careers in preschools, Head Start, childcare, infant-toddler and school age care, and family childcare. Programs for young children require different qualifications for teachers and care providers. The A.S. Degree in Early Childhood Education at Shasta College meets course work qualifications for the Child Development Teacher Permit Level and Title 22 staff qualifications for a teacher and director. Additional specified experience with children is required.

The Shasta College Early Childhood Education Program is participating in a statewide Curriculum Alignment Project between California Community Colleges and participating CSU and UC systems. A twenty-four unit core of eight specific Early Childhood Education courses will articulate with participating four year degree programs in Child Development and Early Childhood Education.

There are a minimum of 44 units in the major required for the Associate Science Degree in Early Childhood Education. Students need to complete core-required courses (38 units) and an additional 6 units of restricted elective courses. Twenty-one (21) General Education units will complete the Associate of Science degree in Early Childhood Education. All courses applied to the ECE A.S. Degree must be completed with a “C” grade or better.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this degree.

**PROGRAM LEARNING OUTCOMES:**
1. Apply an understanding of principles of child development in planning inclusive and developmentally appropriate curriculum and environments.
2. Exhibit skill in observation and documentation as a vehicle for child and program assessment and curriculum design.
3. Create environments that are healthy, respectful and supportive to children and their families.
4. Utilize positive guidance of young children based on an understanding of cognitive, physical, and social and emotional development of children.
5. Identify professional standards and expectations as based upon NA EYC’S Code of Ethical Conduct.
6. Discuss current trends and issues in the field of Early Childhood Education.
7. Perform common tasks online and access resources and information in regard to current best practices in early education.
8. Identify and exhibit the ability to interact successfully with children and adults from an ever changing society.

**DEGREE REQUIREMENTS:**

**CORE COURSES:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 1*</td>
<td>Human Development OR</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2*</td>
<td>Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>(ECE 9 is recommended for students planning to transfer to a 4 year program for a degree in Early Childhood Education or Child Development)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 2</td>
<td>Child, Family, Community</td>
<td>3</td>
</tr>
<tr>
<td>ECE 3</td>
<td>Early Childhood Program Administration</td>
<td>3</td>
</tr>
<tr>
<td>ECE 4</td>
<td>Early Childhood Observation &amp; Assessment</td>
<td>3</td>
</tr>
<tr>
<td>ECE 6</td>
<td>Teaching Practicum for Young Children</td>
<td>5</td>
</tr>
<tr>
<td>ECE 15</td>
<td>Child Health, Safety and Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>ECE 17</td>
<td>Principles/Practices of Teaching Young Children</td>
<td>3</td>
</tr>
<tr>
<td>ECE 20</td>
<td>Introduction to Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>ECE 28*</td>
<td>Teaching in a Diverse Society</td>
<td>3</td>
</tr>
<tr>
<td>ECE 30</td>
<td>E.C. Curriculum: Physical Development</td>
<td>3</td>
</tr>
<tr>
<td>ECE 50</td>
<td>E.C. Curriculum: Cognitive Development</td>
<td>3</td>
</tr>
<tr>
<td>ECE 52</td>
<td>Guidance in Adult-Child Relations</td>
<td>3</td>
</tr>
</tbody>
</table>

**RESTRICED ELECTIVES:** (Choose six units) 6

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ECE 8</td>
<td>Exploring Family Childcare (1)</td>
<td>1</td>
</tr>
<tr>
<td>ECE 10</td>
<td>Early Childhood Learning (3)</td>
<td>3</td>
</tr>
<tr>
<td>ECE 12</td>
<td>Infant-Toddler Learning (3)</td>
<td>3</td>
</tr>
<tr>
<td>ECE 14</td>
<td>School Age and Adolescent Development (3)</td>
<td>3</td>
</tr>
<tr>
<td>ECE 16</td>
<td>Fundamentals of EC Mentoring &amp; Supervision (2)</td>
<td>2</td>
</tr>
<tr>
<td>ECE 22</td>
<td>EC Curriculum: Infant/Toddler Care (3)</td>
<td>3</td>
</tr>
<tr>
<td>ECE 24</td>
<td>EC Curriculum: School Age Care (3)</td>
<td>3</td>
</tr>
<tr>
<td>ECE 26</td>
<td>The Child With Special Needs (3)</td>
<td>3</td>
</tr>
<tr>
<td>ECE 27</td>
<td>Teaching Children with Special Needs (3)</td>
<td>3</td>
</tr>
</tbody>
</table>

Continued on next page...
Upon completion of the ECE Certificate, students will, through planned and completing one of the following Specializations (Infant/Toddler School-Age, or Special Needs in ECE). A Specialization is required for the Master Teacher Level of the Child Development Permit issued by the California Commission on Teaching Credentialing. Associate and Teacher Levels do not require a Specialization.

**INFANT/TODDLER TEACHING SPECIALIZATION**

- ECE 12 Infant-Toddler Learning (3)
- ECE 22 E.C. Curriculum: Infant/Toddler Care (3)

**SCHOOL-AGE TEACHING SPECIALIZATION**

- ECE 14 School-Age and Adolescent Development (3)
- ECE 24 E.C. Curriculum: School-Age Care (3)

**SPECIAL NEEDS IN EARLY CHILDHOOD EDUCATION/EARLY INTERVENTION SPECIALIZATION**

- ECE 26 The Child with Special Needs (3)
- ECE 27 Teaching Children with Special Needs (3)

*May be used to fulfill General Education requirements.

**ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:**

- Major: 44
- Additional General Education: 15
- General Electives: 1
- Degree Total: 60

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

**Certificate:**

**PROGRAM DESCRIPTION:** The Early Childhood Education Certificate will offer students initial training to work with young children. After completion of the 26-unit certificate requirements, the student will qualify for employment as an entry-level teacher in private child care settings licensed through the Department of Social Services. The Early Childhood Education Certificate course work also meets the training requirements for the Child Development Associate Teacher Permit issued by the California Commission on Teacher Credentialing. All certificate requirements must be completed with a "C" grade or better.

This 26 unit certificate is intended to fulfill the ECE requirement of a lower-division program of study that can transfer to the CSU system. With additional coursework, both at lower-division and upper-division levels, it prepares the student for in-depth coursework toward higher degree attainment. When the 26-unit certificate is combined with 16 General Education units, it qualifies the student for a Child Development Permit issued by the Office of Teacher Credentialing, at the Teacher level.

This certificate is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this certificate.

**PROGRAM LEARNING OUTCOMES:**

Upon successful completion of this certificate, the student should be able to:

1. Apply principles of child development in planning inclusive and developmentally appropriate curriculum environments.
2. Utilize positive guidance of young children based on an understanding of cognitive, social and emotional development of children.
3. Create environments that are healthy, respectful and supportive to children and their families.
4. Identify and analyze the elements of professionalism and its importance in family childcare settings.
5. Complete class exercises applying management and operation knowledge by developing an operational structure of a mock family childcare setting.

**GAINFUL EMPLOYMENT INFORMATION:** For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at www.shastacollege.edu/specs/ecce/eccecert_gainfulemployment.

**CERTIFICATE REQUIREMENTS:**

- ECE 2 Child, Family, Community (3)
- ECE 7 Early Childhood Observation and Assessment (3)
- ECE 8 Teaching Practicum for Young Children (5)
- ECE 9 Child, Growth and Development (3)
- ECE 15 Child Health, Safety and Nutrition (3)
- ECE 17 Principles and Practices of Teaching Young Children (3)
- ECE 20 Introduction to Curriculum (3)
- ECE 28 Teaching in a Diverse Society (3)

TOTAL UNITS FOR CERTIFICATE: 26

**Early Childhood Education – Family Childcare Certificate:**

**PROGRAM DESCRIPTION:** The Early Childhood Education Family Childcare Certificate offers students initial training for employment as a family childcare provider. After completion of the 17-unit certification program, the student will be prepared to seek a family childcare provider position or family childcare licensure (assuming ability to pass Community Care Licensing [Social Services] requirements related to physical site).

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

**PROGRAM LEARNING OUTCOMES:**

Upon successful completion of the certificate, the student should be able to:

1. Apply principles of child development in planning inclusive and developmentally appropriate curriculum environments.
2. Utilize positive guidance of young children based on an understanding of cognitive, social and emotional development of children.
3. Create environments that are healthy, respectful and supportive to children and their families.
4. Identify and analyze the elements of professionalism and its importance in family childcare settings.
5. Complete class exercises applying management and operation knowledge by developing an operational structure of a mock family childcare setting.

**GAINFUL EMPLOYMENT INFORMATION:** For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at www.shastacollege.edu/specs/ecce/fccert_gainfulemployment.

Follow the suggested sequence of courses listed below along with the Shasta College catalog. All courses to be applied to the Early Childhood Education Family Childcare Certificate must be completed with a “C” grade or better.

**CERTIFICATE REQUIREMENTS:**

**CORE COURSES:**

- ECE 1 Human Development OR (3)
- ECE 9 Child Growth and Development (3)
- ECE 2 Child, Family, Community (3)
- ECE 6 Exploring Family Childcare (1)
- ECE 52 Guidance in Adult-Child Relations (3)

**RESTRICTED ELECTIVES:** (Choose two courses)

- ECE 12 Infant/Toddler Learning (3)
- ECE 14 School-Age Learning (3)
- ECE 17 Principles/Practices of Teaching Young Children (3)
- ECE 19 Introduction to Curriculum (3)
- ECE 22 EC Curriculum: Infant/Toddler Care (3)
- ECE 24 EC Curriculum: School Age Care (3)
- ECE 26 The Child With Special Needs (3)
- ECE 27 Teaching Children with Special Needs (3)
- ECE 28 Teaching in a Diverse Society (3)

TOTAL UNITS FOR CERTIFICATE: 16
### English as a Second Language Certificate of Completion

**Certificate:**

**PROGRAM DESCRIPTION:** This certificate of completion is comprised of six non-credit courses that range from ESL beginning to advanced. These non-credit courses generally serve our immigrant population who seek language skills for employment and daily living. Instruction follows a communication-based approach to language learning. The last level in this sequence, ESL 336, acts as a transition course for students who want to pursue academic studies.

This certificate is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this certificate.

**PROGRAM LEARNING OUTCOMES:**

1. Meet three of the four course level student learning outcomes for the highest level course in the Program, ESL 236 or ESL 336.

**REQUIRED NON-CREDIT COURSES:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL 303</td>
<td>Beginning Literacy</td>
<td>3</td>
</tr>
<tr>
<td>ESL 331</td>
<td>Beginning Low</td>
<td>3</td>
</tr>
<tr>
<td>ESL 332</td>
<td>Beginning High</td>
<td>3</td>
</tr>
<tr>
<td>ESL 333</td>
<td>Intermediate</td>
<td>3</td>
</tr>
<tr>
<td>ESL 334</td>
<td>Intermediate High</td>
<td>3</td>
</tr>
<tr>
<td>ESL 336</td>
<td>Advanced</td>
<td></td>
</tr>
</tbody>
</table>

### Family Studies

**Associate in Science:**

**PROGRAM DESCRIPTION:** This program is designed to provide students with foundational skills and concepts about human interaction within the primary social, cultural, and economic system of our society—the family. Individual and family issues that arise from changing societal patterns have created a vast need for a variety of support services. Students with an A.S. Degree in Family Studies will have the opportunity to enter the Human Services field in a number of paraprofessional positions, and with additional coursework would be prepared to transfer to a four-year college/university with lower division preparation for a Bachelor’s of Social Work.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

**PROGRAM LEARNING OUTCOMES:**

1. Identify the impact of the context (historical, cultural, societal, and/or familial) on individuals as they develop, as well as the reciprocal influences, and apply this understanding when analyzing human behavior.
2. Integrate the perspectives of continuity and change, multidirectional pathways, and resiliency when evaluating the process of personal and interpersonal development throughout the lifespan.
3. Identify crucial elements of various systems perspectives and apply these concepts in the analysis of specific situations.
4. Reflect a critical awareness of current issues and valid scientific research in the field of Family Studies/Human Services.
5. Create a comprehensive action plan that reflects both personal and interpersonal effectiveness within the physical, mental, financial and psychosocial domains.
6. Differentiate between personal values and professional guidelines/ethics established within the field of Human Services.

**DEGREE REQUIREMENTS:**

The student must complete the Core Courses listed below, required General Education, and electives to total 60 units to complete the A.S. Degree requirements. Some major courses may be double counted toward the General Education requirements. Students planning to transfer to a Social Work Baccalaureate Program should consider utilizing available General Education units and elective units to complete the specific lower division requirements of the transfer school of their choice. It is imperative to consult the catalog of that institution.

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 1A</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 41</td>
<td>Cultural/Social Context of Childhood</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1A</td>
<td>Principles of Economics (MICRO) OR 1B</td>
<td>3</td>
</tr>
<tr>
<td>FIRO 101</td>
<td>Fire Protection Equipment and Systems</td>
<td>3</td>
</tr>
<tr>
<td>FIRO 189</td>
<td>Fire Investigation I</td>
<td>2</td>
</tr>
<tr>
<td>FIRO 25**</td>
<td>Nutrition</td>
<td>3</td>
</tr>
</tbody>
</table>

*May be used to fulfill General Education requirements. See a counselor.

### Fire Technology

**Associate in Science:**

**PROGRAM DESCRIPTION:** The Fire Technology curriculum is planned to serve both as an in-service program and as a pre-employment two-year program for community college students aspiring to enter the field of firefighting. Fire Technology majors may be required to fulfill a tour of duty at a local fire station. The suggested course sequence has been supplied to the Counseling Division by the Instructional Division. Students are urged to use this outline along with the Shasta College catalog. Particular attention should be paid to course prerequisites and to whether a class is taught Fall or Spring semester or both. Courses listed may be offered either spring or fall semesters, or at the discretion of the division.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

**PROGRAM LEARNING OUTCOMES:**

1. Possess the necessary skills, knowledge and abilities to enter the fire service or to increase skills, knowledge and abilities for those already employed as a firefighter.

**DEGREE REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOC 5°</td>
<td>Introduction to Human Biology</td>
<td>3</td>
</tr>
<tr>
<td>CMST 10°</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>ECE 1 F</td>
<td>Human Development</td>
<td>3</td>
</tr>
<tr>
<td>ECE 2 F</td>
<td>Child, Family and Community</td>
<td>3</td>
</tr>
<tr>
<td>FSS 10</td>
<td>Introduction to Human Services</td>
<td>3</td>
</tr>
<tr>
<td>FSS 12</td>
<td>Standards and Practices in Human Services</td>
<td>3</td>
</tr>
<tr>
<td>FSS 14</td>
<td>Introduction to Case Management</td>
<td>3</td>
</tr>
<tr>
<td>FSS 16</td>
<td>Marriage &amp; Family</td>
<td>3</td>
</tr>
<tr>
<td>FSS 18</td>
<td>Adulthood and Aging</td>
<td>3</td>
</tr>
<tr>
<td>FSS 25*</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>ECE 14*</td>
<td>Principles of Economics (MICRO) OR 16</td>
<td>3</td>
</tr>
<tr>
<td>ECE 18*</td>
<td>Principles of Economics (MACRO)</td>
<td>3</td>
</tr>
<tr>
<td>FSS 46°</td>
<td>Personal Finance OR</td>
<td>3</td>
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<tr>
<td>ECON 1A*</td>
<td>Principles of Economics (MICRO) OR 1B</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1B*</td>
<td>Principles of Economics (MACRO)</td>
<td>3</td>
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<tr>
<td>FSS 60°</td>
<td>Life Management</td>
<td>3</td>
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<tr>
<td>FSS 94</td>
<td>Family Studies &amp; Services Worksite Learning</td>
<td>1-4</td>
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<tr>
<td>PSYC 1A*</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 41</td>
<td>Cultural/Social Context of Childhood</td>
<td>3</td>
</tr>
<tr>
<td>SOC 1*</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 70*</td>
<td>Social Welfare</td>
<td>3</td>
</tr>
</tbody>
</table>

*May be used to fulfill General Education requirements. See a counselor.
Firefighter 1

Certificate:

PROGRAM DESCRIPTION:
Firefighter 1 includes everything necessary to learn the essential skills, obtain the required knowledge and abilities to perform at the entry level in a volunteer or paid fire department as a firefighter. The Firefighter 1 Academy is an intense program including rigorous physical conditioning, English designed for firefighters as well as classroom and field training with the same tools and appliances used by the fire service. During the latter portion of the academy students earn State Fire Marshal Certificate for “Fire Control Three” as part of their Firefighter 1 certification. The course also includes Emergency Medical Responder in which the students earn certification from the California Medical Authority. The Firefighter 1 Academy does not assure employment with the U.S. Forest Service or Cal-Fire. Upon satisfactory completion of the listed requirements and filing an application for graduation, the student's transcript will reflect completion of this certificate.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:
1. Demonstrate the basic knowledge, skills and abilities to safely perform the tasks required to become an entry level firefighter.

CERTIFICATE REQUIREMENTS:
FIRS 104 Firefighter I Academy 21

TOTAL UNITS FOR CERTIFICATE 21

Students wishing to apply for the California State Fire Marshal's Office Firefighter I or II certification must meet the following criteria:
- Complete the required coursework as outlined by the State Fire Marshal's Office.
- Work a minimum of either six months as a paid full-time firefighter or 12 months as a volunteer.
- A recommendation and signature on appropriate form from the Fire Chief of the department that a student works for or volunteers at is a mandatory requirement.

Note: No college in California certifies individuals as Firefighter 1 or Firefighter 2. All certifications are approved by the California State Fire Marshal's Office.

This certificate is approved through the California Community College Chancellor's Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student's transcript will reflect completion of this certificate.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:
1. Demonstrate advanced knowledge, skills and abilities to safely perform the tasks required to become an advanced firefighter.

CERTIFICATE REQUIREMENTS:
FIRS 104 Firefighter I Academy 21
FIRS 108 Firefighter II Academy 5

TOTAL UNITS FOR CERTIFICATE 26

Students wishing to apply for California State Fire Marshal's Office Firefighter I or II certification must meet the following criteria:
- Complete the required coursework as outlined by the State Fire Marshal's Office.
- Work a minimum of either six months as a paid full-time firefighter or 12 months as a volunteer.
- A recommendation and signature on appropriate form from the Fire Chief of the department that a student works for or volunteers at is a mandatory requirement.

Note: No college in California certifies individuals as Firefighter 1 or Firefighter 2. All certifications are approved by the California State Fire Marshal's Office.

Fire Technology – Wildland Firefighter 1 Academy

Certificate:

PROGRAM DESCRIPTION:
Students completing this certificate will have the basic firefighting training as required by the U.S. Forest Service and California Department of Forestry for seasonal or permanent employment in fire fighting. This Academy provides the students with all the required knowledge, skills and abilities as required and dictated by the United States Forest Service (USFS) and the California Department of Forestry. This certificate is approved through the California Community College Chancellor's Office; therefore, completion of the Wildland Firefighter 1 Academy does not assure employment with the USFS or CAL-FIRE.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:
1. Demonstrate the basic knowledge, skills and abilities to safely perform the tasks required by the United States Forest Service and the California Department of Forestry and Fire Protection (CAL FIRE) as an entry level wildland firefighter.

CERTIFICATE REQUIREMENTS:
FIRS 73 Wildland Firefighter I Academy 4

TOTAL UNITS FOR CERTIFICATE 4

Note: Calculation assumes a student will double-count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.
**Hospitality – Baking – Culinary Arts Emphasis**

*Certificate:*

**PROGRAM DESCRIPTION:** This certificate provides a foundation in business mathematics, safety and sanitation principles and practices for personal and institutional application, and fundamental baking skills for students who intend to specialize in baking and pastry making for commercial production. Production of yeast and quick breads, cakes, cookies, pies, and pastries, as well as decorating and icings are undertaken. This certificate provides a base for students interested in basic baking techniques and who are also interested in moving forward with additional skills in the Culinary Arts field.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

**PROGRAM LEARNING OUTCOMES:**
Upon successful completion of this certificate, the student should be able to:

1. Explain and apply sanitation guidelines related to food handling.
2. Problem-solve recipe calculations associated with baked goods and pastry production.
3. Define and describe classic cooking terminology associated with baking.
4. Demonstrate health and safety and hand tool usage.
5. Demonstrate usage of a calculator to determine accurate recipe costing of baked goods.

**CERTIFICATE REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 106</td>
<td>Business Math or Math Placement Level 3 or higher</td>
<td>3</td>
</tr>
<tr>
<td>CULA 50</td>
<td>Safety and Sanitation</td>
<td>2</td>
</tr>
<tr>
<td>CULA 172</td>
<td>Baking</td>
<td>2</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE** 4-7

*Correction made to online catalog on 8/15/13

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**Hospitality – Bartender – Culinary Arts Emphasis**

*Certificate:*

**PROGRAM DESCRIPTION:** Students completing this certificate will be able to apply safety and sanitation principles and practices for a beverage operation, describe service skills for wine, beer, and spirits products, and identify wines from the wine districts of California, France, Germany, and Italy. This certification will provide knowledge and skills for those entering a new position and for those interested in sharpening their skills in a current position. Limitation on enrollment: Students must be 21 years of age or older to complete this certificate.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

**PROGRAM LEARNING OUTCOMES:**
Upon successful completion of this certificate, the student should be able to:

1. Illustrate safety and sanitation practices in food and beverage operation. Additionally, students will apply principles of safety and sanitation and business mathematics. This certificate provides skills necessary for an entry-level food service position.
2. Describe the flow of service between a dining room and in a restaurant environment.
3. Assess staffing needs based upon levels of projected business.
4. Identify wine and wine service techniques in a dining room.
5. Plan an effective dining room layout design for staffing and service.

**CERTIFICATE REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CULA 50</td>
<td>Safety and Sanitation</td>
<td>2</td>
</tr>
<tr>
<td>CULA 65</td>
<td>Dining Room Service</td>
<td>3</td>
</tr>
<tr>
<td>CULA 73</td>
<td>Introduction to Wine</td>
<td>2</td>
</tr>
<tr>
<td>HOSP 10</td>
<td>Introduction to Hospitality</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 45</td>
<td>Restaurants, Hotels, and Lawful Management</td>
<td>2</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE** 6

*Correction made to online catalog on 8/15/13

---

**Hospitality – Dining Room Staff – Culinary Arts Emphasis**

**Certificate:**

**PROGRAM DESCRIPTION:** Students completing this certificate will have practiced and demonstrated basic skills for front-of-the-house service in a live food and beverage operation. Additionally, students will apply principles of safety and sanitation in the hospitality industry, areas of focus will include legal aspects of hospitality operations, principles of safety and sanitation, skills for delivery of effective service in a dining room environment, theory of wine sales and service, and business mathematics. This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

**PROGRAM LEARNING OUTCOMES:**
Upon successful completion of this certificate, the student should be able to:

1. Illustrate safety and sanitation practices in food and beverage handling.
2. Describe the flow of service between a dining room and in a restaurant environment.
3. Plan an effective dining room layout design for staffing and service.
4. Assess staffing needs based upon levels of projected business.
5. Describe the sequence of service associated with exemplary dining room service.

**CERTIFICATE REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 106</td>
<td>Business Math or Math Placement Level 3 or higher</td>
<td>3</td>
</tr>
<tr>
<td>CULA 50</td>
<td>Safety and Sanitation</td>
<td>2</td>
</tr>
<tr>
<td>CULA 65</td>
<td>Dining Room Service</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE** 5 – 8

*Correction made to online catalog on 8/15/13

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**Hospitality – Dining Room Management – Culinary Arts Emphasis**

*Certificate:*

**PROGRAM DESCRIPTION:** This certificate provides a foundation for students interested in entry level dining room management. In addition to an overview of the hospitality industry, areas of focus will include legal aspects of hospitality operations, principles of safety and sanitation, skills for delivery of effective service in a dining room environment, theory of wine sales and service, and business mathematics. This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

**PROGRAM LEARNING OUTCOMES:**
Upon successful completion of this certificate, the student should be able to:

1. Describe the flow of service between a dining room and in a restaurant environment.
2. Assess staffing needs based upon levels of projected business.
3. Illustrate safety and sanitation practices in food and beverage handling.
4. Describe wine sales and service techniques in a dining room.
5. Plan an effective dining room layout design for staffing and service.

**CERTIFICATE REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUAD 106</td>
<td>Business Math or Math Placement Level 3 or higher</td>
<td>3</td>
</tr>
<tr>
<td>CULA 50</td>
<td>Safety and Sanitation</td>
<td>2</td>
</tr>
<tr>
<td>CULA 65</td>
<td>Dining Room Service</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE** 12 – 15

*Correction made to online catalog on 8/15/13

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This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

**PROGRAM LEARNING OUTCOMES:**
Upon successful completion of this certificate, the student should be able to:

1. Illustrate safety and sanitation practices in food and beverage handling.
2. Describe the flow of service between a dining room and in a restaurant environment.
3. Plan an effective dining room layout design for staffing and service.
4. Assess staffing needs based upon levels of projected business.
5. Describe the sequence of service associated with exemplary dining room service.
Hospitality – Line Cook – Culinary Arts Emphasis

Certificate:

PROGRAM DESCRIPTION: This certification prepares a student with the basic skills to be a line cook in a food operation. Students will recognize the importance of safety and sanitation, prepare food, demonstrate plate presentations, use weights and measures, and interpret recipes.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements, the student will receive a certificate of completion. This certificate program is approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:
1. Explain fundamental concepts of winemaking and marketing.
2. Demonstrate station organization, purchasing, storage, menu writing, and sanitation principles.
3. Calculate operation budget, various food and labor costs, menu pricing, inventory controls, and forecasting.
4. Demonstrate production line management and organization.
5. Identify and apply guidelines for handling of meats, dairy products, fresh produce, and bakery items.

CERTIFICATE REQUIREMENTS:
- CULA 45 Basic Food Production 5 units
- CULA 46 Advanced Foods 5 units
- CULA 50 Safety and Sanitation 2 units
- HOSP 10 Introduction to Hospitality 3 units

TOTAL UNITS FOR CERTIFICATE 15

Hospitality – Winemaking and Marketing

Certificate:

PROGRAM DESCRIPTION: The Winemaking and Marketing Certificate is designed to provide students with hands-on experience in winemaking, viticultural practices, and wine analysis. It is intended for the entrepreneur exploring business opportunities in the grape wine industry, and/or the prospective small winery employee, as well as the home winemaker, interested in career or skills development. Hands-on winemaking from crush through fermentation, sensory evaluation, product marketing, and food and wine pairing will be covered.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:
1. Define fundamental concepts of winemaking and marketing.
2. List and describe all basic tasks required for winemaking.
3. Assess results from different sensory evaluation techniques winetasting.
4. Apply principles of wine chemistry.
5. Define principles associated with creation and maintenance of a vineyard.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at www.shastacollege.edu/specs/cula_winecert_gainfulemployment.

CERTIFICATE REQUIREMENTS:
- AGEH 94 Horticulture Worksite Learning 1 unit
- AGVIT 80 Vineyard Design and Construction 1 unit
- AGVIT 81 Vineyard Care 1 unit
- CULA 86 Wine With Food 2 units
- CULA 73 Introduction to Wine 2 units
- CULA 74 Basic Winemaking 2 units
- CULA 76 Intermediate Winemaking 2 units
- CULA 78 Sensory Evaluation of Wine 2 units
- CULA 80 Wine Sales and Marketing 3 units
- CULA 88 Wines of the North State 1 unit

TOTAL UNITS FOR CERTIFICATE 17

Hospitality Management – Culinary Arts Concentration

Associate in Science:

PROGRAM DESCRIPTION: With this degree, graduates enter the culinary field and should be able to demonstrate principles in sanitation and safety, hospitality, basic food production, nutrition, management, advanced cuisine, and gourmet food preparation. Business communications and general education requirements are also required for the degree. Hands-on worksite learning provides the student an additional experience in the field.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this degree, the student should be able to:
1. Prepare workstations, corresponding to the preparation and presentation of a meal, in a time-restricted quality-minded setting.
2. Prepare large scale quantity items in a time-restricted quality-minded setting.
3. Practice the principles of sanitation and hygiene procedures.
4. Recognize the types of gourmet foods served in hotels and restaurants and the presentation of these specialties.
5. Demonstrate the principles of the garde-manger section of the kitchen.

DEGREE REQUIREMENTS:

CORE COURSES:
- BUAD 66* Business Communications 3 units
- CULA 45 Basic Food Production 5 units
- CULA 46 Advanced Foods 5 units
- CULA 48 Gourmet Food Preparation 3 units
- CULA 49 Menu Planning and Cost Analysis 2 units
- CULA 50 Sanitation and Safety 2 units
- CULA 55 Purchasing 2 units
- CULA 60 Beverage Management 2 units
- CULA 65 Dining Room Service 3 units
- CULA 73 Pastry 2 units
- CULA 94 Culinary Arts Worksite Learning 1 unit
- CULA 159 Stocks, Soups, Sauces & Basic Culinary Prep. 2 units
- CULA 161 The Art of Garde Manger 2 units
- CULA 172 Baking 2 units
- FSS 25* Nutrition 3 units
- HOSP 10 Introduction to the Hospitality Industry 3 units
- HOSP 65 Hospitality Supervision 3 units

*May be used to fulfill General Education requirements. See a counselor.

ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:

<table>
<thead>
<tr>
<th>Category</th>
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</table>

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

Certificate:

PROGRAM DESCRIPTION: With this certificate, students will enter the Culinary Arts field and should be able to demonstrate principles in sanitation and safety, hospitality, basic food production, nutrition, and business mathematics. Additional skills will be applied in beverage management, advanced foods, menu planning and cost analysis, human resources management, purchasing, dining room service, baking, supervision, garde manger, and actual worksite learning.

This certificate is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this certificate.

Continued on next page...
Chapter 5 – Degrees and Certificates

Hospitality Management – Culinary Arts Concentration Certificate (continued):

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:

1. Prepare workstations, corresponding to the preparation and presentation of a meal, in a time-restricted quality-minded setting.
2. Prepare large scale quantity items in a time-restricted quality-minded setting.
3. Practice the principles of sanitation and safety procedures.
4. Recognize the types of gourmet foods served in hotels and restaurants and the presentation of these specialties.
5. Demonstrate the principles of the garde-manger section of the kitchen.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at www.shastacollege.edu/specs_cula_culacert_gainfulemployment/

CERTIFICATE REQUIREMENTS:

<table>
<thead>
<tr>
<th>Course Code</th>
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<tr>
<td>BUAD 106</td>
<td>Business Mathematics</td>
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<td>CULA 45</td>
<td>Basic Food Production</td>
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</tr>
<tr>
<td>CULA 46</td>
<td>Advanced Foods</td>
<td>5</td>
</tr>
<tr>
<td>CULA 48</td>
<td>Gourmet Foods Preparation</td>
<td>3</td>
</tr>
<tr>
<td>CULA 49</td>
<td>Menu Planning and Cost Analysis</td>
<td>2</td>
</tr>
<tr>
<td>CULA 50</td>
<td>Sanitation and Safety</td>
<td>2</td>
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<tr>
<td>CULA 55</td>
<td>Purchasing</td>
<td>2</td>
</tr>
<tr>
<td>CULA 60</td>
<td>Beverage Management</td>
<td>2</td>
</tr>
<tr>
<td>CULA 65</td>
<td>Dining Room Service</td>
<td>3</td>
</tr>
<tr>
<td>CULA 94</td>
<td>Culinary Arts Worksite Learning</td>
<td>2</td>
</tr>
<tr>
<td>CULA 159</td>
<td>Stocks, Soups, Sauces &amp; Basic Culinary Prep.</td>
<td>2</td>
</tr>
<tr>
<td>CULA 161</td>
<td>The Art of Garde Manger</td>
<td>2</td>
</tr>
<tr>
<td>CULA 172</td>
<td>Baking</td>
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<tr>
<td>FSS 25</td>
<td>Nutrition</td>
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<td>HOSP 10</td>
<td>Introduction to the Hospitality Industry</td>
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<tr>
<td>HOSP 65</td>
<td>Hospitality Supervision</td>
<td>3</td>
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</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE 44

Hospitality Management – Hotel/Restaurant Management Concentration

Associate in Science:

PROGRAM DESCRIPTION: The course of study in hospitality management includes instruction in hotel and restaurant operations designed to prepare students for various positions in the hospitality industry. What interests many prospective students in this field of study is the extraordinary range of management jobs available. In addition to operational management, graduates will be able to pursue careers in such areas as personnel, marketing, sales, finance, training, facilities management, conference management, and purchasing. Career progression is often very rapid, with companies offering very good financial and professional development packages in recognition of the major shortage of well qualified management graduates for what is one of the world’s largest and fastest growing industries.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this degree, the student should be able to:

1. Relate customer expectations to the achievement of financial viability of the organization.
2. Practice appropriate communication skills in operational and human resource management.
3. Evaluate hospitality operations.
4. Apply quality control systems to customer service issues.
5. Apply the appropriate management/supervisory techniques to operational situations.

DEGREE REQUIREMENTS:

CORE COURSES:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>BUAD 66</td>
<td>Business Communications</td>
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<td>BUAD 80</td>
<td>Customer Service</td>
<td>3</td>
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<td>CIS 1</td>
<td>Computer Literacy Workshop</td>
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<td>CULA 50</td>
<td>Safety and Sanitation</td>
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<td>CULA 55</td>
<td>Purchasing</td>
<td>2</td>
</tr>
<tr>
<td>CULA 73</td>
<td>Introduction to Wines OR</td>
<td>2</td>
</tr>
<tr>
<td>CULA 66</td>
<td>Wine with Food</td>
<td>2</td>
</tr>
<tr>
<td>HOSP 10</td>
<td>Introduction to the Hospitality Industry</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 20</td>
<td>Hospitality Operations Management</td>
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</tr>
<tr>
<td>HOSP 35</td>
<td>Computer Applications in the Hospitality Industry</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 40</td>
<td>Human Resource Mgmt. in the Hospitality Industry</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 45</td>
<td>Restaurants, Hotels, and Lawful Management</td>
<td>2</td>
</tr>
<tr>
<td>HOSP 50</td>
<td>Hospitality Marketing, Sales and Advertising</td>
<td>3</td>
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<tr>
<td>HOSP 60</td>
<td>Hospitality and Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>HOSP 65</td>
<td>Hospitality Supervision</td>
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</tr>
<tr>
<td>HOSP 94</td>
<td>Hospitality Worksite Learning</td>
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</tbody>
</table>

*May be used to fulfill General Education requirements.

ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:

<table>
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<tr>
<th>Category</th>
<th>Requirements</th>
<th>Units</th>
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<td>60*</td>
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</tbody>
</table>

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

Certificate:

PROGRAM DESCRIPTION: This certificate is designed to prepare students for careers in the hospitality field associated with food and beverage management, lodging, and tourism. Hands-on worksite learning gives the student additional experience in the field.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student’s transcript.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:

1. Define the concept of service and train others to meet and exceed guest expectations, in any hospitality industry environment.
2. Define the main departments within a full-service hotel and their functions, and describe how each department works together to ensure the overall objective is met.
3. Describe computer applications commonly used in the hospitality industry.
4. Describe the nature of, and be able to effectively function in, this dynamic physically demanding environment.
5. Describe motivational techniques that management can employ to improve employee performance in a hospitality operation.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at www.shastacollege.edu/specs_hosp_hotelmanagecert_gainfulemployment/

CERTIFICATE REQUIREMENTS:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>BUAD 80</td>
<td>Principles of Customer Service</td>
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<tr>
<td>HOSP 10</td>
<td>Introduction to the Hospitality Industry</td>
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<tr>
<td>HOSP 20</td>
<td>Hospitality Operations Management</td>
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<td>HOSP 35</td>
<td>Computer Applications in the Hospitality Industry</td>
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<td>Human Resource Mgmt. in the Hospitality Industry</td>
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<td>HOSP 94</td>
<td>Hospitality Worksite Learning</td>
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</table>

TOTAL UNITS FOR CERTIFICATE 16
Industrial Technology Certificate

Certificate:

PROGRAM DESCRIPTION: The Industrial Technology Certificate is designed to provide employable knowledge and skills courses common to various industrial occupations for entry-level employment in diverse industries.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor's Office; therefore, completion of the certificate will not be listed on the student’s transcript.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:
1. Explain the basic theory of the subject matter or industrial system for the course of instruction based on industry standards.
2. Analyze a scenario based upon an industrial equipment system failure/problem/complaint.
3. Employ a systematic approach to troubleshooting an industrial system malfunction and prepare an effective repair solution.
4. Analyze component failures to determine the root cause of the component failure.
5. Verify if the path of repair was correct by testing and/or completing a work order/report.
6. Demonstrate the correct usage of tools/supplies required to diagnose/repair a malfunction

CERTIFICATE REQUIREMENTS:
DIES 48  Hydraulics  3.5
INDE 101  Industrial Occupation Basics  3
INDE 138  Fundamentals of Electronics and Electricity  3
MATH 100  Technical Applications of Mathematics  3
WELD 70  Beginning Welding  3

TOTAL UNITS FOR CERTIFICATE: 15.5

Life Management

Certificate:

PROGRAM DESCRIPTION: This certificate is designed to provide students with the information, perceptions and skills necessary to move toward responsible independence and effective interpersonal relationships. Resources such as time, money and energy will be stressed along with the study of the physical, mental, emotional and social needs of all ages. This curriculum is essential for preparing individuals to balance personal, family and work responsibilities throughout the life cycle.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be capable of balancing personal, family and work responsibilities on a sustainable basis through the use of:
1. A comprehensive model of developmentally appropriate concepts and behavior throughout the lifespan.
2. A personal mission statement for life and set of initial life goals.
3. A theoretical perspective of family.
4. A personal dietary analysis and plan.
5. A personal budgetary analysis and plan.

CERTIFICATE REQUIREMENTS:
All courses to be applied to the Life Management Certificate must be completed with a “C” grade or better.
ECE 1  Human Development  3
FSS 16  Marriage and Family  3
FSS 25  Nutrition  3
FSS 46  Personal Finance  3
FSS 60  Life Management  3

TOTAL UNITS FOR CERTIFICATE: 15

Music

Associate in Arts:

PROGRAM DESCRIPTION: The AA curriculum in Music is designed to provide preparation for either transfer to a CSU or UC as a music major and/or assist in development for a career in music within a variety of music career choices. A few of these career options could be: working in the music industry, music performance, music education, music publishing, musical theater, composition, retail music merchandising, and private music instruction. Additionally the music curriculum creates an opportunity for local amateur and professional musicians to perform within the music department’s music performance ensembles (Choirs, Orchestras, Symphonic Bands, and Jazz Ensembles) and/or to advance their music skills.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this degree, the student should be able to:
1. Explain and demonstrate the principles and rules of common four-part harmonic practice.
2. Attain a first-year college student level of piano competency.
3. Perform as a soloist at a first-year college student level of competency on a principal instrument or voice.
4. Analyze given score materials to identify stylistic differences within the common practice era.

DEGREE REQUIREMENTS:
Students must complete the courses required for the Certificate. In addition, students fulfill the 34-39 unit general education pattern for CSU or IGETC.

CORE COURSES:
MUS 2  Diatonic Harmony and Musicianship  5
MUS 3  Advanced Diatonic Harmony and Musicianship  5
MUS 4  Chromatic Harmony  5
MUS 5  20th Century Harmony  5

RESTRICTED ELECTIVES: (Choose four units)  4
MUS 30  Intermediate Voice (1)
MUS 31  Chamber Choir (1)
MUS 33  Jazz Ensemble (1)
MUS 35  Vocal Jazz Ensemble (1)
MUS 39  Chamber Music (1)
MUS 40  Concert Choir (1)
MUS 41  Shasta College Women’s Ensemble (1)
MUS 42  Shasta College Chorale (1)
MUS 43  Shasta College Symphony Orchestra (1)
MUS 44  Shasta College Youth Symphony (.5-1)
MUS 46  Shasta College Symphonic Band (1)
MUS 47  Shasta College Jazz Ensemble (1)

RECOMMENDED ELECTIVE COURSES:
MUS 1  Music Fundamentals (pre-Music Major only)  3
MUS 10*  Music Appreciation (valid for G.E.)  3
MUS 11*  History of Jazz and Rock (valid for G.E.)  3
MUS 14*  World Music  3
MUS 22A  Beginning Piano (pre-Music Major only)  1
MUS 29/30  Beginning/Intermediate Voice  1
MUS 61A  Performance Analysis  .5-2

*May be used to fulfill General Education requirements.
Continued on next page...
Music Degree (continued):

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
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<td><strong>Degree Total</strong></td>
<td><strong>60 – 63</strong></td>
</tr>
</tbody>
</table>

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.*

Certificate:

PROGRAM DESCRIPTION: The Certificate in Music is designed to provide preparation for development of career employment within a variety of music career choices. A few of these career options could be: working in the music industry, music performance, music publishing, musical theater, composition, and private music instruction. Additionally the music curriculum creates an opportunity for local amateur and professional musicians to perform within the music department's music performance ensembles (Choirs, Orchestras, Symphonic Bands, and Jazz Ensembles) and/or to advance their music skills.

This certificate is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and transcript, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

Certificate Requirements:

- **MUS 2** Diatonic Harmony and Musicianship 5
- **MUS 3** Advanced Diatonic Harmony and Musicianship 5
- **MUS 4** Chromatic Harmony 5
- **MUS 5** 20th Century Harmony 5

RESTRICTED ELECTIVES: (Choose four units) 4

- **MUS 30** Intermediate Voice (1)
- **MUS 31** Chamber Choir (1)
- **MUS 33** Jazz Ensemble (1)
- **MUS 35** Vocal Jazz Ensemble (1)
- **MUS 39** Chamber Music (1)
- **MUS 40** Concert Choir (1)
- **MUS 41** Shasta College Women’s Ensemble (1)
- **MUS 42** Shasta College Chorale (1)
- **MUS 43** Shasta College Symphony Orchestra (1)
- **MUS 44** Shasta College Youth Symphony (.5-1)
- **MUS 46** Shasta College Symphonic Band (1)
- **MUS 47** Shasta College Jazz Ensemble (1)

**TOTAL UNITS FOR CERTIFICATE: 24**

Nurse Aide/Home Health Aide Certificate:

PROGRAM DESCRIPTION: Curriculum for this course is designed to prepare a student to work in any one of several health care situations, (acute care hospital, long term care, and home care).

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

PROGRAM LEARNING OUTCOMES:

Upon successful completion of this certificate:

1. 90% of those students who are eligible to sit for the National Council Licensing Examination for Registered Nursing (NCLEX-RN) will pass their examination within the first six months of the first attempt.

NOTE: All students participating in clinical rotations must submit proof of immunizations, TB clearance, and physical examination; pass a drug screening and a background check; and, have current certification in cardiopulmonary resuscitation (CPR) for the health professional according to established program process prior to going into clinical facilities. Students are financially responsible for meeting these requirements. See division/program web page at [http://www.shastacollege.edu/hsup](http://www.shastacollege.edu/hsup) or call Division Office (530-339-3600) for specific requirements, procedures, and deadlines.

Graduation Requirements:

1. Completion of the Humanities requirement.
2. Completion of competence in math (MATH 102 Intermediate Algebra or MATH 110 Essential Math are the advised course for meeting this requirement).
3. Completion of the multi-cultural awareness requirement.
4. Completion of computer literacy.

Due to the time commitments of the A.D.N. program, it is strongly recommended to complete the graduation requirement before entering the program.

REQUIREMENTS FOR ENROLLMENT INTO THE PROGRAM:

Students filing enrollment packets must be a high school graduate or equivalent. The “Prerequisite Science” courses listed below must be completed with a grade of C or higher in each course and a minimum science 2.5 GPA. Prerequisites must be completed upon application. No in progress courses will be accepted.

**PREREQUISITE COURSES:**

- **ANAT 1** Anatomy 5
- **MICR 1** “Microbiology” 5
- **PHY 1** Physiology (with lab) 5

Students must complete the remaining “PREREQUISITE” courses listed below with a grade of “C” or better in each course.

- **ENGL 1A** College Composition 4
- **ANTH 2** Cultural Anthropology OR 3
- **SOC 1** Introduction to Sociology OR 3
- **SOC 2** Social Problems

**PSYC 1A** General Psychology OR 3
**PSYC 14** Understanding Human Behavior

**Continued on next page...**
Space in the program is limited. A new class is enrolled every three semesters. In order to be eligible for enrollment, students must satisfy the prerequisites listed below and file an enrollment packet with the Admissions Office during designated enrollment periods in each semester. All qualified applicants are placed on a waiting list and enrolled on a space available basis in the order of their accepted application date. For specific information, see the program web page at http://www.shastacollege.edu/hsup or call the Division Office at (530-339-3600).

**REQUIREMENTS FOR ENROLLMENT INTO THE PROGRAM:**
1. Students must have a high school diploma or equivalent.
2. Students must be a current Certified Nurse Aide (CNA).
3. Students must complete the following prerequisite courses with a C grade or better.

**PREREQUISITE COURSES:**
- **BIOL 5** Introduction to Human Biology 3
- **BIOL 6** Human Biology Lab 1
- **ECGE 1** Human Development 3
- **FSS 25** Nutrition 3
- **PSYC 1A** General Psychology OR 3
- **PSYC 14** Understanding Human Behavior 3

**TOTAL UNITS FOR PREREQUISITES:** 13

**CERTIFICATE REQUIREMENTS:**
Students must be enrolled in the program in order to take the courses listed below. Students, at their expense, are required to have a physical examination and immunizations prior to entering the program. Students must meet established physical criteria to participate in the clinical area, have a current Basic CPR card for the health professional, provide proof of drug testing, and completed a criminal background check. For specific information, see the program web page at www.shastacollege.edu/hsup or call the Division Office (530-339-3600).

NOTE: Students must show competence in both clinical and theory components (a grade of C or better) in order to progress through the curriculum. A failing clinical grade results in removal from the program regardless of the theory grade.

- **VOCN 160** Foundations of Nursing Practice 15
- **VOCN 161** Nursing of Adults 13
- **VOCN 162** Nursing of Adults and Children 13

**TOTAL UNITS FOR CERTIFICATE:** 41

**RECOMMENDED COURSES** (Not required):
- **ENGL 190** Reading and Writing II 3
- **MATH 220** Basic Mathematics 3
- **OAS 110** Beginning Medical Terminology 3

**Office Administration – Administrative Office Assistant Certificate:**

**PROGRAM DESCRIPTION:** This certificate prepares students for work as an entry-level Administrative Assistant. Administrative Assistants work for supervisors, managers, and executives. Students learn the following skills:
- **Document and Data Handling:** how to prepare, modify, and proofread documents such as reports, letters, memos, records, lists, and schedules.
- **Technology:** Working knowledge of Microsoft Office (Word, Excel, Internet Explorer, and Outlook).
- **Keyboarding:** Type 35-40 words per minute. Interpersonal: Meet and greet clients and visitors, maintain a pleasant manner, and project a professional image in person and on the phone.
- **Confidential:** Handling of mail, money, and receipts.
- **General:** Research and price office furniture and supplies with attention to detail. Obtaining on-the-job training through the Worksite Learning course at Shasta College is highly recommended.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

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Continued on next page…
In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.
Theatre Arts

Associate in Arts:

PROGRAM DESCRIPTION: The Theatre Arts program is academically grounded in the liberal arts tradition of literature, performance, cultural studies, history, philosophy, and technical skills. It also provides a hands-on, learn-by-doing environment that gives students experiences and skills to complement many career paths. Employers find theatre trained applicants become valuable employees because they have developed excellent communication and problem-solving skills, confidence, and the ability to work cooperatively with a diverse team of people.

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this degree, the student should be able to:
1. Describe the basic elements of dramatic structure and analyze the dramatic components in a theatrical production.
2. Select appropriate monologues and prepare them as audition pieces.
3. Investigate the themes and dramaturgy of the Greek, Roman, Medieval, Renaissance, Elizabethan, Jacobean and Restoration periods of theater history and compare and contrast those periods through discussion, papers, and performance analysis.
4. Identify and apply the major components of stagecraft in the implementation of scenery, lighting, costume, make-up, special effects, and production management.
5. Investigate the social, political, and spiritual objectives of theatrical performance through discussions and papers that deal with gender, politics and religion.

DEGREE REQUIREMENTS:

CORE COURSES:
THTR 1* Introduction to Theatre Arts 3
THTR 8* Theatre History I 3
THTR 12 Acting I 2
THTR 23/26 Mainstage Production III/ OR 3
THTR 70 Repertory Theatre I
THTR 30 Stagecraft 3
THTR 41 Theatre Laboratory OR 3
THTR 74 Repertory Theatre – Technical

RESTRICTED ELECTIVES IN THEORY: (Choose six units) 6
THTR 5* 20th Century Theatre (3)
THTR 9* Theatre History II (3)
THTR 13 Acting II (2)
THTR 29 Directing (2)
THTR 31 Introduction to Theatrical Design (3)
THTR 34 Makeup (2)
THTR 81 Playwriting and Script Analysis (3)

RESTRICTED ELECTIVES IN PRACTICUM: (Choose four units) 4
THTR 16 Acting Lab (1)
THTR 38 Makeup Lab (1)
THTR 42 Technical Stage Production (1-4)
THTR 60 Special Projects-Production (1-2)
THTR 70 Repertory Theatre I (1-4)
THTR 74 Repertory Theatre – Technical (1-4)
THTR 97 Special Studio Topics: Theatre (1-3)
THTR 98 Special Topics: Theatre (1-3)

*May be used to fulfill General Education requirements. See a counselor.

ASSOCIATE IN ARTS DEGREE REQUIREMENTS:

Major 27
Additional General Education 18
General Electives 15
Degree Total 60

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

Transition Certificate for Students with Disabilities

Certificate:

PROGRAM DESCRIPTION: This curriculum is designed to provide an integrated educational option for students transitioning to post-secondary educational settings. This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:
1. Approximately 70% of students should be able to use a word processor, find information on the Internet, and create a PowerPoint presentation.
2. Approximately 70% of students will be ready to enter regular college math classes such as MATH 220 or MATH 240.
3. Approximately 70% of students will be ready to enter non-adaptive college English classes such as ENGL 280 or 270.
4. Approximately 70% of students will have identified a career path.
5. Students will acquire the knowledge necessary to select relevant occupational opportunities and job search skills. Approximately 70% of students will demonstrate the ability to find job postings, complete job applications, write a resume and prepare for job interviews.
6. Students will know how to access relevant community and governmental resources. Approximately 70% of students will be able to identify at least four or more community organizations, or state agencies that provide support services for students with disabilities.

CERTIFICATE REQUIREMENTS:

ADAP 219 Career Planning and Development 1
ADAP 245 Adapted Computer Skills (two semesters) 2
ADAP 255 Human Awareness and Life Skills 2
ADAP 256 Reading/Writing for Life Skills (2 semesters) (4) 4-6
ADAP 256 Reading & Writing for Life Skills (2)
ENGL 260 Elements of Reading (4)
ADAP 258 Mathematics for Life Skills (2 semesters) (4) 4-5
ADAP 258 Mathematics for Life Skills (2)
MATH 220 Basic Math (3)

TOTAL UNITS FOR CERTIFICATE 13 – 16

Watershed Restoration Certificate

Certificate:

PROGRAM DESCRIPTION: This certificate provides full-time students as well as professionals related to various agencies and industries an opportunity to obtain knowledge, skills and hands-on training related to the many facets of watershed restoration including regulation, mapping, water quality, data collections, recent advances in erosion control and bio-engineering applications and techniques, and heavy equipment operations.

This is a locally approved certificate. Upon satisfactory completion of the listed requirements and application for completion of the certificate to Admissions and Records, the student will receive a certificate of completion. This certificate program is not approved through the California Community College Chancellor’s Office; therefore, completion of the certificate will not be listed on the student’s transcript.

Continued on next page...
Watershed Restoration Certificate (continued):

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:
1. Apply the newest technologies and practices in erosion control in restoring an ecosystem.
2. Apply the latest techniques in bio-engineering applications.
3. Select and implement an appropriate method or procedure for monitoring a specific attribute of the environment.
4. Operate and maintain heavy equipment resulting in minimum impact to the watershed.
5. Accurately navigate in the field using maps, compass, a Global Positioning System (GPS). Students will also be able to use GPS for field data collection and Geographic Information Systems (GIS) for data mapping and display.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/bait_nr_gainful_employment/.

CERTIFICATE REQUIREMENTS:
<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>AGNR 50 Natural Resources Measurements</td>
<td>4</td>
</tr>
<tr>
<td>AGNR 64 Watershed Management and Ecology</td>
<td>3</td>
</tr>
<tr>
<td>AGNR 66A Watershed Restoration Practicum I</td>
<td>1</td>
</tr>
<tr>
<td>CONS 46 Equipment Operations and Maintenance</td>
<td>3</td>
</tr>
<tr>
<td>CONS 47 Project Construction for Equipment Operations</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE: 14

Water/Wastewater Treatment Certificate:

PROGRAM DESCRIPTION: This program is designed to provide entry-level training and upgrading for California water and wastewater public and private agency operators. A student seeking introduction into either water or wastewater fields would benefit by taking the entire course offerings. It is strongly recommended that students complete MATH 101-Basic Algebra and CHEM 2A-Introduction to Chemistry before completing the requirements of the program.

This certificate is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this certificate.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:
1. Assess existing methods in water and wastewater treatment technology.
2. Analyze treatment plant’s relationship and responsibility to the community.
3. Evaluate the processes of coagulation, flocculation, sedimentation, filtration, disinfection, and distribution in water treatment.
4. Evaluate the processes of primary sedimentation, oxidation, disinfection, and disposal in wastewater treatment.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/bait_wtt_gainful_employment/.

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Water/Wastewater Treatment Certificate (continued):

CERTIFICATE REQUIREMENTS:
<table>
<thead>
<tr>
<th>Course</th>
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</tr>
</thead>
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<td>WTT 177 Introduction to Wastewater Treatment</td>
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<tr>
<td>WTT 180 Introduction to Water Treatment Tech</td>
<td>3</td>
</tr>
<tr>
<td>WTT 181 Intermediate Water Treatment Tech</td>
<td>3</td>
</tr>
<tr>
<td>WTT 183 Intermediate Wastewater Treatment</td>
<td>3</td>
</tr>
<tr>
<td>WTT 184 Small Water Systems and Distribution</td>
<td>3</td>
</tr>
<tr>
<td>WTT 186 Advanced Wastewater Treatment</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE: 18

Welding Technology

Associate in Science:

PROGRAM DESCRIPTION: The Welding Technology Program is designed to prepare students for positions in a variety of trades or service industries requiring technically trained and/or certified welders. The program is designed to prepare students for the opportunity to become certified welders under the standards set by the American Welding Society. Students can receive their certification by the American Welding Society in a variety of processes as part of the instructional program. The program is available in two formats:

- Associate in Science Degree in Welding Technology
- Certificate from Shasta College in Welding Technology
- Certification by the American Welding Society as a certified welder

This degree is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of all degree requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this degree.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this degree, the student should be able to:
1. Demonstrate competencies in job safety skills and awareness of workplace hazards.
2. Follow written and oral instructions in the interpretation of simple drawings and sketches, including welding symbols and the execution of the fabrication process.
3. Set up, maintain, and adjust welding related equipment.
4. Acquire skills and knowledge to make a successful transition to an entry-level position in the work force.
5. Pass workmanship tests using common welding processes.

DEGREE REQUIREMENTS:

CORE COURSES:
- DIES 48 Hydraulics: 3.5
- ENGR 118 Blueprint and Specification Reading (Mechanical): 2
- INDE 1 Career Planning for Industrial Technology: 1
- MATH 110 Essential Math: 3
- WELD 70 Beginning Welding: 3
- WELD 73 Structural Steel Metal Fabrication: 3
- WELD 170 Introduction to ARC Welding: 3
- WELD 171 Intermediate ARC Welding: 3
- WELD 174 Structural Steel MIG Welding: 3
- WELD 175 TIG Welding: 3
- WELD 178 Pipe Welding Fundamentals: 3
- WELD 182 Advanced ARC Welding: 1.5
- WELD 183 Advanced ARC Welding Specialty Lab: 1.5
- WELD 184 Advanced GTAW (TIG) Welding: 1.5
- WELD 186 Advanced Pipe Welding: 2
- WELD 188 Advanced GMAW (MIG) Welding: 1.5

*May be used to fulfill General Education requirements. See a counselor.

ASSOCIATE IN SCIENCE DEGREE REQUIREMENTS:

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<tr>
<th>Category</th>
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<tr>
<td>Additional General Education</td>
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<td>General Electives</td>
<td>3.5</td>
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<tr>
<td>Degree Total</td>
<td>60*</td>
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</tbody>
</table>

*Note: Calculation assumes a student will double-count the Multicultural graduation requirement with either a social science or humanities G.E. requirement and that the student will fulfill computer literacy through a test. If students plan well and see a counselor, they may be able to double count the Multicultural and Computer Literacy units. If these graduation requirements are added, the number of units is increased by 6 units.

Certificate:

PROGRAM DESCRIPTION: The Welding Technology Program is designed to prepare students for positions in a variety of trades or service industries requiring technically trained and/or certified welders. The program is designed to prepare students for the opportunity to become certified welders under the standards set by the American Welding Society. Students can receive their certification by the American Welding Society in a variety of processes as part of the instructional program.

continued on next page...
Welding Technology Certificate (continued):

This certificate is approved through the California Community College Chancellor’s Office. Upon satisfactory completion of the listed requirements and filing an application for graduation with Admissions and Records, the student’s transcript will reflect completion of this certificate.

PROGRAM LEARNING OUTCOMES:
Upon successful completion of this certificate, the student should be able to:
1. Demonstrate competencies in job safety skills and awareness of workplace hazards.
2. Follow written and oral instructions in the interpretation of simple drawings and sketches, including welding symbols and the execution of the fabrication process.
3. Set up, maintain, and adjust welding related equipment.
4. Acquire skills and knowledge to make a successful transition to an entry-level position in the work force.
5. Pass workmanship tests using common welding processes.

GAINFUL EMPLOYMENT INFORMATION: For information about our graduation rates, the median debt of students who completed this certificate, and other important information, please visit our website at http://www.shastacollege.edu/bait_weld_gainful_employment/

CERTIFICATE REQUIREMENTS:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 118</td>
<td>Blueprint &amp; Specification Reading</td>
<td>2</td>
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<tr>
<td>WELD 70</td>
<td>Beginning Welding</td>
<td>3</td>
</tr>
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<td>WELD 73</td>
<td>Structural Steel Metal Fabrication</td>
<td>3</td>
</tr>
<tr>
<td>WELD 170</td>
<td>Introduction to ARC Welding</td>
<td>3</td>
</tr>
<tr>
<td>WELD 171</td>
<td>Intermediate ARC Welding</td>
<td>3</td>
</tr>
<tr>
<td>WELD 174</td>
<td>Structural Steel MIG Welding</td>
<td>3</td>
</tr>
<tr>
<td>WELD 175</td>
<td>TIG Welding</td>
<td>3</td>
</tr>
<tr>
<td>WELD 178</td>
<td>Pipe Welding Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>WELD 182</td>
<td>Advanced ARC Welding</td>
<td>1.5</td>
</tr>
<tr>
<td>WELD 184</td>
<td>Advanced GTAW (TIG) Welding</td>
<td>1.5</td>
</tr>
<tr>
<td>WELD 186</td>
<td>Advanced Pipe Welding</td>
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</tr>
<tr>
<td>WELD 188</td>
<td>Advanced GMAW (MIG) Welding</td>
<td>1.5</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE 29.5

REQUIREMENTS FOR AMERICAN WELDING SOCIETY CERTIFICATION:

In order to become certified by the American Welding Society, the following courses are offered for the student to increase his/her skill and knowledge. Certification by the American Welding Society is dependent upon the meeting of criteria as determined by the certified welding inspector. The completion of these courses is recommended, but does not guarantee certification by the American Welding Society.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 182</td>
<td>Advanced ARC Welding</td>
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<tr>
<td>WELD 183</td>
<td>Advanced ARC Welding Specialty Lab</td>
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</tr>
<tr>
<td>WELD 184</td>
<td>Advanced GTAW (TIG) Welding</td>
<td>1.5</td>
</tr>
<tr>
<td>WELD 186</td>
<td>Advanced Pipe Welding</td>
<td>2</td>
</tr>
<tr>
<td>WELD 188</td>
<td>Advanced GMAW (MIG) Welding</td>
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</table>
### Chapter 6 – Course Descriptions

**COURSE FAMILIES** *(as of 5/7/13): Students are limited to a total of four enrollments within a family effective Fall 2013.*

<table>
<thead>
<tr>
<th>FAMILY:</th>
<th>COURSES INCLUDED:</th>
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<tbody>
<tr>
<td><strong>ART FAMILY</strong></td>
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<tr>
<td>Visual Art</td>
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<tr>
<td>ART 12</td>
<td>Form, Design and Color</td>
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<td>ART 13</td>
<td>Inter. Form, Design and Color</td>
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<tr>
<td>ART 15</td>
<td>Three Dimensional Design</td>
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<tr>
<td>ART 110</td>
<td>Mixed Media: Works on Paper</td>
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<tr>
<td>Drawing</td>
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</tr>
<tr>
<td>ART 16</td>
<td>Pencil Rendering</td>
</tr>
<tr>
<td>ART 17</td>
<td>Shades/Shadows/Perspective</td>
</tr>
<tr>
<td>ART 21A</td>
<td>Beginning Freehand Drawing</td>
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<td>ART 21B</td>
<td>Intermediate Freehand Drawing</td>
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<td>Figure Drawing</td>
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<td>ART 31B</td>
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<td>ART 31C</td>
<td>Adv. Inter. Figure Drawing</td>
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<td>Advanced Figure Drawing</td>
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<td>ART 29C</td>
<td>Adv. Intermediate Painting</td>
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<td>ART 29D</td>
<td>Advanced Painting</td>
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<tr>
<td>ART 122</td>
<td>Portrait Painting</td>
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<td>ART 123</td>
<td>Landscape Painting</td>
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<td>ART 124</td>
<td>Painting</td>
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<td>Water Media</td>
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<td>ART 23</td>
<td>Pen, Brush and Ink</td>
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<td>Adv. Intermediate Watercolor</td>
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<td>ART 26D</td>
<td>Advanced Watercolor</td>
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<td>Introduction to Watercolor</td>
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<td>ART 126</td>
<td>Nature in Watercolor</td>
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<td>Printmaking</td>
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<td>ART 50A</td>
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<td>ART 50B</td>
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<tr>
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<td>Beg. Darkroom Photography</td>
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<td>DAN 30C</td>
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<td>DAN 30D</td>
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<td>PE 31</td>
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<td>Individual Sports and Team Sports</td>
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<td><strong>THEATRE FAMILY</strong></td>
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<td>Mainstage Production I</td>
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<td>Stage Production</td>
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<td>Stage Production – Choreography</td>
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<td>Stage Production – Music</td>
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*Variable unit course. When the student enrolls in this course (regardless of the unit value), it is counted as one of the four enrollments for the Family. The course can also be taken up to the maximum number of units stated for that specific course; subsequent enrollments will not count towards the limit of four enrollments for the Family.*
ACCOUNTING (ACCT)
See Also: BUAD, CIS, OAS

ACCT 2  INTRODUCTION TO FINANCIAL ACCOUNTING – 3 Units
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course is the study of accounting as an information system, examining why it is important and how it is used by investors and creditors to make decisions. The course coverage includes the accounting information system and the recording, and reporting of business transactions with a focus on the accounting cycle, the application of generally accepted accounting principles, classified financial statements, and financial statement analysis. It also includes issues related to asset, liability, and equity valuation, revenue and expense recognition, cash flow, internal controls, and ethics. This course may be offered in a distance education format.

ACCT 4  INTRODUCTION TO MANAGERIAL ACCOUNTING – 3 Units
Prerequisite: A grade of C or higher in ACCT 2
Advisory: A grade of C or higher in MATH 101 or Math Placement Level 3 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course is the study of the use and reporting of accounting data for managerial planning, cost control, and decision making purposes. The course includes broad coverage of concepts, classifications, and behaviors of costs. Topics include cost systems, the analysis and use of cost information, cost-volume-profit analysis, contribution margin, profit planning, standard costs, relevant costs, and capital budgeting. This course may be offered in a distance education format.

ACCT 101  BASIC ACCOUNTING I – 3 Units
Class Hours: 45 lecture/27 lab total (when offered in the Distance Education format, hours will total 162)
A beginning course based on the double-entry bookkeeping system with an emphasis on a procedural approach. Topics include: accrual, cash, and modified cash basis of accounting; the accounting cycle, transaction analysis (rules of debits and credits), journalizing, posting, worksheets, preparation of financial statements, adjusting, closing, and reversing entries; combination journal; petty cash; bank reconciliations; special journals, accounts receivable, accounts payable; and basic payroll procedures. The course culminates with the student keeping a set of books using special journals for a small merchandising partnership for the last month of the fiscal year. This course is not transferable to a four-year college or university. This course may be offered in a distance education format.

ACCT 102  BASIC ACCOUNTING II – 3 Units
Prerequisite: A grade of C or higher in ACCT 101 or ACCT 2
Class Hours: 45 lecture/27 lab total (when offered in the Distance Education format, hours will total 162)
A continuation of ACCT 101 maintaining the procedural approach. Topics include: accounting for notes payable, notes receivable, inventories, fixed assets, partnerships, corporations, long-term debt, and cash flows. The course culminates with the student keeping a manual set of books for a small merchandising partnership for the last month of the fiscal year. This course is not transferable to a four-year college or university. This course may be offered in a distance education format.

ACCT 103  PC ACCOUNTING – 2 Units
Prerequisite: A grade of C or higher in ACCT 101 or ACCT 2
Advisory: Ability to type 25 wpm strongly recommended
Class Hours: 18 lecture/54 lab total (when offered in the Distance Education format, hours will total 108)
Accounting on microcomputers emphasizes the major areas of a computerized accounting system. This course provides the student with hands-on opportunity to determine procedure, analyze transaction, enter data and print reports and financial statements related to the General Ledger, Depreciation, Accounts Receivable, Accounts Payable, Payroll, Financial Statement Analysis and Inventory Control. This course may be offered in a distance education format.

ACCT 104  PAYROLL ACCOUNTING – 2 Units
Prerequisite: A grade of C or higher in ACCT 101 or ACCT 2; and BUAD 106 or Math Placement Level 3 or higher
Advisory: A grade of C or higher in OAS 64
Class Hours: 27 lecture/27 lab total (when offered in the Distance Education format, hours will total 108)
Payroll Accounting emphasizes the methods of computing wages and salaries, the methods of keeping records, and the preparation of government reports. This course is designed to provide training in the complexities of payroll accounting for vocational purposes. This course may be offered in a distance education format.

ACCT 194  INCOME TAX – 3 Units
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A basic course in income tax law intended to acquaint students with provisions of State and Federal Income Tax Law. It is designed for individuals or the small business owner wanting to become better acquainted with the handling and processing of income tax returns and recent tax laws and developments. This course may be offered in a distance education format.

ADAPTIVE STUDIES (ADAP)

ADAP 100  COLLEGE SUCCESS FOR STUDENTS WITH DISABILITIES – 3 Units (formerly SPED 100)
Grading: Pass/No Pass Option
Advisory: English Placement Level 2 or higher
Class Hours: 54 lecture total
Introduction and practice of college study skills and techniques to enhance student success. Emphasis of this course will be on self assessment for the student who has a disability, as well as information dissemination. Topics to be discussed will include study skills, college support services and programs, disability awareness, personal goals, the college experience, and career exploration. Discussion will also include legal aspects of disability.

ADAP 102  ORIENTATION TO COLLEGE – 1 Unit
Grading: Pass/No Pass Option
Class Hours: 18 lecture total
An orientation to college that is tailored to the unique needs of students with disabilities. Introduction of educational programs, student services, and learning resources, along with full orientation to Disabled Students Programs and Services is covered. The laws and policies guiding the inclusion of students with disabilities in post-secondary education will be covered. In the one-unit format, students will complete formal educational plans and explore options for transfer education or job placement. This course may be repeated in compliance with Title 5 regulations.

ADAP 200  PREPARATION FOR COLLEGE – 3 Units
Grading: Pass/No Pass Option
Advisory: English Placement Level 2 or higher
Class Hours: 36 lecture/54 lab total
Introduction to college including completion of all applications and forms, thorough review of college catalog, college services, and student rights and responsibilities. Emphasis of this course will be on self-assessment for the student who has a disability including learning styles, personal strengths and weaknesses, and goal-setting. Additional topics to be discussed will include legal aspects of disability in college and work settings, reasonable accommodations and strategies for success, disability awareness, and college visitation. This course may be repeated in compliance with Title 5 regulations.

ADAP 210  CAREER PLANNING AND DEVELOPMENT – 1 Unit
Grading: Pass/No Pass Option
Class Hours: 18 lecture total
This course is designed as a career development and planning option for transitioning students who have disabilities. The course is designed to provide the intensive drill necessary to master the alphabetic keys as well as numbers and symbols of the microcomputer keyboard. A beginning class intended for students needing a computer terminal keyboarding skill who have had no previous typing experience. Students will be required to access software and key in data. Including the speed and accuracy development. This course may introduce document production if keyboard is mastered by touch. This class does not meet the requirement of Keyboarding I (Beginning Typing) for an Associate in Arts degree or certificate. This course may be repeated in compliance with Title 5 regulations.

ADAP 253  ADAPTIVE MICROCOMPUTER KEYBOARDING – 1 Unit
(formerly OAS 254, MIS 251, MIS 251AB, BUSI 251AB)
Grading: Pass/No Pass Option
Class Hours: 54 lab total
A personal-use individualized course in keyboarding designed to meet the needs of students with disabilities. Interested students must be interviewed by a DSPS counselor and/or the instructor to determine if the course is appropriate for the student's abilities and interests. The course is designed to provide the intensive drill necessary to master the alphabetic keys as well as numbers and symbols of the microcomputer keyboard. A beginning class intended for students needing a computer terminal keyboarding skill who have had no previous typing experience. Students will be required to access software and key in data. Including the speed and accuracy development. This course may introduce document production if keyboard is mastered by touch. This class does not meet the requirement of Keyboarding I (Beginning Typing) for an Associate in Arts degree or certificate. This course may be repeated in compliance with Title 5 regulations.
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ADJU 23 CAREER PLANNING FOR ADMINISTRATION OF JUSTICE – 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
Career Planning for Administration of Justice is designed to acquaint students with current employment techniques and standards in multiple areas of the Administration of Justice field. Students will be exposed to multi-agency recruiting, testing and hiring practices. Students will learn to identify personal problematic areas regarding these practices and will be instructed as to how to seek out and obtain possible solutions to these problems.

ADJU 24 MULTICULTURAL ISSUES IN LAW ENFORCEMENT – 3 Units
Grading: Pass/No Pass Option
Note: Required field trip
Class Hours: 54 lecture total
This class covers cultural diversity issues related to law enforcement. Specific areas such as history, current make-up, value of diversity, recognition and handling are discussed. Law enforcement issues related to sexual harassment, victimology and crisis intervention are covered. Course satisfies P.O.S.T. Basic Academy Part 1 curriculum requirements.

ADJU 25 SUBSTANTIVE LAW – 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
An in-depth study of the substantive laws commonly encountered by the municipal, county, or state police officer or investigator or other criminal justice employee. The scope of the course includes misdemeanor and felony violations of the criminal statutes.

ADJU 26 COURTROOM TESTIMONY & REPORT WRITING – 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
Provides practical instruction and experience in the proper techniques of report writing and presentation of courtroom evidence. Major emphasis will include the correct writing process, spelling, main elements of a report, report content as well as important aspects of courtroom testimony. Required for Administration of Justice majors.

ADJU 30 WILDLIFE LAW ENFORCEMENT – 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
Students will develop an understanding of the practice of wildlife enforcement. Students will analyze various wildlife enforcement situations and learn to apply management techniques to properly and safely utilize wildlife populations.

ADJU 40 INTRODUCTION TO CORRECTIONS – 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course will provide a history of and critical analysis of punishment, the various types of punishment, alternatives to punishment, and the impact of punishment on the criminal justice system. Corrections, a critical examination of the types of correctional institutions and the clients housed in each institution, and an examination of contemporary correctional issues. This course may be offered in a distance education format.

ADJU 41 FUNDAMENTALS OF CRIME AND DELINQUENCY – 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
An introduction to major types of criminal behavior, roles and careers of offenders, factors which contribute to the production of criminality or delinquency; methods used in dealing with violators in the justice system; the changing roles of police, courts, and aftercare process of sentence, probation, paroles, and parole; changes of the law in crime control and treatment processes. This course may be offered in a distance education format.

ADJU 42 INTERVIEWING AND COUNSELING – 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
Introduction to approaches of behavior modification through interviewing and counseling. An overview of the techniques available to entry-level practitioners in corrections, counseling and interviewing. Creates an awareness of advanced methods utilized by professional counselors. Traces the development of positive relationships between the client and corrections personnel.

ADJU 94 ADMINISTRATION OF JUSTICE WORKSITE LEARNING – 1-8 Units
Grading: Pass/No Pass Option
Limitation on Enrollment: Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.
Class Hours: 75 hours paid or 60 hours non-paid per unit
The Vocational Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is accessed by the student and related to the student’s major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on the job performance. A student may earn up to 16 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in a single semester.

ADJU 100 P.C. 832 ARREST COURSE – 2 Units
Grading: Pass/No Pass Option
Notes: 1. This course does not include P.C. 832 Firearms Training. Students wishing to receive such training need to concurrently enroll in ADJU 102.
2. Students taking this course may be required to submit fingerprint card to DOJ and pay a substantial fee for a background check. Instructors will explain requirements at first class session.
3. The ADJU 100 course requires the use of POST workbooks which will cost the student approximately $100.
4. If you intend to continue in the POST basic academy Modular format this course is not required. You should enroll directly in ADJU 131 Regular Basic Course Modular Format Level IV Academy.
Class Hours: 40 lecture total
Designed to satisfy the curriculum standards of the Commission on Peace Officer Standards and Training as required by Penal Code Section 832 for peace officers; includes laws of arrest, search and seizure, methods of arrest, and discretionary decision-making, mandatory for all peace officers who do not possess a basic certificate awarded by the Commission on Peace Officer Standards and Training.

ADJU 102 P.C. 832 FIREARMS – 5 Unit (formerly ADJU 110)
Grading: Pass/No Pass Option
Limitation on Enrollment: Student must be at least 18 years of age to register for this course. Student will be required to submit a Live Scan report to the DOJ (at the student’s expense) to verify eligibility to possess/carry a firearm. The results of the Live Scan must be presented to the instructor the first day of class.
Corequisite: Student must be concurrently enrolled in, or have completed ADJU 100 with a grade of C or higher.
Note: Students are required to provide their own ammunition for the range.
Class Hours: 27 lab total
Course meets curriculum and competency objectives for the firearms portion of the Commission on Peace Officer Standards and Training (P.O.S.T.) P.C. 832 training standard. Students will receive training on use and safety of firearms. They will also be required to fire a handgun and meet an accuracy standard established by P.O.S.T.

ADJU 106 SEXUAL ASSAULT AND DOMESTIC VIOLENCE EDUCATION & TRAINING – 4 Units
Grading: Pass/No Pass Option
Class Hours: 72 lecture total
This course covers the history, causes and dynamics of domestic violence and sexual assault. It will also cover existing laws and regulation in California with regards to sexual assault and domestic violence. Incident impact on individuals, family structure and the community will be discussed. The course is specifically designed to provide training to those who may become involved in crisis intervention and sexual assault and domestic violence victim advocacy, as well as those pursuing a career in law enforcement, education or social services.

AG – GENERAL AGRICULTURE (AG)

AG 1 CAREER PLANNING FOR AGRICULTURE – 2 Units
(formerly ENVRI)
Grading: Pass/No Pass Option
Class Hours: 36 lecture total
Career opportunities and requirements in Agriculture, Agriculture Business, Equine Science, Environmental Horticulture and Veterinary Technology will be examined. Students will learn how to apply for jobs. Traits of highly successful people will be explored by formal presentation and interactive assignments. Environmental awareness and relationships with career success will be covered.

AG 6 CAREER PLACEMENT – AG AND NATURAL RESOURCES – 1 Unit (formerly AGRI 6)
Grading: Pass/No Pass Option
Note: Designed for students concurrently completing or who have completed the core course requirements in agriculture, horticulture, and natural resources majors. This course may require a multi-day, overnight field trip to survey the industry.
Class Hours: 18 lecture total
This class is designed to give students an overview of the California agriculture, horticulture, and natural resources industry and assist in obtaining the best possible employment during the summer and upon graduation. Students will learn interview techniques, will develop an employment portfolio, and will learn how to apply for jobs. This class is required for all agriculture, horticulture, and natural resources majors.
AG 9A AGRICULTURE AND NATURAL RESOURCES LEADERSHIP I – 1 Unit (formerly AG 9, ENVR 9)
Grading: Pass/No Pass Option
Note: Required field trips
Class Hours: 9 lecture/27 lab total
The course is designed to develop leadership qualities in students. "Hands-on" techniques will be used to facilitate problem solving, cooperative work ethics, developing initiative, managing and organizing information, flexible thinking and effective questioning. Practical experience in conducting business as a group will be gained by participation.

AG 9B AGRICULTURE AND NATURAL RESOURCES LEADERSHIP II – 1 Unit
Grading: Pass/No Pass Option
Note: Required field trips
Class Hours: 9 lecture/27 lab total
The course is designed to develop leadership qualities in students. Students will learn group dynamics and problem solving when working in committees. Event organizing, planning and follow up will be emphasized. "Hands-on" activities will emphasize these leadership development activities.

AG 9C AGRICULTURE AND NATURAL RESOURCES LEADERSHIP III – 1 Unit
Grading: Pass/No Pass Option
Note: Required field trips
Class Hours: 9 lecture/27 lab total
The course is designed to develop leadership qualities in students especially as it relates to understanding personality types. Students will develop public speaking skills for prepared and extemporaneous topics and will analyze current trends, regulations and policies around agriculture and natural resource topics.

AG 9D AGRICULTURE AND NATURAL RESOURCES LEADERSHIP IV – 1 Unit
Grading: Pass/No Pass Option
Note: Required field trips
Class Hours: 9 lecture/27 lab total
The course is designed to develop leadership qualities in students. Students will develop habits of successful people. Work with community and industry member's activities and events. Participate in leadership building skills, such as public speaking, job interviews and debate teams.

AG 58 STUDENT ENTERPRISE PROJECTS – 1-4 Units (formerly AGRI 58)
Limitation on Enrollment: Student must have a sponsoring instructor from the Division.
Note: Student projects are subject to approval by a project evaluation committee.
Class Hours: 9 lecture/27-189 lab total
Selection and completion of a management/production enterprise project under faculty supervision. Each student will be required to develop a project plan, timeline, budget and contract with the sponsoring instructor.

AG 94 AG WORKSITE LEARNING – 1-5 Units (formerly AGRI 94)
Limitation on Enrollment: Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.
Class Hours: 75 hours paid or 60 hours non-paid per unit
The Vocational Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acquired by the student and related to the student's major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on-the-job performance. FINANCIAL AID STUDENTS: Students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.

AG – AGRICULTURE BUSINESS (AGAB)

AGAB 53 INTRODUCTION TO AGRICULTURE BUSINESS – 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
Provides a basic understanding of the business and economics of the agricultural industry; an introduction to the economic aspects of agriculture and their implications to the agricultural producer, consumer and the food system; management principles encountered in the day to day operation of an agricultural enterprise as they relate to the decision making process.

AGAB 54 AGRICULTURE ECONOMICS – 3 Units (formerly AGRI 54)
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
An introduction to economic and business principles as they relate to resource management. The focus of the course will be to relate economic theories and principles to applied agri-business and resource management problem solving. Student involvement in practical marketing, financing, promotions, business analysis, retailing, or some other practical economic problem will be required.

AG – ANIMAL SCIENCE (AGAS)

AGAS 10 LIVESTOCK SELECTION – 3 Units (formerly AGRI 10)
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in AGAS 19
Note: Field trips to area ranches may be taken.
Class Hours: 36 lecture/54 lab total
A course designed to evaluate and select desirable production livestock. Animal genetics, performance records, grading and meat quality characteristics will be discussed as important tools in selection. The majority of lab time will be spent judging live animals.

AGAS 11 LIVESTOCK FEEDING AND NUTRITION – 3 Units (formerly AGRI 11)
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
A study of the digestive physiology of farm animals; their utilization of the basic nutrients, feedstuffs, and feed additives. Common feeds in Northern California will be used to blend practical farm rations for beef, dairy, sheep, swine and horses. Time will be allotted to cost analysis of commercial feeds and least-cost computer ration programs.

AGAS 15 ARTIFICIAL INSEMINATION – 1 Unit (formerly AGRI 15)
Grading: Pass/No Pass Option
Class Hours: 9 lecture /27 lab total
A course to familiarize students with basic techniques of Artificial Insemination in cattle. Demonstration and hands-on involvement will include: synchronization, handling of semen, livestock handling, and breeding techniques.

AGAS 19 PRINCIPLES OF ANIMAL SCIENCE – 3 Units (formerly AGRI 19)
Grading: Pass/No Pass Option
Class Hours: 36 lecture/54 lab total
An introduction to the principles of animal science presented in terms of an animal's biological cycle or production. Topics will include basic nutrition, genetics, reproduction, and animal health relating to domestic farm animals. In addition to investigating modern production practices, the impact of animal agriculture upon mankind and the environment will also be considered. The weekly lab session will be devoted to investigating the basic management practices associated with each livestock species.

AGAS 30 LIVESTOCK PRODUCTION – 3 Units
Class Hours: 36 lecture/54 lab total
This course is a study of the principles and practices of purebred and commercial swine, sheep and beef cattle production throughout California, the United States and the World. Emphasis will be placed on the importance of breeds, breeding principles, selection, nutrition, environmental management, health, marketing and record keeping to ensure scientifically-based management decisions and consumer product acceptance.

AG – ENVIRONMENTAL HORTICULTURE (AGEH)

AGEH 22 NURSERY PRACTICES AND PLANT PROPAGATION – 2 Units (formerly HORT 22, HORT 32A)
Class Hours: 18 lecture/54 lab total
This course is required for all Environmental Horticulture majors. The methods and principles used in the propagation of plants, including both sexual and asexual propagation will be demonstrated and practiced. Other topics related to successful plant propagation such as soil preparation, transplanting and potting, disease and insect control, irrigation, and fertilization will also be covered.
AGEH 23  NURSERY PRACTICES AND MANAGEMENT – 2 Units  
(formerly HORT 23, HORT 32B)  
Grading: Pass/No Pass Option  
Class Hours: 18 lecture/54 lab total  
This is required for all Environmental Horticulture majors. This hands-on course will cover production schedules, marketing strategies, customer service, product displays, greenhouse and nursery management and much more. Best practices and economic feasibility will be emphasized.

AGEH 26  INTEGRATED PEST MANAGEMENT IN ENVIRONMENTAL HORTICULTURE – 3 Units  
(formerly HORT 26, AGRI 26)  
Grading: Pass/No Pass Option  
Class Hours: 36 lecture/54 lab total  
Exploration, identification, and control of major horticultural pests, including insects, weeds, and diseases; impact of pests on commercial nursery crops and the landscape is also discussed. Integrated pest management including cultural, biological, mechanical/physical, and chemical control methods is emphasized. Course is designed to assist students in preparing for California licensing exams in pest management. Laboratory required. (C-ID AG-EH 120L)

AGEH 27  PLANT IDENTIFICATION AND TAXONOMY OF EVERGREEN TREES, SHRUBS AND GROUND COVERS (formerly HORT 27) – 1 Unit  
Grading: Pass/No Pass Option  
Class Hours: 13.5 lecture/13.5 lab total  
This is a course which will familiarize the student with approximately 65 commonly used landscape plants. The plant's taxonomic description, landscape uses, and culture will be emphasized. This is the first of three plant identification courses students working toward an AA or AS degree in Environmental Horticulture are required to take. AGEH 27, AGEH 28 and AGEH 29 are a series and may be taken in any order.

AGEH 28  PLANT IDENTIFICATION AND TAXONOMY OF DECIDUOUS TREES, SHRUBS AND GROUND COVERS – 1 Unit  
(formerly HORT 28)  
Grading: Pass/No Pass Option  
Class Hours: 13.5 lecture/13.5 lab total  
This is a course which will familiarize the student with approximately 65 commonly used landscape plants. The plant's taxonomic description, landscape uses, and culture will be emphasized. This is the third of three plant identification courses students working toward an AA or AS degree in Environmental Horticulture are required to take. AGEH 27, AGEH 28 and AGEH 29 are a series and may be taken in any order.

AGEH 29  PLANT IDENTIFICATION AND TAXONOMY OF TREES, SHRUBS AND GROUND COVERS – 1 Unit  
(formerly HORT 29)  
Grading: Pass/No Pass Option  
Class Hours: 13.5 lecture/13.5 lab total  
This is a course which will familiarize the student with approximately 65 commonly used landscape plants. The plant's taxonomic description, landscape uses, and culture will be emphasized. This is the third of three plant identification courses students working toward an AA or AS degree in Environmental Horticulture are required to take. AGEH 27, AGEH 28 and AGEH 29 are a series and may be taken in any order.

AGEH 31  LANDSCAPE IRRIGATION – 3 Units  
(formerly HORT 31, AGRI 31)  
Grading: Pass/No Pass Option  
Advisory: A grade of C or higher in MATH 100, or Math Placement Level 3 or higher; and a grade of C or higher in ENGL 190, or English Placement Level 6 or higher  
Class Hours: 36 lecture/54 lab total  
This is a study of water hydraulics, irrigation systems design and installation procedures and irrigation scheduling. Techniques in the operation and maintenance of irrigation systems will also be presented. Emphasis will be placed on residential design and installation, but commercial design and installation will be covered. This course is required for all Environmental Horticulture majors.

AGEH 31.1  LANDSCAPE IRRIGATION – DESIGN – 1 Unit  
(formerly HORT 31.1)  
Grading: Pass/No Pass Option  
Advisory: A grade of C or higher in MATH 100, or Math Placement Level 3 or higher; and a grade of C or higher in ENGL 190, or English Placement Level 6 or higher  
Class Hours: 12 lecture/18 lab total  
Modular delivery of course content of AGEH 31. This is a study of irrigation systems design, water hydraulics and plant/soil/water relationships. Emphasis will be placed on residential design as well as commercial design. Completion of AGEH 31.1, AGEH 31.2 and AGEH 31.3 is the equivalent of AGEH 31. This course is required for all Environmental Horticulture majors.

AGEH 31.2  LANDSCAPE IRRIGATION – INSTALLATION – 1 Unit  
(formerly HORT 31.2)  
Grading: Pass/No Pass Option  
Advisory: A grade of C or higher in MATH 100, or Math Placement Level 3 or higher; and a grade of C or higher in ENGL 190, or English Placement Level 6 or higher  
Class Hours: 12 lecture/18 lab total  
Modular delivery of AGEH 31. This class covers the basics in reading blueprints, preparing a bill of materials and installing an irrigation system. Emphasis will be placed on residential installation but commercial installation will be covered. This course is required for all Environmental Horticulture majors. Completion of AGEH 31.1, AGEH 31.2 and AGEH 31.3 is the equivalent to AGEH 31.

AGEH 31.3  LANDSCAPE IRRIGATION – TROUBLESHOOT AND SCHEDULE – 1 Unit  
(formerly HORT 31.3)  
Grading: Pass/No Pass Option  
Advisory: A grade of C or higher in MATH 100, or Math Placement Level 3 or higher; and a grade of C or higher in ENGL 190, or English Placement Level 6 or higher  
Class Hours: 12 lecture/18 lab total  
Modular delivery of AGEH 31. This is a study of irrigation system operation and scheduling. Techniques in the operation and maintenance and troubleshooting of irrigation systems will be presented. This course is required for all Environmental Horticulture majors. Completion of AGEH 31.1, AGEH 31.2 and AGEH 31.3 is the equivalent of AGEH 31.

AGEH 32  LANDSCAPE DESIGN 3 Units (formerly HORT 32, AGRI 32)  
Grading: Pass/No Pass Option  
Class Hours: 36 lecture/54 lab total  
Grading: Pass/No Pass Option  
This course introduces the beginning floral design student to the principles and techniques of flower arranging. The subject matter includes a blend of art, science, business, and career in preparation for entering the floral industry and related areas. Fall flowers and fall/winter holiday arrangements will be emphasized.

AGEH 34  BEGINNING FLORAL DESIGN – FALL FLOWERS – 2 Units  
(formerly HORT 34, HORT 34AB)  
Grading: Pass/No Pass Option  
Note: Students must provide those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.

AGEH 35  LANDSCAPE DESIGN 3 Units (formerly HORT 35, AGRI 35)  
Grading: Pass/No Pass Option  
Prerequisite: A grade of C or higher in AGEH 27 and AGEH 28 or a grade of C or higher in AGNR 6  
Class Hours: 36 lecture/54 lab total  
This course is a requirement for all Environmental Horticulture majors. This course emphasizes the process leading to the development of the residential design. The incorporation of design principles i.e. unity, rhythm, repetition, balance, etc. and how the principles are used to create a functional and pleasing composition with plant material and other landscape elements will be stressed. Emphasis is on residential design, both rural and suburban.

AGEH 36  FLORAL DESIGN FOR WEDDINGS AND SPECIAL OCCASIONS – 2 Units (formerly HORT 36)  
Grading: Pass/No Pass Option  
Note: Students must provide those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.
AGEH 38 LANDSCAPE AND TURF MANAGEMENT – 3 Units  
(formerly HORT 38, AGRI 38)  
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher; and a grade of C or higher in MATH 220, or Math Placement Level 1 or higher  
Class Hours: 36 lecture/54 lab total  
This is a required course for Environmental Horticulture majors. The installation of lawns, groundcovers, shrubs and trees will be covered. The practices of pruning, trimming, mowing, watering, fertilizing, and pesticide application as applied to landscape management of home, parks, highways, and how to estimate and bid in all areas of landscape management will also be covered.

AGEH 39 TROPICAL FLORAL DESIGN – 1.5 Units (formerly HORT 39)  
Grading: Pass/No Pass Option  
Advisory: A grade of C or higher in AGEH 34 or AGEH 44  
Note: Students must provide those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.  
Class Hours: 18 lecture/27 lab total  
This course covers all aspects of floral design as it relates to tropical flowers. Students will learn to make corsages, formal/linear design, leisure and party decorations from tropical flowers.

AGEH 40 INTERMEDIATE FLORAL DESIGN – 2 Units  
(formerly HORT 40, HORT 34CD)  
Prerequisite: A grade of C or higher in AGEH 34 or AGEH 44  
Note: Students must provide those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.  
Class Hours: 18 lecture/54 lab total  
Instruction in floristry skills related to contemporary styles of design for all occasions, weddings, and sympathy work. The application of techniques for mass and line style designs including Flemish, Oriental, parallel, contemporary, free-style, vegetative, and interpretive will be addressed.

AGEH 41 SELECTION AND CARE OF BLOOMING AND TROPICAL PLANTS – 1.5 Units (formerly HORT 41, HORT 135, AGRI 135)  
Grading: Pass/No Pass Option  
Class Hours: 18 lecture/27 lab total  
Designed to prepare students to plan and design using mass plant and linear styles. Emphasis will be placed upon knowledge of plants and their care and use. During lab, students will be directed in practical work using various types of planters constructed in the industry. The class will include a thorough discussion of propagation techniques, pests and diseases common to houseplants.

AGEH 44 BEGINNING FLORAL DESIGN – SPRING FLOWERS – 2 Units  
(formerly HORT 44)  
Grading: Pass/No Pass Option  
Note: Students must provide those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.  
Class Hours: 18 lecture/54 lab total  
This course introduces the beginning floral design student to the principles and techniques of flower arranging. The subject matter includes a blend of art, science, business, and career in preparation for entering the floral and giftware profession. The class will include the beginning floral design concept and basic floral design techniques. Students will learn to design arrangements for spring and summer seasons.

AGEH 45 HOLIDAY DECORATIONS AND BANQUETS – 1 Unit  
(formerly HORT 45)  
Grading: Pass/No Pass Option  
Note: Students must provide those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.  
Class Hours: 13.5 lecture/13.5 lab total  
This class will offer in-depth instruction on the specific techniques and floral materials used in holiday designing. Floral pieces specific to the fall and winter holidays will be created in class.

AGEH 46 SYMPATHY FLOWERS – 1 Unit (formerly HORT 46)  
Grading: Pass/No Pass Option  
Advisory: A grade of C or higher in AGEH 34  
Class Hours: 13.5 lecture/13.5 lab total  
This class will offer in-depth instruction on the specific floral materials and techniques used in sympathy designing. Servicing the order and customer service relating to funerals and memorials will be emphasized. Floral pieces specific to funerals and memorials will be practiced in class.

AGEH 50 MASTER GARDENER TRAINING – 3 Units (formerly HORT 50)  
Grading: Pass/No Pass Option  
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher  
Class Hours: 54 lecture total  
This is the training course for the Master Gardener Program, a community service organization designed to relay research based horticultural information to the home gardener. The Master Gardener program was developed by the University Cooperative Extension to train interested horticultural enthusiasts to assist local gardeners in diagnosing plant problems and to provide science based information for keeping home landscapes and the environment healthy. The University of California has agreed to let Shasta College use their training materials which are provided through this class. Topics covered in this course include pesticide use, IPM, weed identification and management, pruning, plant diseases, soils, fertilizers, growing vegetables, native plants, vermiculture, watering and many other plant related topics. This is a required course for anyone interested in obtaining a UC Extension certification as a Shasta College Master Gardener.

AGEH 60 ORGANIC GARDENING PRACTICES (SUMMER) – 1 Unit  
(formerly HORT 60)  
Grading: Pass/No Pass Option  
Note: This course is complimentary to, but independent from AGEH 72 Organic Gardening Practices (Fall and Spring)  
Class Hours: 9 lecture/27 lab total  
This course covers organic vegetable growing practices for home and market gardeners. Includes fall vegetable crops, irrigation, pests and cultural practices for growing a summer garden. This course will teach students the importance of planning and planning for the season and encouraging gardeners to start their own gardens.

AGEH 61 PLANT PROTECTION MATERIALS – 3 Units  
Class Hours: 162 total hours (Distance Education delivery format only)  
Course will cover pesticide laws and regulations, risks, benefits and mode of action, safety and responsible use, toxicology, and environmental issues related to the use of all agricultural chemicals. Fertilizers, plant growth regulators, defoliants, antimicrobials and other new generation pesticides will be discussed. Sustainable practices will be emphasized and examples used to generate students ability to solve pest problems and formulate integrated pest/agrichemical management plans. This course may be offered in a distance education format.

AGEH 71 ORGANIC GARDENING PRACTICES (FALL AND SPRING) – 1 Unit (formerly HORT 71)  
Grading: Pass/No Pass Option  
Note: This course is complimentary to, but independent from AGEH 71 Organic Gardening Practices (Summer)  
Class Hours: 9 lecture/27 lab total  
This course is an introduction to Organic Gardening. It includes summer crops, irrigation, pests and cultural practices for growing a summer garden. Students will be planting crops for the season and encouraged to start their own garden plots. Subject matter in this course is supplementary to AGEH 72, which addresses gardening practices for spring and fall seasons.

AGEH 72 ORGANIC GARDENING PRACTICES (FALL AND SPRING) – 1 Unit (formerly HORT 72)  
Grading: Pass/No Pass Option  
Note: This course is complimentary to, but independent from AGEH 71 Organic Gardening Practices (Summer)  
Class Hours: 9 lecture/27 lab total  
This course covers cool season organic vegetable growing practices for the home and market gardener. Includes fall vegetable crops, irrigation, pests and cultural practices for growing a summer garden. This course teaches students the importance of planning and planning for the season. Students will be planting crops appropriate for the season. Since subject matter varies with each seasonal crop, this course is supplementary to AGEH 71, which addresses gardening practices for the summer season.

AGEH 94 MASTER GARDENER TRAINING) – 3 Units (formerly HORT 94)  
Limitation on Enrollment: Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.  
Class Hours: 75 hours paid or 60 hours non-paid per unit  
The Vocational Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acquired by the student and related to the student’s major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on the job performance. A student may earn up to 16 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in a single semester.

AGEH 120 SELECTED TOPICS IN ENVIRONMENTAL HORTICULTURE: PRUNING – .5 Units  
(formerly HORT 120, HORT 128E, AGRI 128E)  
Grading: Pass/No Pass Option  
Class Hours: 9 lecture total  
A basic course in pruning techniques of ornamental plants, and the specific categories of flower-bearing and fruit-bearing trees, shrubs, and vines. The focus of this short course is to teach the student why plants are pruned, when plants should be pruned and how plants are pruned.
Students will be encouraged to develop skills in horsemanship, interpretation of students with opportunities to learn practical skills in the field of equine reproduction. The course is designed to complement and reinforce the lecture by providing collection, evaluation and processing of fresh cooled and frozen semen. Ultrasound, equine sexual behavior, breeding management of mares and stallions and innovations in assisted reproduction will also be discussed. The laboratory portion of this course may be offered in a distance education format.

AG – NATURAL RESOURCES (AGNR)

AGNR 1 INTRODUCTION TO NATURAL RESOURCES – 3 Units
(formerly NR 1)
Grading: Pass/No Pass Option
Note: Required day field trips
Class Hours: 36 lecture/54 lab total
Basic range management and improvement practices. Proper utilization of rangeland resources, management for sustainable human and environmental values, use by wild and domestic animals, historical and legal changes in rangeland management. Overview of multiple use principles. Maintenance and improvement of range plant communities, conserving biological diversity and environmental quality in rangelands. The lecture portion of this course may be offered in a distance education format.

AGNR 6 NATIVE PLANT IDENTIFICATION – 3 Units (formerly NR 6)
Grading: Pass/No Pass Option
Note: Includes one optional overnight weekend field trip.
Class Hours: 36 lecture/54 lab total
The study of botanical characteristics, taxonomy morphology, and community relationships of the major tree and shrub associations in California and Western United States. Includes discussion of commercial uses and geographic ranges of these plants.

AGNR 11 ENVIRONMENTAL ETHICS – 3 Units (formerly ENVR 11, INTR 11)
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course examines the influence of cultural values on the relationship of humans with each other and with plants, animals and the land. An important objective is to develop skills and sustained attitudes and guidelines which will enhance a healthy globe. Sources of western society's historical and current attitudes toward nature as well as alternative cultural perspectives will be explored. Students will emerge from this class with a greater understanding of their individual moral responsibilities toward the environment. This course may be offered in a distance education format.
AGNR 12 ENVIRONMENTAL POLICY AND LAW – 2 Units
Grading: Pass/No Pass Option
Note: Required day field trips
Class Hours: 36 lecture total (when offered in the Distance Education format, hours will total 108)
This course will introduce students to various aspects of environmental laws, policy, and agencies responsible for management and regulation of our natural resources. Topics of the course will include origins and importance of environmental law; legal principals; property rights; international, federal, state, and local environmental regulations; and regulatory authorities. The course will include discussion of the Legislative and Regulatory history, and current implementation of the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA). Students will gain an understanding of the interactions between federal, state, and local environmental regulations, and how they pertain to environmental compliance and protection, and enforcement for illegal activities. Examples of legislation and regulations to be covered will include aspects of the Federal Clean Water Act (CWA), California Water Code, National Pollution Discharge Elimination System (NPDES), Federal Endangered Species Act (ESA), California Irrigated Lands Program, Local Grading Ordinances, California Storm Water Program, California Streamlined Alteration Agreements, and other pertinent federal, state, and local environmental laws.

AGNR 50 NATURAL RESOURCES MEASUREMENTS – 4 Units
(formerly NR 50)
Grading: Pass/No Pass Option
Note: Several field trips to various locations will occur as feasible.
Class Hours: 36 lecture/108 lab total (when offered in the Distance Education format, hours will total 108 for the lecture portion of the class and an additional 108 hours of lab totaling 216 hours for this course)
This course will help students develop an understanding of the sampling methods and equipment used to inventory forest resources on Private, State, and Federal lands. Measurements of timber stand growth, quantity, and quality, and other natural resources including water, range, and wildlife will also be covered. The lecture portion of this course may be offered in a distance education format.

AGNR 51 SILVICULTURE AND FIRE ECOLOGY – 2 Units (formerly NR 51)
Grading: Pass/No Pass Option
Note: Includes one optional overnight weekend field trip and required day trips
Class Hours: 18 lecture/54 lab total
Forestry practices and systems used to grow and manage trees and forests for the sustained production of timber products. Course will also cover a survey of fire ecology.

AGNR 52 COMPUTERS IN AGRICULTURE AND NATURAL RESOURCES – 3 Units (formerly ENVR 52, AGRI 52)
Grading: Pass/No Pass Option
Class Hours: 36 lecture/54 lab total
This course introduces students to basic computer applications in agriculture, horticulture, natural resources, and related Career Technical Education majors. Students will gain basic computer literacy skills while learning to use examples of industry-specific software. Others topics will include file management, data manipulation and, use of software such as Excel, Word, Enroll, Access, and PowerPoint. Students will also be exposed to basic concepts and software related to Geographic Information Systems (GIS). This course is required for all agricultural, horticulture, and natural resources majors.

AGNR 53 FOREST PROTECTION AND HEALTH – 3.5 Units (formerly NR 53)
Grading: Pass/No Pass Option
Note: Several field trips to various locations will occur as feasible.
Class Hours: 27 lecture/108 lab total (when offered in the Distance Education format, hours will total 81 for the lecture portion of the class and an additional 108 hours of lab totaling 189 hours for this course)
This course will discuss the biotic and abiotic stress factors that influence forest resource values. Direct and indirect management practices in addition to silvicultural principles that maintain and enhance biotic balance, biological diversity, and ecosystem health and productivity will be covered. Also, issues related to fuels management and prescribed fire will be covered. The lecture portion of this course may be offered in a distance education format.

AGNR 55 INTRODUCTION TO FOREST OPERATIONS – 3 Units (formerly NR 55)
Grading: Pass/No Pass Option
Note: Several field trips to various locations will occur as feasible.
Class Hours: 36 lecture/54 lab total
Develop knowledge and skills to recognize the capabilities and limitations of timber harvesting equipment and systems operating in a broad range of forest resource management situations. After completing the course, students will be able to identify harvest systems that are best matched with the characteristics of the physical, environmental, economic, and social operating environments. Harvest process evaluations and decisions are aided with various forest engineering analysis and tools.

AGNR 60 ENVIRONMENTAL SCIENCE – 3 Units
(formerly ENVR 60, NR 60)
Grading: Pass/No Pass Option
Advisory: Students who wish to add a lab component to this class should co-enroll in AGNR 61
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course is an introduction to the conservation or wise use of natural resources and incorporates discussions about the complex relationships of man to the environment. Students will learn about the diverse agencies that manage our resources along with their history and philosophies. Each of the major natural resources such as water, air, energy, forests, wildlife, agriculture, and soils will be covered and students will learn about the environmental policy and laws that govern use of these resources. An emphasis is placed on the practical components of Environmental Science as it relates to social and economic aspects of conservation. This course may be offered in a distance education format.

AGNR 61 ENVIRONMENTAL SCIENCE LABORATORY – 1 Unit
(formerly ENVR 61)
Grading: Pass/No Pass Option
Corequisite: Student must be concurrently enrolled in AGNR 60, or have completed AGNR 60 with a grade of C or higher
Note: May include several field trips
Class Hours: 54 lab total
A laboratory course designed to complement AGNR 60 and to acquaint the students with some of the more common laboratory and field tests and procedures utilized in environmental science.

AGNR 64 WATERSHED MANAGEMENT AND ECOLOGY – 3 Units
(formerly NR 64)
Grading: Pass/No Pass Option
Note: Field trips to various district facilities, federal, state, county, city, and private agencies will occur as feasible.
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 108 for the lecture portion of the class and an additional 54 hours of lab totaling 162 hours for this course)
This course addresses a variety of topics concerned with the quality and quantity of water resources and watershed management, ecology, and restoration. Emphasis will be on the State of California. Coverage will include the hydrologic cycle, water quality, water use and conservation, and watershed health and function. Sources, measurements, quality (pollution and treatment), usage, and conservation of water will be addressed. Environmental impacts of dam construction and hydropower operation will be discussed. Laboratory work will involve measurements and interpretations of data collected or distributed and watershed restoration project planning and implementation. Field trips to various facilities (federal, state, county, city, private agencies) and restoration/monitoring sites will occur as feasible. The lecture portion of this course may be offered in a distance education format.

AGNR 65 FOREST ECOLOGY – 3 Units (formerly NR 65, NR 165)
Grading: Pass/No Pass Option
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 108 for the lecture portion of the class and an additional 54 hours of lab totaling 162 hours for this course)
The forest community is used as a model to discuss ecological principles as they apply to forest management. Students will gain a better understanding of Biological Organization and community classification, biotic and abiotic environmental factors, population and community ecology, and the role of disturbance in forested ecosystems. In addition, biogeochemical cycling, forest succession, and the role of natural selection will be discussed. Students will be expected to apply scientific principles and critical thinking skills to all lab activities and research papers. The lecture portion of this course may be offered in a distance education format.

AGNR 66A WATERSHED RESTORATION PRACTICUM I – 1 Unit
(formerly AGNR 66, NR 66)
Grading: Pass/No Pass Option
Class Hours: 9 lecture/27 lab total
This course will use the hydrologic watershed unit as the focus which will provide a hands-on approach to ecosystem management, erosion control, sediment control, and stream restoration. The course will emphasize how restoring resource values require an interdisciplinary scientific approach and community-wide participation to protect, enhance, and restore.

AGNR 66B WATERSHED RESTORATION PRACTICUM II – 1 Unit
Grading: Pass/No Pass Option
Class Hours: 9 lecture/27 lab total
Students will determine best management practices for erosion and sediment control. Laws and requirements will be discussed along with the importance and methods for documenting endangered species and archaeological sites.
AGNR 69  BIRDS AND THEIR HABITAT – 2 Units  (formerly NR 69)  
Grading:  Pass/No Pass Option  
Note: Three eight-hour field trips will be a required part of this course.  
Class Hours:  27 lecture/27 lab total  
An introduction to the study of birds. Emphasis on the behavior, taxonomy, migration, orientation, flight, evolution, economic importance, and field identification of the birds. We will also study bird ecology and the role of birds in bio-diversity and ecosystems. Other topics covered are songs and calls, territory, courtship, nests and eggs, care of young, and the systems (reproductive, etc.) of birds.  

AGNR 70  WILDLIFE CONSERVATION AND MANAGEMENT – 3 Units  (formerly NR 70)  
Grading:  Pass/No Pass Option  
Note: Includes several all-day field trips  
Class Hours:  36 lecture/54 lab total  
The study of plant and animal ecology in relation to principles of wildlife management. An emphasis will be placed on identifying common western birds and mammals, sexing and aging criteria, wildlife population dynamics, wildlife habitat management, and a review of trapping and marking techniques. Ecological concepts such as biotic communities, succession, limiting factors, and predator-prey relationships will also be covered.  

AGNR 83  INTRODUCTION TO GLOBAL POSITIONING SYSTEMS (GPS) – 1 Unit  (formerly NR 83)  
Class Hours:  9 lecture/27 lab total  
This course is an introduction to theory and practice of geopositioning (GPS). Course will cover principles of geopositioning, including satellite systems, triangulation, accuracy and the configuration and use of GPS field devices. Students will gain experience in the use of both recreational grade and mapping grade GPS equipment for field navigation and data collection. The application of GPS to various fields and industries will be covered, from natural resources and agriculture to construction and infrastructure management.  

AGNR 94  NATURAL RESOURCES WORKSITE LEARNING – 1-8 Units  (formerly NR 94)  
Limitation on Enrollment: Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.  
Class Hours:  75 hours paid or 60 hours non-paid per unit  
The Vocational Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acquired by the student and related to the student’s major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on the job performance. A student may earn up to 8 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in a single semester.  

AGNR 173  BEGINNING TAXIDERMY – 2 Units  (formerly NR 173)  
Grading:  Pass/No Pass Option  
Class Hours:  18 lecture/54 lab total  
An introduction to taxidermy dealing with the taxidermy of birds. It will include collecting, materials and tools, preservatives, skinning, mounting and painting. Habitat materials and composition will be discussed and applied.  

AGNR 174  INTERMEDIATE TAXIDERMY – 2 Units  (formerly NR 174)  
Grading:  Pass/No Pass Option  
Prerequisite: A grade of C or higher in AGNR 173  
Class Hours:  18 lecture/54 lab total  
An introduction to taxidermy dealing with the taxidermy of small mammals, reptiles and fish. Advanced techniques in bird taxidermy are also presented. Instruction will include game laws, tools and materials, skinning, tanning, mounting and display. A variety of artificial habitats will be employed. Students will supply their own specimens.  

AGNR 176  WILDLIFE OF NORTHERN CALIFORNIA – 1 Unit  (formerly NR 176)  
Grading:  Pass/No Pass Option  
Note: A weekend field trip to the Tulelake area will be required.  
Class Hours:  9 lecture/27 lab total  
Common species of wildlife found in Northern California will be observed and discussed. Habitat ecology and management along with regulatory and conservation issues will be covered in the class. Various identification tools, instructional aids, and other relevant materials will be reviewed and discussed.  

AGPS 20  PLANT SCIENCE – 4 Units  (formerly AGRI 20)  
Grading:  Pass/No Pass Option  
Note: Field trips to local areas will be included.  
Class Hours:  54 lecture/54 lab total  
An introduction to the biological principles of plant growth and development. Ecosystem relationships will be covered with particular emphasis on succession, water cycle, mineral cycle, and energy flow. In addition to investigating modern production and marketing practices of agronomic crops, the impact of commercial crop production upon mankind and the environment will be considered.  

AGPS 24  SOILS – 3 Units  (formerly ENVRI 24, AGRI 24)  
Grading:  Pass/No Pass Option  
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher; and one year of high school chemistry or equivalent  
Note: Class includes two Saturday field trips on classification, judging, and conservation of soils. This class is required for all agriculture, natural resources, and horticulture majors.  
Class Hours:  36 lecture/54 lab total  
This class is an introductory course on the physical, chemical, and biological properties of soil as it relates to agriculture and natural resources. Ecosystem relationship of soil use and management is emphasized. The effects of drainage, tillage, and irrigation on land use are discussed.  

AGPS 25  CALIFORNIA WATER – 3 Units  (formerly AGRI 25)  
Grading:  Pass/No Pass Option  
Advisor: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher; and one year of high school chemistry or equivalent  
Note: Class includes two Saturday field trips on classification, judging, and conservation of soils. This class is required for all agriculture, natural resources, and horticulture majors.  
Class Hours:  54 lecture total (when offered in the Distance Education format, hours will total 162)  
This course is an interdisciplinary examination of California’s water use and management with a historical emphasis on the politics and conflict arising from water scarcity. Topics of water quality, water law, measurement of water, evaluation of irrigation methods and systems, and issues relating to water use will all be covered. This course may be offered in a distance education format.  

AGPS 126  PESTICIDE TRAINING - .5 Unit  (formerly AGRI 126, AGRI 126AD)  
Grading:  Pass/No Pass Option  
Class Hours:  9 lecture total  
This course is designed to meet the continuing education requirement for pesticide applicators and pest control advisors. The focus of the course is on methods and calculations necessary to apply pesticides safely, accurately and efficiently and to look at alternative techniques being used and developed for management of plant pests.  

AGA 94  NATURAL RESOURCES WORKSITE LEARNING – 1-8 Units  (formerly NR 94)  
Limitation on Enrollment: Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.  
Class Hours:  75 hours paid or 60 hours non-paid per unit  
The Vocational Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acquired by the student and related to the student’s major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on the job performance. A student may earn up to 8 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in a single semester.  

AGA 173  BEGINNING TAXIDERMY – 2 Units  (formerly NR 173)  
Grading:  Pass/No Pass Option  
Class Hours:  18 lecture/54 lab total  
An introduction to taxidermy dealing with the taxidermy of birds. It will include collecting, materials and tools, preservatives, skinning, mounting and painting. Habitat materials and composition will be discussed and applied.  

AGA 174  INTERMEDIATE TAXIDERMY – 2 Units  (formerly NR 174)  
Grading:  Pass/No Pass Option  
Prerequisite: A grade of C or higher in AGA 173  
Class Hours:  18 lecture/54 lab total  
An introduction to taxidermy dealing with the taxidermy of small mammals, reptiles and fish. Advanced techniques in bird taxidermy are also presented. Instruction will include game laws, tools and materials, skinning, tanning, mounting and display. A variety of artificial habitats will be employed. Students will supply their own specimens.  

AGA 176  WILDLIFE OF NORTHERN CALIFORNIA – 1 Unit  (formerly NR 176)  
Grading:  Pass/No Pass Option  
Note: A weekend field trip to the Tulelake area will be required.  
Class Hours:  9 lecture/27 lab total  
Common species of wildlife found in Northern California will be observed and discussed. Habitat ecology and management along with regulatory and conservation issues will be covered in the class. Various identification tools, instructional aids, and other relevant materials will be reviewed and discussed.  

AGA 60  AGRICULTURE RESOURCE MANAGEMENT – 3 Units  (formerly AGRI 60)  
Grading:  Pass/No Pass Option  
Class Hours:  36 lecture/54 lab total  
A unique non-traditional land management class based on “sustainable,” “regenerative,” or “holistic” principles and practices. The total course will focus around the use of a “model” for making land management decisions for public and private lands. This class is appropriate for managing ranches and farms or for anyone interested in sustainable land management.  

AGA 50  AGRICULTURE RESOURCE MANAGEMENT – 3 Units  (formerly AGRI 50)  
Grading:  Pass/No Pass Option  
Class Hours:  36 lecture/54 lab total  
A unique non-traditional land management class based on “sustainable,” “regenerative,” or “holistic” principles and practices. The total course will focus around the use of a “model” for making land management decisions for public and private lands. This class is appropriate for managing ranches and farms or for anyone interested in sustainable land management.  

AGA 56  INTRODUCTION TO SUSTAINABLE AGRICULTURE AND FARM MANAGEMENT – 3 Units  
Grading:  Pass/No Pass Option  
Class Hours:  54 lecture total  
This course explains the organization and operation of sustainable farm and ranch businesses, identifies factors affecting profitability, and evaluates the business for sustainability, increased efficiency and profit. Budgeting, resources management and farm operation analysis are applied to the Farm lab. Includes an examination of case studies to connect sustainable agriculture principles to actual farming practices.  

AGA VETERINARY SCIENCE  (AGVETT)  
AGVETT 16 VETERINARY PRACTICES – 2 Units  (formerly AGRI 16)  
Grading:  Pass/No Pass Option  
Class Hours:  18 lecture/54 lab total  
An introduction to common veterinary practices, sanitation, and livestock disease endemic to Northern California. Special emphasis will be given to parasite control and preventive vaccination programs. Lab activities will include demonstrations and student participation in performing castration, worming, vaccinations, and animal handling and restraint procedures.
AG – VITICULTURE (AGVIT)

AGVIT 80  VINEYARD DESIGN AND CONSTRUCTION – 1 Unit  
(formerly HORT 80)  
Grading: Pass/No Pass Option  
Class Hours: 13.5 lecture/13.5 lab total  
An introductory course in establishing a commercial or home vineyard. Numerous principles will be covered with respect to the design and construction of a vineyard. A vineyard will be utilized as a resource for this class.

AGVIT 81  VINEYARD CARE – 1 Unit  (formerly HORT 81)  
Grading: Pass/No Pass Option  
Class Hours: 13.5 lecture/13.5 lab total  
This is an introductory course for the care and maintenance of wine grape vineyards. Both conventional and organic management methods will be discussed. This course would benefit students interested in both commercial production and home vineyard care.

AGRICULTURE (AGRI)

See AG, AGAB, AGAS, AGERH, AGEQ, AGMA, AGNR, AGPS, AGSA, and AGVIT for course listings

AMERICAN SIGN LANGUAGE (ASL)

Two years of high school foreign language with grades of “C” or better is equivalent to one semester of foreign language at Shasta College.

ASL 1  AMERICAN SIGN LANGUAGE 1 – 4 Units  
(formerly SL 90, SPED 93A)  
Grading: Pass/No Pass Option  
Corequisite: Concurrent enrollment in ASL 1L, or previous completion of ASL 1L with a grade of C or higher  
Class Hours: 54 lecture total  
Designed to introduce student to basic skills in American Sign Language vocabulary, finger spelling, and grammatical structure. The student will gain the manual skills to engage in basic dialogue, visual cues and the receptive skills to understand general American Sign Language conversation. Topics include: American Sign Language as an independent language, the history of American Sign Language, the Deaf community and Deaf culture.

ASL 2  AMERICAN SIGN LANGUAGE 2 – 4 Units  
(formerly SL 92, SPED 93B)  
Grading: Pass/No Pass Option  
Corequisite: Concurrent enrollment in ASL 1, or previous completion of ASL 1 with a grade of C or higher  
Class Hours: 72 lecture total  
This course is designed to give students a lab environment to practice basic American Sign Language skills. The course will review vocabulary, sentence structure and visual, non-manual behaviors from ASL 1 and give students a solid foundation in basic signing skills which will better prepare them for the next level of American Sign Language. The lab environment will provide visual structured activities. Most of class time will be non-verbal interactions.

ASL 3  AMERICAN SIGN LANGUAGE 3 – 4 Units  
(formerly SL 94, SPED 93C)  
Grading: Pass/No Pass Option  
Prerequisite: A grade of C or higher in ASL 2  
Class Hours: 54 lecture/54 lab total  
This course is intended for students who plan to use American Sign Language in their daily lives. Success in this course will enable students to communicate with Deaf and Hard-of-Hearing individuals through sign language at an average rate of speed and build confidence in their use of the language. Students will study basic qualities and skills needed to interpret including topics such as the interpreting process, an overview of the NAD-RID Code of Professional Conduct, expectations, and simultaneous interpreting practice. Exposure to Deaf culture through class discussions and guest lecturers will be incorporated.

ASL 4  AMERICAN SIGN LANGUAGE 4 – 4 Units  (formerly SL 96)  
Grading: Pass/No Pass Option  
Prerequisite: A grade of C or higher in ASL 3  
Class Hours: 54 lecture/54 lab total  
This course is intended for students who plan to use American Sign Language in their daily lives. Success in this course will enable students to communicate with Deaf and Hard of Hearing individuals through sign language at an average rate of speed and build confidence in their use of the language, storytelling ability and presentation. Students will study qualities and skills needed to become interpreters. Students will be exposed to a variety of members and activities in the Deaf community.

ASL 5  AMERICAN SIGN LANGUAGE 5: GRAMMAR – 4 Units  
(formerly SL 7)  
Grading: Pass/No Pass Option  
Prerequisite: A grade of C or higher in ASL 4  
Class Hours: 72 lecture total  
This course focuses on American Sign Language grammar and communication skills. ASL stories and literature are employed to give students the opportunity to learn and practice the rules of Deaf culture and the grammar of ASL. English grammar will be analyzed and the differences between the two languages discussed.

ASL 60  DEAF CHALLENGES – 3 Units  (formerly SL 80)  
Grading: 54 lecture total (when offered in the Distance Education format, hours will total 162)  
This course covers four areas that have a large impact on people’s development: society, family, education, and work. Students are made aware of the challenges deaf people face in these areas and how it influences their lives. This course may be offered in a distance education format.

ASL 80 – 100  UNIVERSAL CHALLENGES OF DeafNESS – 3 Units  
(formerly SL 81)  
Grading: 54 lecture total (when offered in the Distance Education format, hours will total 162)  
This course covers four areas that have a large impact on people’s development: society, family, education, and work. Students are made aware of the challenges deaf people face in these areas and how it influences their lives. This course may be offered in a distance education format.

ANATOMY (ANAT)

ANAT 1  HUMAN ANATOMY – 5 Units  
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher  
Note: May be taken concurrently with PHY 1  
Class Hours: 54 lecture/54 lab/18 discussion total  
A college level introductory course in human anatomy. A systematic hands-on approach to the anatomy of the human body. Human cadavers and/or mammalian dissection are used as a teaching resource. May be taken concurrently with PHY 1.

ANTHROPOLOGY (ANTH)

ANTH 1  PHYSICAL ANTHROPOLOGY – 3 Units  
Grading: Pass/No Pass Option  
Advisory: A grade of C or higher in ENGL 1A or English Placement Level 7  
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)  
Topics include the theories of human origins and the evolution of life in general; classification of primates, introduction to living primates and primate behavior, genetics, population genetics, the fossil record, the evolution of hominid behavior, the evolution of language, environment and technology; hunting and the evolution of society; the evolution and condition of modern humans. This course may be offered in a distance education format.
ANTH 2 CULTURAL ANTHROPOLOGY – 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 1A or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
An introductory course exploring the nature of culture as the human adaptation to the natural world. It includes such topics as making a living, family structure, social organization and institutions, language, religion, art, and cultural change. This course may be offered in a distance education format.

ANTH 5 HUMANITY, CULTURE, AND ECOLOGY – 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 1A or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
An ecological perspective of cultures as adaptations to diverse habitats, and explorations of how these adaptations respond to environmental alterations. Emphasis will be placed on adaptive strategies and challenges in contemporary societies. This course may be offered in a distance education format.

ANTH 14 RELIGION, MYTH AND RITUAL – 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 280 or English Placement level 5 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A cross-cultural study of the forms and functions of religion, myth, and ritual in contemporary and historical societies. Emphasis will be on non-Western traditional groups and understanding their religious beliefs in a culturally relative context. This course may be offered in a distance education format.

ANTH 25 CULTURE AND HISTORY OF THE NORTH AMERICAN INDIAN – 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 280 or English Placement Level 5 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A course dealing with the history and culture of the North American Indian. Emphasis will be on the origins, spread and diversification, and the development of Native American cultures in North America. Additional emphasis will be on contemporary Native Americans. Consideration will be given to how the arts, economics, and cultural contributions of Native Americans have influenced the modern world. This course may be offered in a distance education format.

ARCH 3 PRINCIPLES OF ARCHAEOLOGY – 3 Units
Class Hours: 54 lecture total
An introductory course to the study of world prehistory and historical archaeology through the analysis of archaeological method, theory, and regional development. The course includes case study examination of the fundamental concepts of archaeology and the changing theoretical orientations of archaeology in the contemporary world.

ARCH 4A BEGINNING FIELD ARCHAEOLOGY – 3 Units (formerly ARCH 4, 4AD)
Grading: Pass/No Pass Option
Class Hours: 18 lecture/108 lab total
An introductory course in the practical application of archaeological principles and methods. Students will become familiar with the basic techniques of scientific archaeological excavation and site survey, mapping, photographing, data recording, cataloging and preservation of archaeological specimens.

ARCH 4B INTERMEDIATE FIELD ARCHAEOLOGY – 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ARCH 4A
Class Hours: 18 lecture/108 lab total
An intermediate course in the practical application of archaeological principles and methods that continues to build on the beginning course. Students will begin to take a part in the development and organization of scientific archaeological excavation projects. Students will learn additional excavation techniques, and learn to supervise field crews. Students will learn how to develop strategies for site reconnaissance and recording. Students will evaluate field records, and coordinate field catalogues.

ARCH 4C ADVANCED INTERMEDIATE FIELD ARCHAEOLOGY – 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ARCH 4B
Class Hours: 18 lecture/108 lab total
An advanced intermediate course in the practical application of archaeological principles and methods. Students learn advanced excavation techniques. Students learn additional methods of site mapping and recording. Students learn to map using a total station. Students are trained in soil sampling, and flotation techniques.

ARCH 4D ADVANCED FIELD ARCHAEOLOGY – 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ARCH 4C
Class Hours: 18 lecture/108 lab total
An advanced course in the practical application of archaeological principles and methods. Students will serve as assistant field director to the principal investigator in a local archaeological project. Students will learn to use archival facilities and evaluate documentary evidence of archaeological sites. Students will organize and execute aspects of field projects. Students will learn to interpret data gathered from field projects.

ARCH 4C ADVANCED FIELD ARCHAEOLOGY – 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ARCH 4C
Class Hours: 18 lecture/108 lab total
An advanced course in the practical application of archaeological principles and methods. Students will serve as assistant field director to the principal investigator in a local archaeological project. Students will learn to use archival facilities and evaluate documentary evidence of archaeological sites. Students will organize and execute aspects of field projects. Students will learn to interpret data gathered from field projects.
ART 4  WORLD ART – 3 Units
Class Hours: 54 lecture total
A survey of the visual arts of ethnic and indigenous cultures with an emphasis on both historic and contemporary art. Explored are the Americas, Africa, India, Japan and China. Lectures are focused on the styles, motifs, symbols, rituals and traditions of the cultures by examining their crafts, drawings, sculpture, printmaking and paintings. This course is designed as a Humanities elective, recommended for Art Core Programs, and required for the Art History Concentration.

ART 6  HISTORY OF MODERN ART – 3 Units
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
An in-depth study of visual expression since 1860, starting with pre-Impressionist stirring and tracing the development of modernism through significant art movements in the 20th Century. This course may be offered in a distance education format.

ART 12   BEGINNING FORM, DESIGN AND COLOR – 3 Units
(formerly ART 14A)
Grading: Pass/No Pass Option
Class Hours: 27 lecture/81 lab total
A fundamental course in two-dimensional design and color theory with the study of basic design elements as they apply to form. Two-dimensional design includes balance, directional movements, structural analysis, texture and unity. Color theory includes color schemes, psychological use of color, and value and intensity concepts. Required for the Art Core Program, and recommended for theatre, architecture and graphic design studies.

ART 13   INTERMEDIATE FORM, DESIGN AND COLOR – 3 Units
(formerly ART 14B)
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ART 12
Class Hours: 27 lecture/81 lab total
An introductory course using two-dimensional form concepts and color theory with the application to three-dimensional form. The development of personal ideas and direction, the use of scale, surface effects, and new materials (synthetics). More concern is given to presentation, focus and consistency.

ART 15   THREE DIMENSIONAL DESIGN – 3 Units (formerly ART 15AB)
Note: Field trips may be required
Class Hours: 27 lecture/81 lab total
A hands-on studio art course using the elements and principles of three-dimensional design in the creation of form and space relationships. This course provides students with the fundamental design and problem solving skills that apply to the fields of three-dimensional art, architecture, landscape, interior and industrial design.

ART 16   PENCIL RENDERING – 2 Units (formerly ART 16AB)
Class Hours: 18 lecture/54 lab total
A basic course in the use of various perspective techniques, using one and two point as well as grids. This course is designed for Art, Architecture, Graphic Design and Landscape Architecture students. It involves developing three-dimensional drawings of buildings structures, objects, etc., using perspective techniques and adding value rendering as well as shadows to create finished works.

ART 17   SHADES, SHADOWS, AND PERSPECTIVES - 3 Units
(formerly ART 17AD)
Grading: Pass/No Pass Option
Class Hours: 27 lecture/81 lab total
A fundamental course to prepare pictorial presentations applicable to advertising, architectural and industrial design, landscapes and illustrations using mechanical perspective and rendering media. Course designed for Architectural majors and recommended for Art majors.

ART 23   PEN, BRUSH AND INK – 2 Units (formerly ART 23AB)
Grading: 18 lecture/54 lab total
Exploring 2D possibilities with a variety of pens, brushes, inks, and papers. Exercises are based in observation and imagination, with support foundational drawing practice. Exposure to artists using this medium, and to links between illustration and fine arts.

ART 26A   BEGINNING WATERCOLOR – 3 Units (formerly ART 26, 26AB)
Grading: Pass/No Pass Option
Class Hours: 27 lecture/81 lab total
An introductory course in watercolor painting techniques as they apply to the visual arts. Methods covered include wet wash, wash, stroke and glaze overlays, with emphasis on creative interpretation and expression.

ART 26B   INTERMEDIATE WATERCOLOR – 3 Units (formerly ART 27, 26CD)
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ART 26A
Class Hours: 27 lecture/81 lab total
An intermediate course in watercolor painting with an emphasis on expansion of watercolor techniques as well as conceptual and technical development. Students will investigate non-traditional materials, explore methods of paint application (including subtractive and stencil methods) and further their artistic understanding and development through the consideration of contemporary trends in watercolor.

ART 26C   ADVANCED INTERMEDIATE WATERCOLOR – 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ART 26B
Class Hours: 27 lecture/81 lab total
A course designed to expand upon the information and techniques learned in Intermediate Watercolor Painting. General attention will be given to personal idea development, consistency, presentation techniques and working with more independence. The student will be expected to increase the quality and number of paintings completed during the semester. The student will also learn to develop a professional portfolio and to communicate professionally.

ART 26D   ADVANCED WATERCOLOR – 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ART 26C
Class Hours: 27 lecture/81 lab total
An advanced course in Watercolor. Students will explore ink painting, non-brush techniques, watercolor transfer as well as illustration techniques. Students will develop a portfolio which incorporates a variety of compositional schemes in expressive and non-objective imagery.

ART 29A   BEGINNING PAINTING – 3 Units (formerly ART 29, 25AB)
Class Hours: 27 lecture/81 lab total
A creative course in the use of oil, polymer, and other synthetic media on canvas, hardboard, or metal. Application of these media and other media used in representation and abstract form. Course designed for Architecture majors, Painting Concentration and Theatre Arts Technician Concentration.

ART 29B   INTERMEDIATE PAINTING – 3 Units (formerly ART 30, 25CD)
Prerequisite: A grade of C or higher in ART 29A
Class Hours: 27 lecture/81 lab total
An intermediate course in oil or polymer painting which is designed, through guided experimentation, to broaden the student’s knowledge of opaque media and techniques. Students are expected to complete three paintings: a non-objective work, a realist work and a “Free” painting (student’s choice).

ART 29C   ADVANCED INTERMEDIATE PAINTING – 3 Units
Prerequisite: A grade of C or higher in ART 29B
Class Hours: 27 lecture/81 lab total
A course designed to expand upon the information and techniques learned in Intermediate painting. Attention will be given to personal idea development, consistency, presentation techniques and working with more independence. The student will be expected to increase quality and number of paintings completed during the semester. The student will also learn to develop a professional portfolio and communicate professionally.

ART 29D   ADVANCED PAINTING – 3 Units
Prerequisite: A grade of C or higher in ART 29C
Class Hours: 27 lecture/81 lab total
Advanced students will narrow the scope of techniques addressed in Art 29C to focus on the creation of a series of images which effectively express selected images. Artists will create a portfolio for use in the Annual Student Art Competition. These directed works will result from ongoing class discussions of projects, instructor presented slide lectures, films and technical critiques. Students will investigate preservation and cataloguing techniques.
ART 31A BEGGINNING FIGURE DRAWING – 3 Units (formerly ART 31, 22AB)
Class Hours: 27 lecture/81 lab total
An introductory course in creative drawing of the nude human figure. Emphasis will be placed on anatomy, proportion, composition, and development of personal expression.

ART 31B INTERMEDIATE FIGURE DRAWING – 3 Units (formerly ART 32, 22CD)
Prerequisite: A grade of C or higher in ART 31A
Class Hours: 27 lecture/81 lab total
An intermediate visual arts course in the study of the nude human figure. Through the use of a variety of media, students will expand their skills in drawing from observation as well as interpret the figure through a variety of approaches.

ART 31C ADVANCED INTERMEDIATE FIGURE DRAWING – 3 Units
Prerequisite: A grade of C or higher in ART 31B
Class Hours: 27 lecture/81 lab total
A developmental course designed to expand on information and techniques learned in Intermediate Figure Drawing. Attention will be given to a more personal interpretation of the figure, technique, consistency, presentation and the execution and resolution of ideas with greater independence. The student will produce and critically discuss increasingly sophisticated works, which will become part of his/her professional portfolio.

ART 31D ADVANCED FIGURE DRAWING – 3 Units
Prerequisite: A grade of C or higher in ART 31C
Class Hours: 27 lecture/81 lab total
Advanced Figure Drawing students will work toward an expanded knowledge of (and ability with) materials employed in Advanced Intermediate Figure Drawing. Through this exploration, students will define a clearer personal direction and emerge with enhanced critical skills.

ART 35A BEGINNING CERAMICS – 3 Units (formerly ART 35, 35AB)
Class Hours: 47 lecture/81 lab total
An introductory course developing skills in hand-building with coils, slabs and introduction of the potter’s wheel. The course includes glazing, decorative techniques, properties of clay and firing of ceramic forms.

ART 35B INTERMEDIATE CERAMICS – 3 Units (formerly ART 36, 35CD)
Class Hours: 27 lecture/81 lab total
Note: Field trips may be required
Field trips required
Note: Field trips may be required
Class Hours: 27 lecture/81 lab total
This is a ceramics course emphasizing studio problems which involve the potter’s wheel, construction of molds and hand-building techniques. Use of the potter’s wheel will go beyond basic functional forms and will be used to create sculpture. Molds and hand-building techniques will also emphasize sculptural works in clay.

ART 35C ADVANCED CERAMICS – 3 Units
Prerequisite: A grade of C or higher in ART 35B
Class Hours: 27 lecture/81 lab total
An intermediate course developing skills in the use of the potter’s wheel. The course includes hand-building, throwing, plaster molding, glazing, surface decoration and firing of ceramic forms.

ART 35D ADVANCED CERAMICS – 3 Units
Prerequisite: A grade of C or higher in ART 35C
Class Hours: 27 lecture/81 lab total
Note: Field trips may be required
Field trips required
Note: Field trips may be required
Class Hours: 27 lecture/81 lab total
This is a ceramics course emphasizing studio problems which involve the potter’s wheel, construction of molds and hand-building techniques. Use of the potter’s wheel will go beyond basic functional forms and will be used to create sculpture. Molds and hand-building techniques will also emphasize sculptural works in clay.

ART 45 BEGINNING GLASS – 3 Units (formerly ART 45AB)
Class Hours: 27 lecture/81 lab total
Grading: Pass/No Pass Option
Note: Field trips may be required
Field trips may be required
This class is a hands-on course to explore the beginning aspects of the art of working with glass in its molten and frozen states. Students will develop an understanding of the wide range of possibilities that exist when working with glass. Through demonstrations and practice in the hot shop, students will acquaint themselves with the tools and materials needed to create forms in glass. Students will begin a hands-on involvement with molten glass working, ladle sand casting, kiln casting and other glass processes. Working with clear glass, students will develop basic glass blowing skills by learning how to form simple blown shapes such as the sphere, cylinder, disk and various vessel forms. Individual student skills will be emphasized. Open to students in all disciplines; no prior glassblowing experience necessary.

ART 46 GLASS BLOWING – 3 Units (formerly ART 45CD)
Class Hours: 27 lecture/81 lab total
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ART 45 or ART 57
Note: Field trips may be required
Field trips may be required
Class Hours: 27 lecture/81 lab total
This course focuses on skills progression in working with glass in the molten state. Emphasis is placed upon individualized projects for students. Students will work with studio equipment related to recycling, melting, firing and annealing of glass.

ART 50A BEGINNING PRINTMAKING – 3 Units (formerly ART 50, 50AD)
Class Hours: 27 lecture/81 lab total
Grading: Pass/No Pass Option
An introductory course surveying the four main printmaking processes as they apply to a variety of visual arts. Studio experience during the semester will focus on black and white printing techniques including: relief, intaglio, stencil (serigraph) and planographic (monotype or lithography). Emphasis will be placed upon the use of printmaking processes as an expressive art form through lecture, demonstration, and class critiques.

ART 50B INTERMEDIATE PRINTMAKING – 3 Units
Prerequisite: A grade of C or higher in ART 50A
Class Hours: 27 lecture/81 lab total
An intermediate course focusing on color intaglio techniques including: multi-plate and la poupee processes. Emphasis will be placed upon the use of printmaking processes as an expressive art form through lecture, demonstration, and class critiques.

ART 50C ADVANCED PRINTMAKING – 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ART 50B
Class Hours: 27 lecture/81 lab total
An advanced course focusing on color relief print processes (i.e. multi-plate, a la poupee and rainbow printing). Advanced students will clearly express their personal aesthetic through the production of four editions of prints within the color relief processes. Emphasis will be placed upon the use of color relief printing as an expressive art form through lecture, demonstration, and class critiques.

ART 55A BEGINNING SCULPTURE – 3 Units (formerly ART 55, 55AB)
Advisory: A grade of C or higher in one semester of ART 15
Grading: Pass/No Pass Option
Note: Field trips may be required
Class Hours: 27 lecture/81 lab total
A creative course in the sculpting of wood, clay, plaster, and other materials. Application of these media are used in abstract and representational forms.

ART 55B INTERMEDIATE SCULPTURE – 3 Units (formerly ART 56, 55CD)
Prerequisite: A grade of C or higher in ART 55A
Class Hours: 27 lecture/81 lab total
An intermediate level course in the sculpting of clay, wood, metal, plaster, and other materials. Creative application of these media are used in abstract and representational forms.

ART 55C ADVANCED SCULPTURE – 3 Units
Prerequisite: A grade of C or higher in ART 55B
Class Hours: 27 lecture/81 lab total
An advanced course emphasizing studio problems which involve the sculpting of wood, plaster, metal and other materials. Creative application of these media are used in abstract and representational forms.

ART 57 SCULPTURAL GLASS – 3 Units
Advisory: A grade of C or higher in ART 45 or ART 55
Note: Field trips may be required
Class Hours: 27 lecture/81 lab total
This course expands upon the information and techniques gained from ART 55B. Attention will be given to personal idea development and concepts, consistency, presentation, and working independently. Students will be expected to develop a style and conceptual approach which will be reflected in the sculpture produced during the semester. Students will develop a professional portfolio and learn to communicate professionally.

ART 60A BEGINNING DARKROOM PHOTOGRAPHY – 3 Units (formerly ART 60AB)
Grading: Pass/No Pass Option
This is a film based class; students must provide their own 35mm camera with adjustable shutter and aperture.
Class Hours: 27 lecture/81 lab total
Note: Field trips may be required
Class Hours: 27 lecture/81 lab total
A structured intermediate sculpture course in which students will develop an understanding of the potential of the medium of glass in its molten and frozen states. Students will begin a hands-on involvement with molten glass working, ladle sand casting, kiln casting and other glass processes. Regular demonstrations, presentations and in-class projects as well as individual assignments will establish a fundamental knowledge and physical understanding of glass as a medium for sculpture.

ART 60B BEGINNING DARKROOM PHOTOGRAPHY – 3 Units
Grading: Pass/No Pass Option
Note: This is a film based class; students must provide their own 35mm camera with adjustable shutter and aperture.
Class Hours: 27 lecture/81 lab total
An introductory course presenting the origins and history of photography, camera and lens familiarization, exposure, metering, film development, printing procedures, print presentation, composition and standards of quality. Emphasis is placed on black and white negative and print quality along with content, composition and personal expression.
ART 60D ADVANCED DARKROOM PHOTOGRAPHY – 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ART 60C
Note: This is a film based class; students must provide their own 35mm camera
with adjustable shutter and aperture.
Class Hours: 27 lecture/81 lab total
This course builds on the techniques covered in ART 60C. This course provides
instruction in the advanced concepts of traditional chemical-based photography. Emphasis will be on current issues in
photography, contemporary photographers and portfolio development along with the basic theories of illumination and the utilization of a variety of light sources.

ART 60B INTERMEDIATE DARKROOM PHOTOGRAPHY – 3 Units
(formerly ART 62, 61BD)
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ART 60B
Note: This is a film based class; students must provide their own 35mm camera
with adjustable shutter and aperture.
Class Hours: 27 lecture/81 lab total
This course builds on the techniques covered in ART 60A. This course provides
an introduction to the fundamental theories, vocabularies and techniques of traditional chemical-based photography. Emphasis will be on negative quality, the fine print and presentation.

ART 60C ADVANCED INTERMEDIATE DARKROOM PHOTOGRAPHY – 3 Units
(formerly ART 62, 61BD)
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ART 60B
Note: This is a film based class; students must provide their own 35mm camera
with adjustable shutter and aperture.
Class Hours: 27 lecture/81 lab total
This course builds on the techniques covered in ART 60B. This course provides
instruction in the advanced concepts of traditional chemical-based photography. Emphasis will be on alternative process photography, medium and large format photography and photo theory.

ART 70A BEGINNING DIGITAL PHOTOGRAPHY – 3 Units
(formerly ART 70)
Grading: Pass/No Pass Option
Note: This is a digital imaging class. Students must provide an 8 megapixel (or
larger) digital camera with manual aperture and shutter speed controls.
Class Hours: 27 lecture/81 lab total
An introductory digital course presenting the origins and history of photography, camera and lens familiarization, exposure, metering, printing procedures, print presentation, composition and standards of quality. Emphasis is placed on print quality along with content, composition and personal expression. The course concentrates on expressive and aesthetic aspects of photography in fine art.

ART 70B INTERMEDIATE DIGITAL PHOTOGRAPHY – 3 Units
(formerly ART 71)
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ART 70A
Note: This is a digital imaging class. Students must provide an 8 megapixel (or
larger) digital camera with manual aperture and shutter speed controls.
Class Hours: 27 lecture/81 lab total
A continuation and advancing of the principles covered in ART 70A with emphasis
on artistic expression and use of current technologies.

ART 70C ADVANCED INTERMEDIATE DIGITAL PHOTOGRAPHY – 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ART 70B
Note: This is a digital imaging class. Students must provide an 8 megapixel (or
larger) digital camera with manual aperture and shutter speed controls.
Class Hours: 27 lecture/81 lab total
This course builds on the techniques covered in ART 70B. This course provides
instruction in the advanced theories, vocabularies and techniques of digital photography with emphasis on artistic expression and use of current technologies.

ART 70D ADVANCED DIGITAL PHOTOGRAPHY – 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ART 70C
Note: This is a digital imaging class. Students must provide an 8 megapixel (or
larger) digital camera with manual aperture and shutter speed controls.
Class Hours: 27 lecture/81 lab total
This course builds on the techniques covered in ART 70C. This course provides
continued exploration in the advanced theories, vocabularies and techniques of digital photography. Emphasis will be on current issues in photography, contemporary photographers and portfolio development along with the basic theories of illumination and the utilization of a variety of light sources.

ART 80A GRAPHIC DESIGN – 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ART 12
Note: It would be helpful if the student has basic skills in Adobe Photoshop.
Class Hours: 27 lecture/81 lab total
The course provides the student with an introduction to the theories and applications behind typography, color theory, layout, and composition. The student will learn and use industry standard image editing and page layout software to produce class assignments typically encountered in the graphic design and printing industries.

ART 80B INTERMEDIATE GRAPHIC DESIGN – 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ART 80A
This course builds on the software training and design concepts from 80A to teach the student more advanced image editing, document composition, and digital illustration techniques using industry standard software and accepted design practices and advanced theories and principles.

THE 100 SERIES OF COURSES ARE SPECIFIC SUBJECT AREAS TAKEN FROM THE TRANSFER (1-98) COURSES AS SHORT-TERM INTRODUCTION COURSES:

ART 110 MIXED MEDIA: WORKS ON PAPER – 2 Units
Grading: Pass/No Pass Option
Class Hours: 18 lecture/54 lab total
This course selectively and aesthetically combines various media and techniques of drawing, painting, photo, printing and collage into two-dimensional works. Underlying the instruction is a historical component which emphasizes modern and contemporary art to broaden the students’ interest and awareness of contemporary trends.

ART 121 ILLUSTRATION (formerly ART 121W) – 2 Units
Grading: Pass/No Pass Option
Class Hours: 18 lecture/54 lab total
Advisory: A grade of C or higher in ART 12
Designed as an introductory segment to the practice and theory of painting. This course will focus upon those aspects of pictorial organization employed in the formation of representational painting.

ART 122 PORTRAIT PAINTING – 2 Units (formerly ART 125W)
Grading: Pass/No Pass Option
Class Hours: 18 lecture/54 lab total
A basic course in the materials, tools, composition, proportion, lighting, shadow patterns, anatomy, value, color, line and study of other masters in portrait painting.

ART 123 LANDSCAPE PAINTING – 2 Units (formerly ART 125X)
Grading: Pass/No Pass Option
Class Hours: 18 lecture/54 lab total
A basic course to introduce the techniques of landscape painting, specifically the areas of pictorial materials, space, simple perspective, composition, value, color, scale, texture, line, and the study of other landscape painters.

ART 124 INTRODUCTION TO PAINTING – 2 Units (formerly ART 125Y)
Grading: Pass/No Pass Option
Class Hours: 18 lecture/54 lab total
Designed as an introductory segment to the practice and theory of painting. This course will focus upon those aspects of pictorial organization employed in the formation of representational painting.

ART 125 INTRODUCTION TO WATERCOLOR – 2 Units
(formerly ART 126W)
Grading: Pass/No Pass Option
Class Hours: 18 lecture/54 lab total
A preliminary course in watercolor methods, such as wet wash, stroke and glaze overlays, with emphasis on creative interpretation of subjects in nature.

ART 126 NATURE IN WATERCOLOR – 2 Units (formerly ART 126X)
Grading: Pass/No Pass Option
Class Hours: 18 lecture/54 lab total
An extensive course in different watercolor methods, such as: wet wash, stroke,
and glaze overlays, with emphasis on creative interpretation of subjects in nature.
ART 301 BEGINNING, INTERMEDIATE AND ADVANCED DRAWING & PAINTING-MIXED MEDIA – 0 Units
Class Hours: 6-108 lab total
An introductory, intermediate and advanced course incorporating basic drawing techniques, using a variety of pencils and covering composition, color mixing, brush strokes, watercolor, acrylic, oil and pastels. The course is designed to provide stimulation and growth for individual adults through art activities.

ART 302 ART EXPRESSION FOR SENIORS – 0 Units
Class Hours: 6-108 lab total
Come and express yourself in colorful explorations. “Draw” upon your life experiences: your memories, dreams and reflections. Learn to create designs and images using paints, watercolor crayons, collage, colored pens/pencils, ink, pastels, fiber and clay. Course designed for older adults, no previous art experience is necessary.

ASTRONOMY (ASTR)

ASTR 1 ASTRONOMY – 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A survey course designed to introduce the science of astronomy. This course covers aspects of astrophysics, telescope optics, radio astronomy, prominent scientists, planets and moons, the sun, stars, stellar evolution and galaxies. This course may be offered in a distance education format.

AUTOMOTIVE TECHNOLOGY (AUTO)

AUTO 1 VEHICLE ELECTRICAL SYSTEMS – 3 Units
Class Hours: 27 lecture/81 lab total
Designed to cover the basic theory of electricity and magnetism, as well as areas of operation, testing, and service of vehicle batteries, switches, relays, starters and starting systems, alternators, regulators, charging systems, and light circuits. The course includes electrical theory, repair procedures, and ASE laboratory tasks. This course, along with AUTO 10, is designed to prepare students to become ASE certified in area A-6. Required for Automotive majors with emphasis on electrical systems.

AUTO 10 AUTOMOTIVE ELECTRONICS – 3 Units (formerly AUTO 110)
Prerequisite: A grade of C or higher in AUTO 1
Class Hours: 27 lecture/81 lab total
This course is designed to establish an understanding of electronic theory and solid state technology as it applies to the automobile. The student will learn to read wiring schematics, calculate voltages, current flow, and resistances within parallel and series circuits, and to properly use related testing equipment used for diagnosis. This course includes electrical/electronic theory, repair procedures, and ASE laboratory tasks. This course, along with AUTO 1, is designed to prepare students to become ASE certified in area A-6.

AUTO 20 ENGINE PERFORMANCE – 4 Units
Class Hours: 36 lecture/108 lab total
This course is designed to give students the understanding of the operation of automotive engines and related systems such as electrical, ignition and fuel delivery. The course will also provide students with entry level skills to diagnose, service and repair these systems using current industry tools and equipment. This course includes ASE laboratory tasks and is designed to prepare students to become ASE certified in area A-8.

AUTO 21 ADVANCED ENGINE PERFORMANCE – 3 Units
Prerequisite: A grade of C or higher in AUTO 20
Class Hours: 27 lecture/81 lab total
This course is designed to continue the study of engine performance by including the emission control systems and computer controlled engine operation. The course will also provide students with entry level skills to diagnosis, service and repair these systems using current industry tools and equipment. This course includes ASE laboratory tasks and, along with AUTO 20, is designed to prepare students to become ASE certified in areas A-8 and L-1.

AUTO 94 WORKSITE LEARNING FOR AUTOMOTIVE TECH. – 1-8 Units
Limitation on Enrollment: Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.
Class Hours: 75 hours paid or 60 hours non-paid per unit
The Vocational Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acquired by the student and related to the student’s major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on the job performance. A student may earn up to 16 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in a single semester.

AUTO 130 AUTOMOTIVE STEERING AND SUSPENSION – 3 Units
Class Hours: 36 lecture/54 lab total
This course is designed to give students the entry level skills required to diagnose, service, and repair modern automobile wheel and tire, steering, and suspension systems. The course includes theory of operation, repair procedures, and ASE laboratory tasks. This course, along with AUTO 131, is designed to prepare students to become ASE certified in area A-4.

AUTO 131 AUTOMOTIVE WHEEL ALIGNMENT – 2 Units
Prerequisite: A grade of C or higher in AUTO 130
Class Hours: 18 lecture/54 lab total
This course is designed to give students the entry level skills required to perform complete four-wheel alignments on modern automobiles and light trucks. The course includes theory of alignment principles and the operation of industry standard alignment equipment. This course, along with AUTO 130, is designed to prepare students to become ASE certified in area A-4.

AUTO 147 AUTOMOTIVE BRAKING SYSTEMS – 3 Units
Class Hours: 27 lecture/81 lab total
This course is designed to provide the entry level skills needed to diagnose, service, and repair various braking systems found on domestic and import automobiles and light trucks. The course includes brake theory, repair procedures, and ASE laboratory tasks, and is designed to prepare students to become ASE certified in area A-5. Standard and power assist, drum and disc type systems and anti-lock braking systems are included in this course.

AUTO 150 INTRODUCTION TO ENGINE MACHINING – 3 Units (formerly INDE 150)
Class Hours: 54 lecture total
This course is designed to introduce the student to the basic fundamentals of the internal combustion engine. The subjects will cover the operation and design of varied engine systems and the repair and rebuilding of these engines.

AUTO 152 ENGINE MACHINING LABORATORY – 3 Units (formerly INDE 152)
Corequisite: Students must be concurrently enrolled in, or have completed AUTO 150 with a grade of C or higher
Class Hours: 162 lab total
This course will introduce the student and provide instruction in the disassembly, cleaning and inspection of the internal combustion engine. The student will be oriented in the use of general and specialty tools used in the rebuilding of internal combustion engines. ASE and AERA based tasks utilize hand and power tools and modern machining equipment. Completion of this course along with AUTO 150 will prepare students to become certified in ASE areas A-1, M-1, M-2 and M-3.

AUTO 161 MANUAL DRIVE TRAIN AND AXLES – 3 Units
Class Hours: 27 lecture/81 lab total
A course designed to give a technical and working knowledge of manual drive trains and axles. Subject matter covered includes clutch diagnosis and repair, manual transmission diagnosis and repair, transaxle diagnosis and repair, drive (hand) and universal joint diagnosis and repair, rear axle diagnosis and repair, four-wheel drive component diagnosis and repair, theory of operation, repair procedures, and ASE laboratory tasks. This course is designed to prepare students to become ASE certified in area A-3.

AUTO 162 AUTOMATIC TRANSMISSIONS AND TRANAXLES – 4 Units
Class Hours: 36 lecture/108 lab total
A course designed to give a working knowledge of automatic transmissions and transaxles. Subject matter covered will include transmission/transaxle maintenance and adjustment, in-vehicle transmission/transaxle repair, and off-vehicle transmission/transaxle repair. The course includes theory of operation, repair procedures, and ASE laboratory tasks. This course is designed to prepare students to become ASE certified in area A-2.

AUTO 163 HEATING, AIR CONDITIONING AND ACCESSORIES – 3 Units
Class Hours: 36 lecture/54 lab total
This course is designed to give students a technical and working knowledge of automotive heating and air conditioning systems. Emphasis is placed on entry level skills necessary for diagnosing, servicing, and repairing modern automotive heating and air conditioning systems. The course includes theory of operation, repair procedures, and ASE laboratory tasks. This course is designed to prepare students to become ASE certified in area A-7.
AUTO 180  ENGINE MACHINIST I – 4 Units (formerly INDE 180, AUTO 180A)
Prerequisite: A grade of C or higher in AUTO 150 and AUTO 152, or a grade of C or higher in DIES 164
Note: Basic hand tools required
Class Hours: 36 lecture/108 lab total
This course is designed to give the student instruction in the use of precision equipment required in the reconditioning of modern automotive engines. Students completing this course will have the manipulative skills and the knowledge of the various machine tools required to completely remanufacture automotive engines.

AUTO 181  ENGINE MACHINIST II – 4 Units
(formerly AUTO 181, AUTO 180B)
Prerequisite: A grade of C or higher in AUTO 180
Note: Basic hand tools required
Class Hours: 36 lecture/108 lab total
This course will build on the skills obtained in AUTO 180, Engine Machinist I, and will provide new skills in the following areas; advanced machining techniques, high performance machines, changing fixtures, maintenance and service of machine tools.

BIOL 1  PRINCIPLES OF BIOLOGY – 4 Units
Prerequisite: A grade of C or higher in CHEM 1A
Class Hours: 36 lecture/108 lab total
A biological science emphasizing molecular and cellular organization, energetics of respiration and photosynthesis, cell integration and development. General principles of heredity, evolution, speciation and ecology. Intended for majors in science.

BIOL 5  INTRODUCTION TO HUMAN BIOLOGY - 3 Units
Class Hours: 54 lecture total
A one-semester introductory course in human anatomy and physiology presented with a medical emphasis. Selected topics on eleven organ systems are covered. This course is intended to serve medical assistants, licensed vocational nursing, and fire science majors. It also complements child development and nutrition majors. BIOL 5 is a prerequisite for the LVN program.

BIOL 6  INTRO. TO HUMAN BIOLOGY LABORATORY – 1 Unit
Corequisite: Student must be concurrently enrolled in, or have completed BIOL 5 with a grade of C or higher
Class Hours: 54 lab total
A laboratory course designed to complement BIOL 5. A one-semester human anatomy and physiology laboratory course. Exercises include anatomical language, microscopy, membrane transport processes, skeletal muscle contraction, cardiology, blood pressures, pulmonary ventilation, and enzymatic digestion. The anatomy of eleven organ systems is also included. BIOL 6 is a prerequisite for the LVN program.

BIOL 10  GENERAL BIOLOGY – 3 Units
Grading: Pass/No Pass Option
Note: BIOL 10 will meet the general education requirement for a laboratory science if taken with BIOL 10L. Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
An introduction to the major concept of modern biology. Topics covered include biochemistry, cell biology, heredity, and nature of genes, evolution, diversity of life, and principles of ecology. Emphasis will be placed on those aspects of biology that are rapidly reshaping our culture. This course may be offered in a distance education format. This course will meet the general education requirement for a laboratory science if taken with BIOL 10L.

BIOL 10L  GENERAL BIOLOGY LABORATORY – 1 Unit
Grading: Pass/No Pass Option
Corequisite: Student must be concurrently enrolled in, or have completed BIOL 10 with a grade of C or higher
Note: BIOL 10L will meet the general education requirement for a laboratory science if taken with BIOL 10. Class Hours: 54 lab total
Laboratory experiments and demonstrations covering the basic concepts of the lecture course BIOL 10. The laboratory is designed to expose student to biological techniques including microscopy, biochemistry, genetics, evolution, diversity of life, and principles of ecology.

BIOL 11  DIVERSITY OF LIFE – 3 Units
Grading: Pass/No Pass Option
Class Hours: 162 total hours
This course is a 3-unit, transferable, non-laboratory, computer-based life science course. It is available only on the Internet and is intended for those people who, for one reason or another, cannot come to the Shasta College campus for course work. Topics include molecular and cell biology, inheritance, gene expression, mutation, evolution and the diversity of living organisms.

BIOL 12  FIELD BIOLOGY – 3 Units
Class Hours: 36 lecture/54 lab total
Plant and animal morphology, classification and ecological relationships examined through field and laboratory study. Principles of ecology illustrated in the context of biotic communities of Northern California.

BOTANY (BOT)

BOT 1  GENERAL BOTANY – 4 Units
Prerequisite: A grade of C or higher in MATH 102 or Math Placement Level 4 or higher
Class Hours: 36 lecture/108 lab total
An introduction to the structure, physiology, reproduction, life cycles and taxonomic of major plant and plant-like groups.

BOT 50  WILDFLOWERS OF CALIFORNIA – 1 Unit
Grading: Pass/No Pass Option
Note: Two all-day Saturday field trips will be required.
Class Hours: 9 lecture/27 lab total
Local wildflowers are examined closely in the laboratory in order to learn their structural characteristics. This knowledge will be used to identify flowers using a plant identification key and for sight identification. The field trips reinforce identification skills by allowing students to observe these flowers in their natural setting. A supplementary course for botany, biology, forestry, ornamental horticulture, and natural resources students; elementary and high school teachers; and general interest. Five three-hour class meetings and two all day Saturday field trips.

BOT 52  MUSHROOM IDENTIFICATION – 2 Units
Grading: Pass/No Pass Option
Note: Includes two local mushroom collection field trips
Class Hours: 27 lecture/27 lab total
Note: Includes two local mushroom collection field trips
Class Hours: 27 lecture/27 lab total
In this course, students will learn to identify mushrooms and other fungi of Northern California. Class discussions will cover mushroom biology, the groups of fungi, mushroom structure, recognizing mushrooms by sight, and identifying mushrooms using written mushroom identification keys. Field trips will reinforce identification skills and help students understand the role of mushrooms in the ecosystem. There will be special emphasis on mushroom poisons and consumer safety.

BUSINESS ADMINISTRATION (BUAD)

BUAD 6  BUSINESS LAW I – 3 Units
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course primarily involves the legal ramifications of business and personal conduct in the areas of business contracts and agency. In addition, it includes an introduction to the American legal system, alternative dispute resolution, business torts and ethics. This course may be offered in a distance education format.

BUAD 8  BUSINESS LAW II – 3 Units
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course involves the various parameters and requirements of business organizations, security devices, bankruptcy with personal and intellectual property issues. This course may be offered in a distance education format.

BUAD 10  INTRODUCTION TO BUSINESS – 3 Units
Advisory: A grade of C or higher in ENGL 280 or English Placement Level 5 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A survey course for both business and non-business majors covering the different disciplines (finance, management, and marketing) of business. The course also covers the complexities of the competitive business world and includes additional disciplines such as international business, forms of business ownership, social responsibility and ethics, and entrepreneurship. Designed to provide students with familiarity with basic principles and practices of contemporary business, knowledge of business terminology, and an understanding of how business works within the U.S. economic system. Due to its introductory nature, it is recommended that this course be taken as a first business course. This course may be offered in a distance education format.
### BUAD 12 INTERNATIONAL BUSINESS – 3 Units
**Grading:** Pass/No Pass Option  
**Advisory:** A grade of C or higher in BUAD 10, and a grade of C or higher in ENGL 280 or English Placement Level 5 or higher  
**Class Hours:** 54 lecture total (when offered in the Distance Education format, hours will total 162)

An introduction to the essentials of international business and the environmental forces that impact on the managerial decision process. Gives an overview of global business with emphasis on cultural differences and global business concepts and issues influencing international business decision-making. Course examines the physical, financial, political, legal, competitive, labor, marketing, economic, and sociocultural constraints and opportunities of foreign market analysis and trade management. This course may be offered in a distance education format.

### BUAD 15 BUSINESS AND SOCIETY – 3 Units
**Class Hours:** 54 lecture total  
The purpose of this course is to increase the student’s awareness of ethical issues in business. The course establishes a framework and definition of ethics and the interaction among business, government, and society. Examples from current events and across business disciplines will be used. Opposing points of view will be presented allowing the student to make individual judgments about ethical behavior in business and what things can and should be done to create a sustainable business model for the future.

### BUAD 40 ENTREPRENEURSHIP AND SMALL BUSINESS – 3 Units
**Grading:** Pass/No Pass Option  
**Class Hours:** 54 lecture total (when offered in the Distance Education format, hours will total 162)

This course is an entrepreneurial perspective of starting a small business. The course covers techniques and methods of starting and managing a small business enterprise and incorporates the exploration of a sound business plan that includes a financial, management, and marketing analysis. This course may be offered in a distance education format.

### BUAD 41 LEADERSHIP & SUPERVISION – 3 Units
**Class Hours:** 54 lecture total (when offered in the Distance Education format, hours will total 162)

This course focuses on the role of the first-line supervisor in the organization. There is particular emphasis on team building, coping with organizational change, leadership styles, motivating employees, and the supervisor’s role in monitoring the primary management functions of planning, organizing, directing and controlling. This course may be offered in a distance education format.

### BUAD 42 FINANCING A SMALL BUSINESS – 3 Units
**Grading:** Pass/No Pass Option  
**Advisory:** Students will need to have access to and a working knowledge of Microsoft Excel  
**Class Hours:** 54 lecture total (when offered in the Distance Education format, hours will total 162)

A course designed to give an understanding on the various ways of funding a business venture. The course explores how to raise money for growing or starting a small business by reviewing sources of public and private debt, equity capital, initial Public Offering, commercial loans and SBA-guaranteed programs. This course may be offered in a distance education format.

### BUAD 44 INVESTMENTS – 3 Units (formerly FIN 44)
**Grading:** Pass/No Pass Option  
**Class Hours:** 54 lecture total (when offered in the Distance Education format, hours will total 162)

This course designed to help the student gain an understanding of stocks, bonds, and other securities. Students will be encouraged to develop their own investment philosophy based on an understanding of the securities market and methods of analyzing that market. Recommended for students wanting an understanding of how businesses raise capital in the securities market. The student will develop a hypothetical personal investment portfolio, which will be tracked with the assistance of a web-based monitoring system. This course may be offered in a distance education format.

### BUAD 45 HUMAN RELATIONS ON THE JOB – 3 Units
**Class Hours:** 54 lecture total (when offered in the Distance Education format, hours will total 162)

Human Relations on the Job is a course designed to give the student the opportunity to increase interpersonal skills. There is particular emphasis on communication, motivation, leadership, and group decision skills. Emphasis is placed on improved relationships among employees and between employees and employers. Topics include communication processes and styles, attitudes, values, motivation, leadership, valuing diversity, and reinforcement on the job. This course may be offered in a distance education format.

### BUAD 46 FUNDAMENTALS OF NONPROFIT MANAGEMENT – 1 Unit
**Grading:** Pass/No Pass Option  
**Class Hours:** 18 lecture total (when offered in the Distance Education format, hours will total 54)

Fundamentals of Nonprofit Management provides an understanding of the nonprofit sector as a whole and as nonprofit management from an overview perspective. This course will introduce the fundamentals of effective organization mission and vision statements, strategic planning, operations management, and budgeting. Participants will gain understanding of different aspects of management of a nonprofit organization. This course may be offered in a distance education format.

### BUAD 66 BUSINESS COMMUNICATIONS – 3 Units
**Prerequisite:** A grade of C or higher in BUAD 166 or English Placement Level 6 or higher  
**Class Hours:** 54 lecture total (when offered in the Distance Education format, hours will total 162)

This course provides implementation of letter-writing principles and techniques through expository and argumentative writing. Additionally, the writing of an employment portfolio, business letter and form presentation is required. Application of electronic communication (Netiquette, email format, Internet uses) will also be presented. This is a required course for many major and certificate programs and an alternate requirement or suggested elective in others. This course also satisfies the A.S. General Education requirement in English. This course may be offered in a distance education format.

### BUAD 71 INTRODUCTION TO e-COMMERCE – 1 Unit
**Class Hours:** 18 lecture total (when offered in the Distance Education format, hours will total 54)

This course is an introduction to e-commerce principles. Topics include an overview of where e-commerce fits into the business, e-commerce basics, cost-benefit of e-commerce solutions, planning and development. This course offers practical suggestions to individuals involved in or planning an e-commerce business or business component. This course may be offered in a distance education format.

### BUAD 72 e-COMMERCE MARKETING – 1 Unit
**Class Hours:** 18 lecture total (when offered in the Distance Education format, hours will total 54)

E-Commerce Marketing (electronic commerce) is the study of all the online or electronic-based activities that facilitate manufacturing goods and services by the producer to satisfy the wants and needs of the consumer. Electronic marketing draws heavily on networks' technology to coordinate market research, aid product development, and develop strategies and tactics to persuade consumers to buy, provide for online distribution, maintain customer records, conduct customer satisfaction surveys, and gather consumer feedback. Electronic marketing advances the company’s online marketing program that in turn supports the company’s overall marketing business objectives. This course may be offered in a distance education format.

### BUAD 74 SALES – 3 Units (formerly MKTG 70, BUSI 70)
**Grading:** Pass/No Pass Option  
**Class Hours:** 54 lecture total  
Study of the fundamental problems, practices, and techniques of the salesperson. The course covers both retail and direct selling techniques including prospecting, pre-approach, demonstration/presentation, handling objections, closing, follow-up, and time management. Students will be required to make a minimum of one sales presentation in class.

### BUAD 77 PRINCIPLES OF MARKETING – 3 Units
(formerly MKTG 74, BUSI 74)
**Grading:** Pass/No Pass Option  
**Class Hours:** 54 lecture total  
Course may be offered in a distance education format.

### BUAD 80 PRINCIPLES OF CUSTOMER SERVICE – 3 Units
**Class Hours:** 54 lecture total (when offered in the Distance Education format, hours will total 162)

This course is designed to provide the student with understanding and knowledge of the importance of meeting the needs of customers in a service economy. Students will gain insights into employer and customer expectations of service levels. Emphasis will be placed on developing specific skills and abilities critical to providing excellent customer service. In addition, the student will be
introduced to the concepts of internal and external customers, customer satisfaction and customer retention. Other topics covered are attitude in the workplace, communicating with customers, decision making and problem solving, conflict resolution, and dealing with change in the workplace. This course may be offered in a distance education format.

**BUAD 81 STRESS MANAGEMENT IN THE WORKPLACE** – .5 Unit

*Grading: Pass/No Pass Only*

*Class Hours: 9 lecture total (when offered in the Distance Education format, hours will total 27)*

This course is designed to provide the student with an understanding of how stress is created, how it affects an individual, and how to manage stress in the workplace. This course may be offered in a distance education format.

**BUAD 82 MANAGING ORGANIZATIONAL CHANGE** – .5 Unit

*Grading: Pass/No Pass Only*

*Class Hours: 9 lecture total (when offered in the Distance Education format, hours will total 27)*

This course is designed to provide the student with the knowledge of change, stages of change, and how to manage organizational change. This course may be offered in a distance education format.

**BUAD 83 CONFLICT RESOLUTION** – .5 Unit

*Grading: Pass/No Pass Only*

*Class Hours: 9 lecture total (when offered in the Distance Education format, hours will total 27)*

This course is designed to provide the student with an analysis of attitudes and behavior, which create conflict between individuals and groups within an organization. This course may be offered in a distance education format.

**BUAD 84 ATTITUDE IN THE WORKPLACE** – .5 Unit

*Grading: Pass/No Pass Only*

*Class Hours: 9 lecture total (when offered in the Distance Education format, hours will total 27)*

This course is designed to provide the student with certain key skills in the area of attitude so that they may effectively maintain a positive attitude at the workplace and at home. The student will be introduced to the concepts of how attitudes are communicated, the three types of attitudes and how to adjust one's attitude. Topics will also include the primary causes of a bad attitude, turnaround strategies to battle these bad attitudes and specific techniques to raise the attitude of others. This course may be offered in a distance education format.

**BUAD 85 CUSTOMER SERVICE IN THE WORKPLACE** – .5 Unit

*Grading: Pass/No Pass Only*

*Class Hours: 9 lecture total (when offered in the Distance Education format, hours will total 27)*

This course is designed to provide the student with certain key skills and attitudes in order to effectively meet the needs of the customers. The student will be introduced to the concept of internal and external customers, customer satisfaction and customer retention. Topics will also include communicating with customers, developing a positive attitude, handling complaints and sales skills. This course may be offered in a distance education format.

**BUAD 86 DECISION MAKING AND PROBLEM SOLVING** – .5 Unit

*Grading: Pass/No Pass Only*

*Class Hours: 9 lecture total (when offered in the Distance Education format, hours will total 27)*

This course is designed to introduce the student to decision making and problem solving as a supervisor. This course may be offered in a distance education format.

**BUAD 87 TEAM BUILDING** – .5 Unit

*Grading: Pass/No Pass Only*

*Class Hours: 9 lecture total (when offered in the Distance Education format, hours will total 27)*

This course is designed to provide the student with an understanding of how teams work together, common problems teams encounter and how to solve them. Students will learn to recognize various team player styles. Students will be introduced to team building in the workplace. This course may be offered in a distance education format.

**BUAD 88 COMMUNICATING WITH PEOPLE** – .5 Unit

*Grading: Pass/No Pass Only*

*Class Hours: 9 lecture total (when offered in the Distance Education format, hours will total 27)*

This course is designed to introduce the student to key elements in communication within business organizations. Topics will include verbal and nonverbal communication, listening skills and specific supervisory communication skills. This course may be offered in a distance education format.
A survey of the major classes of organic compounds including structure, nomenclature, properties, reactions, and the reaction mechanisms; an introduction to the biochemistry of proteins, carbohydrates, lipids, nucleic acids and their basic metabolic reactions. Suitable for nursing, dental hygiene, agriculture/natural resources and non-science majors. The lecture/discussion portion of this course may be offered in a distance education format.

CHEM 6 INTRODUCTORY CHEMISTRY APPLIED TO THE ENVIRONMENT – 4 Units
Prerequisite: A grade of C or higher in MATH 101, or Math Placement Level 3 or higher
Note: Students must provide those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.
Class Hours: 36 lecture/108 lab total
An introduction to the basic principles of general chemistry. Emphasis will be placed on applications to the chemistry of the environment, soils, water, air, agriculture, natural resources, and related consumer products. This course is suitable for environmental technology, agriculture, natural resources, and liberal arts students.

CHEM 10 CHEMISTRY FOR THE LIBERAL ARTS – 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in MATH 101 or Math Placement Level 3 or higher
Note: CHEM 10 will meet the general education requirement for a laboratory science if taken with CHEM 11
Class Hours: 54 lecture (when offered in the Distance Education format, hours will total 162)
An introduction to the major concepts of chemistry involving minimal student friendly math with attention to their relevance to practical and societal problems. This course is intended for non-science majors who wish to gain an appreciation for the application of chemistry to everyday living. The course includes such topics as nuclear energy and energy alternatives; health issues of drugs; food additives, nutrition, hormones, chemicals for household use, chemicals in the environment, and synthetics. This course may include field trips (not in the online format). This course may be offered in a distance education format. This course will meet the general education requirement for a laboratory science if it is taken with CHEM 11.

CHEM 11 CHEMISTRY LABORATORY FOR THE LIBERAL ARTS – 1 Unit
Grading: Pass/No Pass Option
Corequisite: Students must be concurrently enrolled in, or have completed CHEM 10 with a grade of C or higher
Note: CHEM 10 taken with CHEM 11 meets GE requirement in science.
Class Hours: 54 lab total (when offered in the Distance Education format, hours will total 54)
Laboratory experiments and demonstrations, almost entirely non-mathematical, covering the basic concepts of the lecture course, CHEM 10. The laboratory is designed to help students learn how to use various chemicals around us, safely and effectively. This course may include field trips. This course may be offered in a distance education format.

CHEM 16 CHEMICAL PROBLEM-SOLVING – 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in MATH 101 or Math Placement Level 3 or higher
Note: Students must provide those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
An introductory chemistry course for students who plan to major in a scientific field. This course is also designed to prepare students for General Chemistry 1A. The major emphasis of the course will be on chemical problem-solving. This course may be offered in a distance education format.

CHEM 26 FUNDAMENTALS OF GENERAL, ORGANIC, AND BIOCHEMISTRY – 4 Units
Class Hours: 72 lecture total (when offered in the Distance Education format, hours will total 216)
An introduction to the fundamental principles of general, organic, and biochemistry delivered completely online that will emphasize practical applications to nursing and health professions. This course will fulfill the CSU-Chico requirement for entry to the RN to BSN upgrade program. It is also suitable for AA degree programs and non-science transfer students. It may fulfill requirements for other related health and nutritional degree programs. This course may be offered in a distance education format.
CHEM 70  ORGANIC CHEMISTRY – 4 Units
Prerequisite: A grade of C or higher in CHEM 1B
Note: CHEM 70A should be taken concurrently with CHEM 70 for science majors for transfer
Class Hours: 54 lecture/18 discussion total (when offered in the Distance Education format, hours will total 216)
Structure, bonding, Polar bonds and their consequences, Alkanes and Cycloalkanes, stereochemistry and physical properties of organic compounds. Overview of organic reactions, reactions and mechanisms of alkanes, alkenes, alkynes, organic halides, Nucleophilic substitutions and eliminations. Science majors should take a second semester organic course, CHEM 71, which completes the required two-semester sequence. CHEM 70A, laboratory course, should be taken concurrently for science majors. Check school of transfer for their requirements. This course may be offered in a distance education format.

CHEM 70A  ORGANIC CHEMISTRY LABORATORY – 1 Unit
Prerequisite: A grade of C or higher in CHEM 1B
Corequisite: Students must be concurrently enrolled in, or have completed CHEM 70 with a grade of C or higher
Note: Chemistry majors are required to take CHEM 70A concurrently with CHEM 70. Students must provide those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.
Class Hours: 54 lab total
Theory and application of organic chemistry laboratory techniques.

CHEM 71  ORGANIC CHEMISTRY – 3 Units
Prerequisite: A grade of C or higher in CHEM 70
Note: CHEM 71A should be taken concurrently with CHEM 71 for science majors for transfer
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A continuation of CHEM 70. Infrared Spectroscopy, Mass Spectrometry, Nuclear Magnetic Resonance, Conjugated Dienes and Ultraviolet Spectroscopy, Benzene and Aromaticity, Chemistry of Benzene, Electrophilic Aromatic Substitution Alcohols and Phenols, Ethers and Epoxides, Thiols and Sulfides, Aldehydes and Ketones, Carboxylic Acids, Carboxylic Acid Derivatives and Nucleophlic Acid substitution, Carbonyl alpha-substitution Reactions Carbonyl Condensation, Amines, Carbohydrates, Amino Acids, Peptides and Proteins, Lipids. This course completes a two-semester sequence for science majors. CHEM 71A, laboratory course, should be taken concurrently for science majors. Check school of transfer for their requirements. This course may be offered in a distance education format.

CHEM 71A  ORGANIC CHEMISTRY LABORATORY – 2 Units
Prerequisite: A grade of C or higher in CHEM 70A
Corequisite: Students must be concurrently enrolled in or have completed CHEM 71 with a grade of C or higher
Note: Chemistry majors are required to take CHEM 71A concurrently with CHEM 71. Students must provide those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.
Class Hours: 108 lab total
A continuation of Organic CHEM 70A. Theory and application of organic chemistry laboratory techniques.

CHINESE (CHIN)

CHIN 1  ELEMENTARY MANDARIN CHINESE – 5 Units
Grading: Pass/No Pass Option
Class Hours: 90 lecture total
This introductory course is designed to give the student thorough and intensive practice in speaking and listening to Chinese and reading and writing Chinese characters. The course will focus on communicative competence in situations relating to daily routines, home life, college life, and everyday activities such as meeting and describing people. Students are introduced to the culture of Chinese speakers in China and in other countries.

COMMUNICATION STUDIES (CMST)

CMST 10  INTERPERSONAL COMMUNICATION – 3 Units
(formerly SPCH 10/10A)
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 54 lecture total
This course is an introduction to the process of human communication with emphasis on the rhetorical principles of social interaction. The examination of the psychological, social, cultural and linguistic factors that affect normal person-to-person interactions includes: the structure of the communication message and process; developing effective messages; clear organization of the message; critical thinking skills in problem solving; analyzing, adapting to and responding to the audience; and delivery of the message both verbally and nonverbally. This course includes individual and group practice which will be evaluated. Each student will demonstrate their understanding and comprehension of Rhetorical Theory by successfully making prepared, evaluated, oral presentations throughout the semester. College level writing skills will be expected on all papers, outlines and short essays. This course satisfies the Oral Communication requirement for the Associate Degree.

CMST 20  INTERCULTURAL COMMUNICATION – 3 Units
(formerly SPCH 28)
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
The purpose of this course is to develop the skills necessary to build and maintain positive communication and relationships across cultures. Students will focus on similarities and differences in communication behaviors. Perceptions, language usage, nonverbal style, thinking modes, and values will be explored to see how these influence face-to-face communication between individuals of different cultures. This course may be offered in a distance education format.

CMST 30  ORAL INTERPRETATION – 3 Units (formerly SPCH 30)
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190, or a English Placement Level 6 or higher
Class Hours: 54 lecture total
This course is an introduction to the process of human communication with emphasis on the oral interpretation of literature. Subjects covered are analyzing the literature, using nonverbal and verbal communication in the interpretation of literature and the understanding, appreciation and performance of prose and poetry. College level writing skills will be expected on all papers, outlines and short essays. This course includes oral performance of literature.

CMST 40  ARGUMENTATION AND DEBATE – 3 Units (formerly SPCH 40)
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher; and completion of a class in public speaking or public speaking experience
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course is an introduction to the nature of argument and critical thinking, including methods of analysis, research, critical evaluation of reasoning and evidence, refutation, and debate as a practical application of argumentation. Basic principles are applied in a variety of formal and informal debate situations. Public speaking training and/or experience are recommended for enrollment. This course may be offered in a distance education format.

CMST 50  SMALL GROUP COMMUNICATION – 3 Units (formerly SPCH 50)
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher
Class Hours: 54 lecture total (.5 to 1.5 units may be offered in the Distance Education format)
This course is an introduction to the process of human communication with experience on small groups. Subjects covered are preparation for discussion, group participation, leadership, decision-making, interpersonal relations, managing diversity, critical thinking/problem-solving, managing conflict, and evaluation of group interaction. Students will be involved in group interactions and emphasis will be placed on practical experience. College level writing skills will be expected on all papers, outlines and short essays. A portion of this course may be offered in a distance education format.

CMST 60  PUBLIC SPEAKING – 3 Units (formerly SPCH 60/60A)
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 54 lecture total
This course is an introduction to the process of human communication with emphasis on public speaking. The subjects covered are: speech topic selection, audience analysis, information competency (e.g. researching, evaluating and using supporting materials), presentation outlining, principles of effective speech delivery, critical evaluation of speeches, and presentation of informative and persuasive speeches. Most students will have the opportunity to be recorded and to use presentation technology. College level writing skills will be expected on all papers, outlines and short essays.
Chapter 6 – Course Descriptions

CMST 75 FORENSICS WORKSHOP – 3 Units
Grading: Pass/No Pass Option
Note: Field trips are required
Class Hours: 16 lecture/108 lab total
Principles of applied speech communication through participation in competitive
intramural and intercollegiate speech performances and/or performance festivals,
including debate, public speaking and interpretive performances. In addition to
forensic competition, the student will debate, speak and perform before a variety of
audiences (including community groups and clubs, Math and Business
Learning Center). Students taking the Internet format of this course must have
access to the Microsoft Operating System and Office Suite—further information
will be provided on the first day of class.
Class Hours: 45 lecture/27 lab total (when offered in the Distance Education
format, hours will total 162)
This course is designed to help students achieve a degree of computer literacy
through exposure to a variety of basic computer concepts including discussions of
hardware/software, computer history, programming, computer ethics, and
professional responsibilities. In addition, the student will be exposed to several
hands-on applications such as word processing (Windows), spreadsheet software (MS Excel),
database software (MS Access), and presentation software (MS PowerPoint). This course may be offered in a
distance education format.

CMST 97 SPECIAL TOPICS IN COMMUNICATION STUDIES - .5-2 Units
(formerly SPCH 97/91AD)
Grading: Pass/No Pass Option
Class Hours: 9-36 lecture total
This course is an introduction to the process of human communication with an
emphasis on public speaking. Subjects covered may include analyzing audiences,
choosing speech topics, finding and using supporting materials, arranging and
outlining related points, demonstrating essentials of speech delivery, and
evaluating speeches. Most students will have the opportunity to be videotaped
and to use presentation technology. College level writing skills will be expected
on all papers, outlines, and short essays.

COM 20 INTRODUCTION TO MULTI-MEDIA – 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
This course introduces the concepts, principles, and creation of relational
SQL database theory and design. Implementation of SQL database design will be
covered in this course, including the fundamentals of the relational database;
the principles and elements of the relational database; design of tables
ranging from .5 to 2 units. This is a service course for communication majors.

COM 21 MULTI-MEDIA AUTHORING – 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total (when offered in the Distance Education format,
hours will total 162)
This course introduces the process of human communication with an
emphasis on public speaking. Subjects covered may include analyzing audiences,
choosing speech topics, finding and using supporting materials, arranging and
outlining related points, demonstrating essentials of speech delivery, and
evaluating speeches. Most students will have the opportunity to be videotaped
and to use presentation technology. College level writing skills will be expected
on all papers, outlines, and short essays.

COM 22 BEGINNING TV PRODUCTION – 3 Units
Class Hours: 27 lecture/81 lab total
A basic course in the theory and operation of television broadcast equipment.
Students will complete projects and activities so that they can effectively operate
broadcast equipment and understand its engineering and production capabilities.
This is a beginning course in television production.

COM 30 INTRODUCTION TO AUDIO RECORDING – 3 Units
Grading: Pass/No Pass Option
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format,
hours will total 162)
This is an introduction to the fundamentals of audio recording. Concepts covered
will include the fundamentals of electricity, musical acoustics and audio theory.
Course enrollment is open to communication and non-communication majors.
Topics include: basics of electricity, acoustics, psychoacoustics, audio measurement
of terms and concepts, microphones, mixers, signal processing and
this course may be offered in a distance education format.

COM 31 INTRODUCTION TO DIGITAL AUDIO – 3 Units
Grading: Pass/No Pass Option
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format,
hours will total 162)
This is an introduction to the fundamentals of digital audio theory, editing, MIDI
sequencing and the production of digital audio for the web and video and a
variety of other media. Topics to be covered are digital audio theory, two track
digital editing, multi-channel recording, digital sequencing, and time-code. Course
enrollment is open to communication and non-communication majors. This course may be offered in a distance education format.

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.
Distance education format.

Class Hours: 45 lecture/27 lab total (when offered in the Distance Education format, hours will total 162)

This course is designed to provide individuals with a complete introduction to database concepts and the relational model using Structured Query Language. Topics include normalization, design methodology, database administration, SQL commands, SQL functions and procedures. At the completion of this course, students should be able to understand a user's database requirements and translate those requirements into a viable database design using SQL. The MySQL and the Microsoft Access versions of SQL are utilized in the class exercises and projects. This course may be offered in a distance education format.

CIS 31 CISCO CCNA 1 - NETWORKING FOR HOME AND SMALL BUSINESSES – 3 Units (formerly MIS 32, MIS 1)

Advisory: A grade of C or higher in CIS 2

Class Hours: 45 lecture/27 lab total (when offered in the Distance Education format, hours will total 162)

This course is the first in a two-course series designed to prepare students for the Cisco Certified Entry Network Technician (CCENT) exam, and the course is the first of a four-course series designed to prepare students for the Cisco Certified Networking Associate (CCNA) exam. This course is offered by Shasta College as the Cisco Regional Networking Academy in the area. Instructional materials developed by Cisco Systems are utilized for the course. The course teaches students the skills needed to obtain entry-level home network installer jobs. It also teaches students how to develop some of the skills needed to become network technicians, computer technicians, cable installers, and help desk technicians. It provides a hands-on introduction to networking and the Internet using tools and hardware commonly found in home and small business environments. Labs include basic installation and configuration, connectivity, file and print sharing, and the installation of game consoles, scanners, and cameras. This course may be offered in a distance education format.

CIS 32 CISCO CCNA 2 – WORKING AT A SMALL-TO-MEDIUM BUSINESS OR ISP – 3 Units (formerly MIS 32, MIS 2)

Prerequisite: A grade of C or higher in CIS 31

Class Hours: 45 lecture/27 lab total (when offered in the Distance Education format, hours will total 162)

This course is the second in a two-course series designed to prepare students for the Cisco Certified Entry Network Technician (CCENT) exam, and the course is the second of a four-course series designed to prepare students for the Cisco Certified Networking Associate (CCNA) exam. This course is offered by Shasta College as the Cisco Regional Networking Academy in the area. Instructional materials developed by Cisco Systems are utilized for the course. The course prepares students for jobs as network technicians. It also helps students develop additional skills required for computer technicians and help desk technicians. It provides a basic overview of routing and remote access, addressing, and security. It familiarizes students with servers that provide email services, Web space, and authenticated access. Students learn soft skills required for help desk and customer service positions. Network monitoring and basic troubleshooting skills are taught in context. This course may be offered in a distance education format.

CIS 33 CISCO CCNA 3 – ROUTING AND SWITCHING IN THE ENTERPRISE – 3 Units (formerly MIS 33, MIS 3)

Prerequisite: A grade of C or higher in CIS 32

Class Hours: 45 lecture/27 lab total (when offered in the Distance Education format, hours will total 162)

This course is the third in a four-course series designed to prepare students for the Cisco Certified Networking Associate (CCNA) exam. The course is offered by Shasta College as the Cisco Regional Networking Academy in the area. Instructional materials developed by Cisco Systems are utilized for the course. The course familiarizes students with the equipment applications and protocols installed in enterprise networks, with a focus on switched networks, IP Telephony requirements, and security. It also introduces advanced routing protocols including Enhanced Interior Gateway Routing Protocol (EIGRP) and Open Shortest Path First (OSPF) Protocol. Other specific topics include Virtual LANs, Access Control Lists, and Inter-VLAN routing. Hands-on exercises include configuration, installation, and troubleshooting. This course may be offered in a distance education format.

CIS 34 CISCO CCNA 4 – DESIGNING AND SUPPORTING COMPUTER NETWORKS – 3 Units (formerly MIS 34, MIS 4)

Prerequisite: A grade of C or higher in CIS 33

Class Hours: 45 lecture/27 lab total (when offered in the Distance Education format, hours will total 162)

This course is the fourth in a four-course series designed to prepare students for the Cisco Certified Networking Associate (CCNA) exam. The course is offered by Shasta College as the Cisco Regional Networking Academy in the area. Instructional materials developed by Cisco Systems are utilized for the course. Learners progress through a variety of case studies and role-playing exercises, which include gathering requirements, designing basic networks, establishing proof-of-concept, and performing project management tasks. Lifecycle services, including upgrades, competitive analysis, and system integration, are presented in the context of pre-sales support. This course may be offered in a distance education format.

CIS 39 CISCO NETWORKING – CCNA SECURITY – 3 Units

Advisory: A grade of C or higher in CIS 34 or CCNA Certification

Class Hours: 45 lecture/27 lab total (when offered in the Distance Education format, hours will total 162)

This course is offered by Shasta College in its role as a Cisco Local Networking Academy. This course prepares students for the Cisco CCNA Security certification exam. This is a widely recognized entry level certification in the network security field. Obtaining this certification will provide Shasta College students with a competitive advantage in advancing to skilled technician positions in the high-demand job markets of computer and network security. Topics that will be addressed include: vulnerabilities and threats, security policy, security technologies and solutions, firewall and secure router design, switch security, intrusion detection, access lists, VPNs, cryptography, and hands-on equipment configuration. This course may be offered in a distance education format.

CIS 50 WINDOWS 8 – CONFIGURATION – 1 Unit

Class Hours: 9 lecture/27 lab total

A Microsoft Certified Solutions Associate course. The terminology, planning, installation, configuration, administration, and troubleshooting of the Windows 8 operating system will be covered. The course is designed to prepare a student to take and pass the Microsoft Certification Exam 70-687 and for employment in the IT field. Students who enrolled in version Windows 7 or earlier will be able to enroll in Windows 8.

CIS 51 MANAGING AND MAINTAINING WINDOWS 8 – 1 Unit

Class Hours: 9 lecture/27 lab total

This is a Microsoft Certified IT Professional course with emphasis on managing and maintaining a Windows 8 client system. The terminology, planning, installation, configuration, administration, and troubleshooting of applications in the Windows 8 environment will be covered. The course is designed to prepare a student to take and pass the Microsoft Certification Exam 70-688 and for employment in the IT field. Students who enrolled in version Windows 7 or earlier will be able to enroll in Windows 8.

CIS 52 INSTALL AND CONFIGURE SERVER 2012 – 1 Unit

Class Hours: 9 lecture/27 lab total

A Microsoft Certified IT Professional course with emphasis on installing and configuring Windows Server 2012. The terminology, planning, installation, configuration, administration, and troubleshooting a Windows Server 2012 environment will be covered. The course is designed to prepare a student to take and pass the Microsoft Certification Exam 70-410 and for employment in the IT field. Students who took CIS 52 with an earlier Server version will be able to enroll in Windows Server 2012.

CIS 53 ADMINISTERING SERVER 2012 – 1 Unit

Class Hours: 9 lecture/27 lab total

A Microsoft Certified IT Professional course with emphasis on administering Windows Server 2012 network infrastructure. The terminology, planning, installation, configuration, administration, and troubleshooting a Windows Server 2012 environment will be covered. The course is designed to prepare a student to take and pass the Microsoft Certification Exam 70-411 and for employment in the IT field. Note: Students who took CIS 53 with an earlier Server version will be able to enroll in Windows Server 2012.

CIS 54 CONFIGURE ADVANCED SERVER 2012 SERVICES – 1 Unit

Class Hours: 9 lecture/27 lab total

A Microsoft Certified IT Professional course with emphasis on configuring Windows Server 2012 services. The terminology, planning, installation, configuration, administration, and troubleshooting a Windows Server 2012 environment will be covered. The course is designed to prepare a student to take and pass the Microsoft Certification Exam 70-412 and for employment in the IT field. Note: Students who took CIS 54 with an earlier Server version will be able to enroll in Windows Server 2012.

CIS 55 EXCHANGE SERVER 2010, CONFIGURATION – 1 Unit

Class Hours: 9 lecture/27 lab total

A Microsoft Certified IT Professional course with emphasis on installing and configuring Microsoft Exchange Server 2010. The terminology, planning, installation, configuration, administration, and troubleshooting an Exchange Server 2010 environment will be covered. The course is designed to prepare a student to take and pass the Microsoft Certification Exam 70-622 and for employment in the IT field. Note: Students who took CIS 55 with an earlier Server version will be able to enroll in Windows Server 2010.
CIS 57  INTRODUCTION TO COMPUTERS THROUGH GAMING – 3 Units  
Class Hours: 36 lecture/54 lab total  
This course is designed to get students interested in the computer field by teaching concepts as they relate to computer gaming. The course will cover the necessary computer troubleshooting and repair, networking, internet research, and overall computer knowledge needed to use sophisticated networked and online games. This course will include hands-on activities such as labs and projects to further learning and experience.

CIS 60  VISUAL BASIC PROGRAMMING – 3 Units (form. BUSI 27, MIS 27)  
Advisory: A grade of C or higher in CIS 2  
Class Hours: 36 lecture/54 lab total  
This course is intended to teach programming techniques using the Visual Basic language. Students will be introduced to Visual Basic statements including, but not limited to input, output, computation, looping, arrays, subroutines, file processing commands, form layout, objects, events, and Visual Basic tools. Students will design, code, test, and execute several detailed business-oriented programs ranging from very simple to complex.

CIS 61  C++ LANGUAGE PROGRAMMING – 3 Units (formerly MIS 25)  
Advisory: A grade of C or higher in CIS 2  
Class Hours: 36 lecture/54 lab total  
A study of the C++ Programming language. Emphasis is placed on programming theory and structure including data types, selection and interaction structures, functions, arrays, pointers, graphics, objects and classes.

CIS 62  JAVA PROGRAMMING – 3 Units (formerly MIS 17)  
Advisory: A grade of C or higher in CIS 2  
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 162)  
Java is a platform-neutral, object-oriented, and secure programming language that is quickly becoming the standard programming language for creating interactive content on the World Wide Web (WWW). This course covers Java programming language and the standard Java class libraries. This course may be offered in a distance education format.

CIS 63  ASSEMBLER LANGUAGE PROGRAMMING – 4 Units (formerly MIS 24)  
Prerequisite: A grade of C or higher in CIS 2  
Class Hours: 54 lecture/54 lab total (when offered in the Distance Education format, hours will total 216)  
In this course students will learn the functions and organization of a modern computer microprocessor including control unit, ALU, register files, cache memory, program counter, and instruction register. The internal binary representation of both data and instructions will be studied including ASCII characters, instruction formats, and two’s complement number system. Emphasis will be placed on understanding machine language instruction formats and developing computer programs in assembly language. Integer instruction sets will be the primary focus, but floating point instructions will be introduced. A pseudocoding technique will be learned which will facilitate development of code in assembler language. Programming techniques and concepts will be studied including function calls, argument passing, use of the stack, array handling, sorting and searching, reentrant coding, recursive programming, exceptions and interrupts, pipelining, number conversions, and program debugging and documentation. This course is designed to meet transfer requirements in computer science for four-year universities. This course may be offered in a distance education format.

CIS 64  WEB PROGRAMMING USING JAVA/PHP/FLASH – 3 Units  
Grading: Pass/No Pass Option  
Advisory: A grade of C or higher in CIS 2  
Class Hours: 36 lecture/54 lab total  
Java is a platform-neutral, object-oriented, and secure programming language that is quickly becoming the standard programming language for creating interactive content on the World Wide Web (WWW). PHP (Hypertext Preprocessor) is a programming language that allows web developers to create dynamic content that interacts with databases. PHP is basically used for developing web-based software applications. Adobe Flash Professional is used to create content for the Adobe Engagement Platform (such as web applications, games and movies, and content for mobile phones and other embedded devices). This course covers introductory Java Applets, PHP Scripting, and Adobe Flash programming.

CIS 72  FUNDAMENTALS OF LINUX – 3 Units  
Advisory: A grade of C or higher in CIS 2 and CIS 90  
Class Hours: 45 lecture/27 lab total (when offered in the Distance Education format, hours will total 162)  
Fundamentals of Linux is an introductory and hands-on course for new users of the popular Linux operating system. Students will learn basic Linux systems administrative skills using both command-line and graphical terminal tools. Topics will include Linux installation and initialization, file system navigation and management, changing file permissions, the vi and emacs text editors, Bash, KDE, and GNOME shell features, process management, shell scripts, security, backup and recovery, printing, and basic networking including clients and network services. The course prepares students for the CompTia Linux+ certification exam. This course may be offered in a distance education format.

CIS 73  PHOTOSHOP – 1 Unit  
Grading: Pass/No Pass Option  
Advisory: Basic knowledge of word processing and Windows  
Class Hours: 9 lecture/27 lab total  
This course is designed to introduce students to image editing and graphic rendering and design using Adobe Photoshop. This course should enable students to develop their own graphics and text styles with little or no previous training in graphic arts.

CIS 76  CELL PHONE APPLICATIONS DEVELOPMENT – 2 Units  
Advisory: A grade of C or higher in CIS 2 and CIS 61  
Class Hours: 18 lecture/54 lab total (when offered in a Distance Education format, hours will total 162)  
This course covers the development of applications for cell phones such as the iPhone, the Blackberry and more. The course will prepare students to design, program and submit their applications for use on cell phones. This course may be offered in a distance education format.

CIS 83  WEB DESIGN USING DREAMWEAVER – 2 Units  
Grading: Pass/No Pass Option  
Advisory: Basic knowledge of word processing and Windows  
Class Hours: 27 lecture/27 lab total  
This course is designed to introduce students to Web site development using Macromedia Dreamweaver. It will also introduce the students to Flash, Shockwave, CSS and Dynamic Web pages.

CIS 86  HTML – 3 Units  
Grading: Pass/No Pass Option  
Note: This class does not require any special software. Assignments may include work outside class, with the use of computer with standard browsers like Internet Explorer, Mozilla Firefox, Chrome, or Safari. Some computer access is provided on campus at the Learning Resource Center.  
Class Hours: 54 lecture (when offered in the Distance Education format, hours will total 162)  
This is a fundamental course on the Hypertext Markup Language for web page authoring, with lecture and hands-on classes. The topics include: the HTML "TAG" structure, the basic <HTML>, <HEAD> and <BODY> components of a web document, text formatting, creation of hyperlinks, inclusion of images, the use of tables, frame and form structures, and incorporation of multimedia, applets and JavaScripts. The editing, saving and publishing of web pages is performed with the basic tools provided with any of the currently available Windows platforms; no special software is needed for the class. This course may be offered in a distance education format.

CIS 90  A+ CERTIFICATION PREPARATION/CISCO IT ESSENTIALS I – 4 Units  
Advisory: A grade of C or higher in CIS 2  
Class Hours: 54 lecture/54 lab total (when offered in the Distance Education format, hours will total 216)  
This course provides the student with the knowledge and skills to pass the A+ Core Hardware and the A+ OS Technologies certification tests. The CompTIA A+ certification exams are nationally recognized, and measures essential competencies for an entry-level computer technician. Topics covered are microcomputer architecture, personal computer hardware, including Microsoft Windows installations, configurations and troubleshooting. Students learn how to assemble and configure a computer, install operating systems and software, and troubleshoot hardware and software problems. This course may be offered in a distance education format.

CIS 92  INTRO. TO COMPUTER SECURITY – SECURITY + – 3 Units  
Advisory: A grade of C or higher in CIS 31  
Class Hours: 45 lecture/27 lab total (when offered in the Distance Education format, hours will total 162)  
This course provides the student with background, requirements, policies and procedures for establishing and maintaining computer and information system security. Course elements include: Risk discovery and assessment; system planning with cost/benefits analyses; management policies; security practices and procedures within system life cycles and system recovery. The course will stress applied solutions to computer security problems, preparing students for the CompTIA Security+ Certification exam. This course may be offered in a distance education format.
CIS 94 COMPUTER INFORMATION SYSTEMS WORKSITE LEARNING – 1-8 Units
Grading: Pass/No Pass Option
Limitation on Enrollment: Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.
Class Hours: 75 hours paid or 60 hours non-paid per unit
The Vocational Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acquired by the student and related to the student’s major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on the job performance. A student may earn up to 16 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in a single semester.

CONSTRUCTION TECHNOLOGY (CONS)

CONS 45 CAREER PLANNING AND LEADERSHIP FOR HEAVY EQUIPMENT OPERATORS - 2 Units
Class Hours: 36 lecture total
Career opportunities and training requirements in the field of Heavy Equipment Operations will be examined. Students will be assisted in identifying career opportunities and developing career goals. Leadership skills dealing with organizing a meeting, public speaking, and leadership styles will be covered. This class is required of all Equipment Operations and Maintenance students.

CONS 46 EQUIPMENT OPERATIONS & MAINTENANCE – 3 Units
(formerly AGRI 46/ENVR 46)
Grading: Pass/No Pass Option
Limitation on Enrollment: Student must produce a negative test result in accordance with the Shasta College Student Substance Abuse Testing Policy at a student cost to be paid to the designated testing facility prior to enrolling.
Class Hours: 27 lecture/81 lab total
This class covers basic skill-level operation and maintenance of on- and off-road heavy equipment including agriculture and earth moving. Students will not be allowed to operate road equipment without license and driving record. Operational equipment used may include any of the following: dump truck, grader, backhoe, dozer, farm tractor, loader, excavator, forklift, and scraper.

CONS 47 PROJECT CONSTRUCTION FOR EQUIPMENT OPERATIONS – 3 Units
(formerly ENVR 47, AGRI 47)
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in CONS 46 and a grade of C or higher in CONS 48
Note: Students will not be allowed to operate road equipment without a proper license and driving record. Students must be enrolled in the college’s random drug testing program.
Class Hours: 27 lecture/81 lab total
This class teaches intermediate skill-level operation and maintenance of off-road and on-road heavy equipment. It also covers common project construction techniques utilizing heavy equipment with an emphasis on environmental concerns.

CONS 48 SURVEYING FOR EQUIPMENT OPERATORS – 2 Units
(formerly AGRI 48)
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in MATH 100
Class Hours: 18 lecture/54 lab total
This course teaches basic surveying techniques and concepts with emphasis on application for heavy equipment operators. It involves basic problem solving, grade setting and checking, leveling, distance measurement, cut-fill ratio, and basic mapping. The course has a heavy emphasis on field work using various equipment and instruments including levels, compasses tapes, as well as various state-of-the-art electronic surveying devices. This course will prepare students for work on a heavy equipment construction crew.

CONS 52 RESIDENTIAL ESTIMATING - 3 Units
Class Hours: 54 lecture total
This course is designed for learning construction-estimating techniques for both small and medium sized construction projects. It includes estimating materials, costs, labor, taxes, insurance fees, overhead, profit, transportation and contingencies common in the residential construction industry. In this class students will be responsible for interpreting blueprints, developing budgets and estimates, as well as planning a construction project representative of current industry activity.

CONS 53 MATERIALS OF CONSTRUCTION - 3 Units
Class Hours: 54 lecture total
This course provides students fundamental instruction in the green environment, green construction practices, and green building rating systems. This course introduces students to career opportunities and lists the responsibilities and characteristics a worker should possess in the following construction careers: carpenter, electrical, heating, ventilating, and air conditioning (HVAC), plumbing, concrete, heavy equipment, sheet metal, painting and sprinkler fitting. Provides students with techniques for communicating effectively with co-workers and supervisors. Teaches the basic leadership skills required to supervise personnel. Discusses principles of project planning, scheduling, estimating, management, and presents several case studies for student participation.

CONS 54 SURVEY OF THE BUILDING INDUSTRY - 3 Units
Note: Field trips may be required
Class Hours: 54 lecture total
This course provides students fundamental instruction in the green environment, green construction practices, and green building rating systems. This course introduces students to career opportunities and lists the responsibilities and characteristics a worker should possess in the following construction careers: carpenter, electrical, heating, ventilating, and air conditioning (HVAC), plumbing, concrete, heavy equipment, sheet metal, painting and sprinkler fitting. Provides students with techniques for communicating effectively with co-workers and supervisors. Teaches the basic leadership skills required to supervise personnel. Discusses principles of project planning, scheduling, estimating, management, and presents several case studies for student participation.

CONS 55 EQUIPMENT OPERATIONS SKILLS DEVELOPMENT – 1-4 Units
(Formerly AGRI 55EH/AGRI 55/ENVR 55)
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in CONS 46
Limitation on Enrollment: Student must produce a negative test result in accordance with Shasta College Student Substance Abuse Testing Policy at a student cost to be paid to the designated testing facility.
Class Hours: 54 lab hours per unit
The practical application of skills needed to be successful in equipment operation. Includes farm and industrial equipment such as wheel and crawler tractors, forklift, backhoe, motor grader and scraper. Service and adjustment will also be a part of this course. Required of all transfer agriculture, production agriculture and ornamental horticulture majors.

CONS 56 ESSENTIALS OF CONSTRUCTIONS - 3 Units
Class Hours: 54 lecture total
In this course, students will become familiar with traditional and current construction for safety obligations of workers, supervisors, and managers to ensure a safe workplace. This course covers topics such as OSHA-10, construction drawings, components, and symbols including the different types of drawings (civil, architectural, structural, mechanical, plumbing/piping, electrical, and fire protection) and instructs students on how to interpret and use drawing dimensions. Provides the basic terms used to move materials and equipment from one location to another on a job site. Describes inspection requirements and load-handling safety practices. Also reviews American National Standards Institute (ANSI) hand signals. This course covers OSHA-10 training requirements and application.

CONS 84 ANALYSIS OF CONSTRUCTION DRAWINGS AND SPECIFICATIONS – 3 Units
Class Hours: 54 lecture total
This course is designed for employment on approved jobs related to the students major and is supervised by a College representative to ensure that the work experience is of educational value. Good work habits through actual job performance is stressed. One to four units per semester may be taken depending on hours and nature of jobs. One unit of worksite learning credit is granted for 75 hours paid or 60 hours non-paid of on-the-job activity. A student may earn up to 16 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in a single semester.
CONS 148 SURVEYING AND GRADE SETTING FOR CONSTRUCTION – 1 Unit (formerly AGRI 148)
Grading: Pass/No Pass Only
Note: Previous construction experience will be helpful
Class Hours: 9 lecture/27 lab total
This is an advanced level course designed to give the participants practical skills and knowledge in the latest technology and applications related to surveying for construction and grade setting. The course will emphasize skills development and hands-on exercises as well as provide an opportunity for participants to discuss related topics with industry leaders.

CONS 149 CLASS A & B LICENSE TRAINING – 1 Unit (formerly ENVR 149, AGRI 149)
Prerequisite: A grade of C or higher in CONS 46
Note: Students will not be allowed to operate road equipment without a proper license and driving record. Students must be enrolled in the college's random drug testing program. Students must produce a negative test result in accordance with Shasta College Student Substance Abuse Testing Policy at a student cost to be paid to the designated testing facility.
Class Hours: 9 lecture/27 lab total
This is an advanced level course designed to give the participants practical skills and knowledge in the operation and safety of on-road heavy equipment. The course will emphasize safe operation skills, pre-operation inspections and Department of Motor Vehicles Class A and B license training as it pertains to operating on-road heavy equipment.

CONS 150 INTRODUCTION TO RESIDENTIAL CONSTRUCTION - 3 Units
Class Hours: 54 lecture total
This course is recommended for entry-level students in the construction trades. Instruction will include tool safety, estimating costs, foundations, framing, plumbing, electrical, mechanical, and finish carpentry work. The student will gain a basic knowledge of the building trades.

CONS 160 CARPENTRY PRACTICES – 5 Units (formerly CONS 151/152, 151A/151B)
Class Hours: 72 lecture/54 lab total
The purpose of this course is to train students to become competent in the construction trades. Related information including interpretation of layout, estimation of construction costs and choice quantities of materials will be emphasized. Basic skills will be developed with each phase of the job: foundation, framing, exterior and interior trim, and cabinet work. Basic information of building codes will be covered.

CONS 161 ELECTRICAL, PLUMBING AND MECHANICAL SYSTEMS – 5 Units (formerly CONS 154/155)
Class Hours: 72 lecture/54 lab total
This course is designed to give the student a basic understanding of all electrical, plumbing and mechanical systems and to familiarize them with the applicable construction codes, materials and skills.

CONS 178 BUILDING CODES AND STANDARDS – 3 Units
Class Hours: 54 lecture total
This course is designed to provide the crafts-person, building, designer, and inspector with knowledge and insight regarding building regulations and requirements for maintaining construction guidelines and specifications. It covers the use of the latest Uniform Building, Plumbing, Mechanical and Electric Codes and assists in using them to the builder’s advantage. The class also provides information on sources of assistance and publications to meet the needs for dwelling construction industry.

CULINARY ARTS (CULA)
The following courses will require extensive reading and math exercises.

CULA 45 BASIC FOOD PRODUCTION – 5 Units
Corequisite: Students must be concurrently enrolled in, or have completed CULA 50 with a grade of C or higher
Class Hours: 18 lecture/216 lab total
This is a beginning laboratory course in food preparation and presentation including cooking equipment, techniques, and safety procedures, using weights and measures, and interpretation of recipes. Product identification and basic cooking techniques and procedures based on nutrition and classic preparation methods are presented. Students are provided the hands-on experience in preparing meals by following recipe structure and using and modifying recipes based on knowledge gained through the course. Food preparation is produced in a time-restricted setting to prepare for functioning in a commercial kitchen. This course is designed for students interested in pursuing a career in Culinary Arts/Culinary Management.

CULA 46 ADVANCED FOODS – 5 Units
Prerequisite: A grade of C or higher in CULA 45 and a grade of C or higher in CULA 50
Class Hours: 18 lecture/216 lab total
This course examines advanced principles of food preparation of foods served in restaurants. Emphasis given to the planning and preparation of food products relating to restaurants, hotels, and specialty food operations.

CULA 48 GOURMET FOOD PREPARATION – 3 Units
Prerequisite: A grade of C or higher in CULA 45 and a grade of C or higher in CULA 50
Class Hours: 27 lecture/81 lab total
This course is designed to teach advanced food preparation techniques and methods. Students learn to develop recipes and create the art of gourmet cooking through small batch assignments. Areas of focus include gourmet items, buffet specialties, hors d’oeuvres, and canapés, while practicing presentation and garnishing. Small scale preparation is produced in a time-restricted quality-minded setting. This course is for students pursuing a career in culinary arts/culinary management.

CULA 49 MENU PLANNING AND COST ANALYSIS – 2 Units
Class Hours: 36 lecture total
This course is designed to summarize the basic principles of menu planning and layout for various food service operations. Topics included are pricing, nutrition, and types of menus.

CULA 50 SANITATION & SAFETY (formerly CULA 150) – 2 Units
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 36 lecture (when offered in the Distance Education format, hours will total 108)
This course provides sanitation and safety principles and practices for personal and institutional application. Methods and techniques for handling foods safely are examined including food preparation, storage, service, and the prevention of food contamination. Also covered are the importance of microorganisms, food borne illness and food allergies, sanitary facilities and equipment, accident prevention, crisis management, and pest management. Compliance with city, state, and federal health regulation as embodied in HACCP (Hazard Analysis Critical Control Point) are emphasized, along with the supervisor’s responsibilities in maintaining high standards of these principles. This course will provide updated information on USDA, FDA, Codex, and ISO 24,000 regulations and their relationship to food borne illness. The student receives a certificate of completion from the Educational Foundation of the National Restaurant Association upon the successful completion of this course with a passing grade of 75% or higher. This course will provide the safe use of culinary equipment and its proper use to avoid accidents. This course is required for all Culinary Arts/Culinary Management students and is advised to be taken as the first course prior to all other culinary courses or in conjunction with the first few. It may be used for American Culinary certification and recertification, and is required for the Dietary Service Supervisor Certificate offered by the Nutrition Department. This course may be offered in a distance education format.

CULA 55 PURCHASING – 2 Units (formerly CULA 155)
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 36 lecture total (when offered in the Distance Education format, hours will total 108)
This course will cover the function of purchasing from the viewpoint of management. It discusses channels of distribution, buying techniques, specification writing and other principles needed to perform this critical activity. This course may be offered in a distance education format.

CULA 59 CATERING AND EVENT PLANNING – 3 Units
Prerequisite: A grade of C or higher in CULA 45 and a grade of C or higher in CULA 50
Advisory: A grade of C or higher in ENGL 280 or English Placement Level 5 or higher, concurrent enrollment in CULA 94
Class Hours: 36 lecture/54 lab total
This course provides practical experiences designed to supplement the basic curriculum and includes special cooperative educational opportunities set up with the College and approved Chefs. Experiences include special and short order food preparation and service, buffet service, catering, dining room management and service and receiving and storeroom procedures. Large scale and small quantity preparation is produced in a time-restricted quality minded setting. This course is for students pursuing a career in culinary arts/culinary management.

CULA 60 BEVERAGE MANAGEMENT – 2 Units
Class Hours: 36 lecture total
Identification, production, purchasing, and service of spirits, wine and beer products. Marketing, menu development, and cost controls of a beverage operation. Special emphasis on staffing, training, and legal regulations for beverage sales.
CULA 65  DINING ROOM SERVICE – 3 Units
Class Hours: 27 lecture/8 lab
In this course, students will learn in a live environment, the skills and techniques of the “front of the house” service staff. Throughout this course, students will rotate through basic dining room positions, learning and practicing their skills in front of dining room guests, in our public dining facility. Emphasis will be on the basic serving techniques and on customer satisfaction.

CULA 66  WINE WITH FOOD – 2 Units
Limitation on Enrollment: Students must be 21 years of age or older to take this course.
Class Hours: 36 lecture total
This course is designed to teach students the applied approach to match wine and food from different parts of the world using flavors, textures, and components present in food and wine as complementing strategies. Emphasis on menu planning, preparation of foods, cooking methods, and tasting wines with food. Concepts can be applied to home preparation of food with wine, restaurant food production with wine, and dining out.

CULA 73  INTRODUCTION TO WINES – 2 Units
Grading: Pass/No Pass Option
Limitation on Enrollment: Students must be 21 years of age or older to take this course.
Class Hours: 36 lecture total
Characteristics of wines from the major varietals emphasized. Identification of wines from the wine districts of California, France, Germany, and Italy. The concept of food and wine pairing will also be evaluated.

CULA 74  BASIC WINEMAKING – 2 Units
Grading: Pass/No Pass Option
Limitation on Enrollment: Students must be 21 years of age or older to take this course.
Class Hours: 27 lecture/27 lab
This is a course in the basic science and technology of winemaking. It is intended for the entrepreneur exploring business opportunities in the grape wine industry, and/or the prospective small winery employee, as well as the home winemaker, interested in career or skills development. Hands-on winemaking from crush through fermentation will be covered.

CULA 75  PASTRY – 2 Units
Prerequisite: A grade of C or higher in CULA 50 and a grade of C or higher in CULA 172
Class Hours: 18 lecture/54 lab total
This course covers fundamental baking skills for students who intend to specialize in baking and pastry making for commercial production. Production of yeast and quick breads, cakes, cookies, pies, and pastries, as well as decorating and icings are undertaken, with emphasis placed on more sophisticated items and gourmet specialties including cakes and pastries for weddings, birthdays and special occasions. Gourmet baked items and pastries are produced in a time-restricted quality-minded setting. This course is for students pursuing a career in culinary arts/culinary management.

CULA 76  INTERMEDIATE WINEMAKING – 2 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in CULA 74
Limitation on Enrollment: Students must be 21 years of age or older to take this course.
Class Hours: 27 lecture/27 lab
This is an intermediate course in the science and technology of winemaking. It is intended for the entrepreneur exploring business opportunities in the grape wine industry, and/or the prospective small winery employee, as well as the home winemaker, interested in career or skills development. This course encompasses winemaking in the realms of wine analysis, chemistry, and treatments.

CULA 78  SENSORY EVALUATION OF WINE – 2 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in CULA 73 or CULA 66
Limitation on Enrollment: Students must be 21 years of age or older to take this course.
Class Hours: 36 lecture
This course will provide the student a better understanding of wine by learning about the senses and how to use them. Students will learn how to describe wines precisely, practice tasting varietals, learn how to judge good and bad wines, and how a wine’s sensory characteristics are created in the vineyard and the winery.
CULA 172  BAKING – 2 Units
Corequisite:  Students must be concurrently enrolled in, or have completed CULA 50 with a grade of C or higher
Class Hours:  18 lecture/54 lab total
This course covers fundamental baking skills for students who intend to specialize in baking and pastry making for commercial production. Production of yeast and quick breads, cakes, cookies, pies, and pastries, as well as decorating and icings are undertaken. Gourmet baked items and pastries are produced in a time-estimated quality-minded setting. This course is for students pursuing a career in culinary arts/culinary management.

DANCE (DAN)

DAN 10  DANCE COMBINATIONS – 1 Unit
Grading:  Pass/No Pass Option
Class Hours:  54 lab total
Introduction to the fundamental movement, technique, terminology, choreography, and philosophy of jazz, ballet, and modern dance.

DAN 15  FUNDAMENTALS OF CHOREOGRAPHY – 1 Unit
Grading:  Pass/No Pass Option
Advisory:  Previous dance experience or concurrent enrollment in dance classes
Class Hours:  54 lab total
Introduction to the fundamentals of choreography for concert dance. This course will explore the elements of space and its use. Students portray a topic of interest through a dance discipline, experimenting with movement style and choice of music accompaniment. The course will include analysis and critique of the student’s own work, the work of other students and of professional and historic choreography. Students will have the opportunity to audition completed works for Shasta College Dance Concerts.

DAN 16  INTERMEDIATE CHOREOGRAPHY – 1 Unit
Grading:  Pass/No Pass Option
Advisory:  A grade of C or higher in DAN 15 or previous dance experience
Class Hours:  54 lab total
This is a continuation of the Fundamentals of Choreography. The class will expand on concert dance into commercial work and musical theater; working within the parameters of someone else’s criteria. The course will elaborate on the elements of space and its use. Students may come up with their own topics of interest, using a dance discipline of their choice for choreography. Analysis and critique of the works presented will include professional and historical choreography references. Students will be invited to audition completed works for presentation at the Shasta College dance concerts.

DAN 17  ADVANCED CHOREOGRAPHY AND DANCE ANALYSIS – 1 Unit
Grading:  Pass/No Pass Option
Class Hours:  54 lab total
This course is an advanced class in choreography. Students will have the opportunity to apply the knowledge and skills they have acquired through the technique and choreography classes to create a project that is complete for presentation. As part of the choreographic training, the student will have the option to collaborate with students from other artistic disciplines, sometimes using digital tools to blend dance with video and sound, design their own lighting and prepare a piece for public performance

DAN 20A  BEGINNING MODERN DANCE – 1 Unit
(formally DAN 20, PE 40, HPE 36AB)
Grading:  Pass/No Pass Option
Class Hours:  54 lab total
Fundamental movement, techniques, terminology, basic rhythm, and simple choreography of modern dance.

DAN 20B  INTERMEDIATE MODERN DANCE - 1 Unit
(formally DAN 21, PE 43, HPE 47AD, HPE 36CD)
Grading:  Pass/No Pass Option
Advisory:  A grade of C or higher in DAN 20A
Class Hours:  54 lab total
Movement, techniques, terminology, basic rhythm, and choreography of modern dance at an intermediate level.

DAN 20C  ADVANCED INTERMEDIATE MODERN DANCE - 1 Unit
Grading:  Pass/No Pass Option
Advisory:  A grade of C or higher in DAN 20B
Class Hours:  54 lab total
A class for modern dance students interested in more technical and sophisticated performing and choreography.

DAN 20D  ADVANCED MODERN DANCE - 1 Unit
Grading:  Pass/No Pass Option
Advisory:  A grade of C or higher in DAN 20C
Class Hours:  54 lab total
A class for modern dance students interested in advanced choreography and performance experience.

DAN 30A  BEGINNING BALLET – 1 Unit
(formally DAN 30, PE 41, HPE 37AB)
Grading:  Pass/No Pass Option
Class Hours:  54 lab total
This course is an introduction to the art form of classical concert dance and includes beginning classical technique, emphasis on body placement; introduction to classical ballet terminology used worldwide, recognition of the musical rhythms that accompany specific historic steps, beginning choreography of most used ballet step combinations and patterns.

DAN 30B  INTERMEDIATE BALLET – 1 Unit
(formally DAN 31, PE 44, HPE 45AD, HPE 37CD)
Grading:  Pass/No Pass Option
Advisory:  A grade of C or higher in DAN 30A
Class Hours:  54 lab total
This is an intermediate level course of classical concert dance and includes intermediate level techniques, recognition of differences in classroom labels between different schools of ballet, developing ability in coordination of steps, musical rhythms and recognition of ballet steps, combinations and patterns.

DAN 30C  ADVANCED INTERMEDIATE BALLET – 1 Unit
(formally DAN 31, PE 44, HPE 45AD, HPE 37CD)
Grading:  Pass/No Pass Option
Advisory:  A grade of C or higher in DAN 30B
Class Hours:  54 lab total
This is a class for ballet students interested in developing a more technical and sophisticated aspect of classical dance. Students will be instructed in the process of the classical exercises and be able to identify their purpose. Students will gain knowledge of the different schools of thought and the terminology of classical dance. There are performance and choreographic requirements and opportunities.

DAN 30D  ADVANCED BALLET, POINTE AND PARTNERING – 1 Unit
(formally DAN 32)
Grading:  Pass/No Pass Option
Advisory:  A grade of C or higher in DAN 30C
Class Hours:  54 lab total
This is an advanced level of ballet for the student who is ready to approach the art of classical technique that involves dancing on pointe and the fundamentals of partnering another dancer. Students will be taught original variations from past masters as well as contemporary work of choreographers working today. Performance opportunities are available each semester.

DAN 40A  BEGINNING JAZZ DANCE – 1 Unit
(formally DAN 40, PE 42 and HPE 72AB)
Grading:  Pass/No Pass Option
Class Hours:  54 lab total
Fundamental movement, techniques, terminology, basic rhythm, and simple choreography of jazz dance.

DAN 40B  INTERMEDIATE JAZZ DANCE – 1 Unit
(formally DAN 41, PE 45, HPE 72CD, HPE 46AD)
Grading:  Pass/No Pass Option
Advisory:  A grade of C or higher in DAN 40A
Class Hours:  54 lab total
Movement, techniques, terminology, rhythm, and choreography of jazz dance at an intermediate level.

DAN 40C  ADVANCED INTERMEDIATE JAZZ DANCE – 1 Unit
Grading:  Pass/No Pass Option
Advisory:  A grade of C or higher in DAN 40B
Class Hours:  54 lab total
A class for jazz dance students interested in a more technical and sophisticated performing and choreography.

DAN 40D  ADVANCED JAZZ DANCE – 1 Unit
Grading:  Pass/No Pass Option
Advisory:  A grade of C or higher in DAN 40C
Class Hours:  54 lab total
A class for jazz dance students interested in advanced technical and sophisticated performing and choreography.

DAN 50A  BEGINNING TAP DANCE – 1 Unit (formerly PE 50, 46)
Grading:  Pass/No Pass Option
Class Hours:  54 lab total
This class will introduce beginning sounds of tap. It will build technique, both physical and mental of this classic art form.
DENTAL (DNTL)

DNTL 10 ORAL BIOLOGY - 3 Units
Limitation on Enrollment: Enrollment in the Dental Hygiene Program
Class Hours: 54 lecture/18 lab total
The study of embryology and histology of oral structural formation, clinical recognition of normal oral structures, the physiological and structural functions of teeth and supporting tissues, and oral anatomy relative to proper dental hygiene procedures.

DNTL 11 ORAL RADIOLOGY - 3 Units
Limitation on Enrollment: Enrollment in the Dental Hygiene Program
Class Hours: 36 lecture/54 lab total
This course focuses on radiation physics, biology, protection, quality, dental techniques, film processing and mounting, interpretation of errors, recognition of anatomical landmarks, and evidence of pathologies. Students practice skills on radiographic models and student patients in a clinical setting; all skills are taught to clinical competence. This course builds on basic and dental sciences and prepares for clinical dental hygiene practice.

DNTL 12 HEAD AND NECK ANATOMY - 2 Units
Limitation on Enrollment: Enrollment in the Dental Hygiene Program
Class Hours: 27 lecture/27 lab total
This course studies the anatomical structures of the head and neck regions and relates these structures to the clinical practice of Dental Hygiene.

DNTL 13 DENTAL HEALTH EDUCATION/SEMINAR – 2 Units
Limitation on Enrollment: Enrollment in the Dental Hygiene Program
Class Hours: 36 lecture total
Principles and practices of prevention and control of dental disease with emphasis on nutrition, and plaque control, motivation and chairside patient education.

DNTL 14 INTRODUCTION TO CLINIC – 4 Units
Limitation on Enrollment: Enrollment in the Dental Hygiene Program
Class Hours: 36 lecture/108 lab total
Introduction to all clinical procedures and skills needed for Dental Hygiene.

DNTL 20 LOCAL ANESTHESIA AND NITROUS OXIDE – 2 Units
Prerequisite: A grade of C or higher in each of the following courses: DNTL 10, DNTL 11, DNTL 12, and DNTL 14
Class Hours: 18 lecture/54 lab total
Covers the pharmacology and physiology of local anesthetic agents and effective technique in delivery of these agents to the oral cavity. Focuses on the anatomy of the nerves, physiology of nerve conduction, and how anesthetics work. Discusses the prevention and management of associated emergencies. Skills are practiced in a clinical setting on student patients: all skills are taught to clinical competence.

DNTL 21 GENERAL AND ORAL PATHOLOGY – 4 Units
Prerequisite: A grade of C or higher in each of the following courses: DNTL 10, DNTL 11, DNTL 12, DNTL 13 and DNTL 14
Class Hours: 72 lecture total
Pathological processes of inflammation, immunology defense, degeneration, neoplasia, developmental disorders, healing and repair. Recognition of abnormalities in the human body with a special emphasis on normal and abnormal conditions in the oral cavity.

DNTL 23 PATIENT MANAGEMENT AND GERIATRICS – 2 Units
Prerequisite: A grade of C or higher in each of the following courses: DNTL 10, DNTL 11, DNTL 12, DNTL 13 and DNTL 14.
Class Hours: 36 lecture total
This course teaches characteristics of individual patients, motivation, and management of same and interpersonal communication. Treatment of the compromised patient and myofunctional therapy is presented.

DNTL 24 CLINICAL PRACTICE I – 4 Units
Prerequisite: A grade of C or higher in each of the following courses: DNTL 10, DNTL 11, DNTL 12, DNTL 13 and DNTL 14.
Class Hours: 18 lecture/162 lab total
Provides beginning clinical experience in the treatment of adult and child patients. Various clinical procedures utilizing scaling and polishing techniques, oral inspection, cancer screening, dental and periodontal charting, principles of ultrasonic scaling, plaque control instruction and fluoride application will be taught.

DNTL 26 NUTRITION IN DENTISTRY – 1 Unit
Prerequisite: A grade of C or higher in each of the following courses: DNTL 10, DNTL 11, DNTL 12, DNTL 13, and DNTL 14
Class Hours: 18 lecture total
Provides the basic principles of nutrition and their relationship to dental health. To teach students to perform dietary surveys on clinic patients and to plan nutritional dietary programs.

DNTL 27 SUMMER CLINIC 27 – 1 Unit
Grading: Pass/No Pass Only
Prerequisite: Completion of DNTL 11, DNTL 12, DNTL 14, DNTL 20, DNTL 23, DNTL 24
Class Hours: 54 lab total
This course will provide students with the opportunity to become more proficient in the clinical skills learned and practiced during previous clinical courses including instrumentation techniques, patient assessment, and administration of local anesthesia.

DNTL 30 PERIODONTOLOGY I – 3 Units
Prerequisite: A grade of C or higher in each of the following courses: DNTL 20, DNTL 21, DNTL 23, DNTL 24, DNTL 25 and DNTL 26
Class Hours: 54 lecture total
A course in Periodontology teaches the scientific study of the structures and function of the periodontium in both health and disease, the etiology and principles of periodontal diseases, examination procedures, treatment and preventative measures.

DNTL 31 PHARMACOLOGY – 2 Units
Prerequisite: A grade of C or higher in each of the following courses: DNTL 20, DNTL 21, DNTL 23, DNTL 24, DNTL 25 and DNTL 26
Class Hours: 36 lecture total
Focuses on pharmacology as it affects the clinical practice of dentistry. Emphasizes drugs commonly used in dentistry, for treatment of common systemic and oral diseases, and for emergency treatment: effects, administration, and toxicology. Builds on basic and dental sciences and prepares for clinical dental hygiene practice.

DNTL 32 DENTAL MATERIALS – 2 Units
Prerequisite: A grade of C or higher in each of the following courses: DNTL 20, DNTL 21, DNTL 23, DNTL 24, DNTL 25 and DNTL 26
Class Hours: 36 lecture/18 lab total
Provides the basic principles of nutrition and their relationship to dental health. To teach students to perform dietary surveys on clinic patients and to plan nutritional dietary programs.

DNTL 33 ADVANCED CLINICAL TOPICS – 2 Units
Prerequisite: A grade of C or higher in each of the following courses: DNTL 20, DNTL 21, DNTL 23, DNTL 24, DNTL 25 and DNTL 26
Class Hours: 36 lecture total
This course is designed to present advanced topics and current technology used in the dental and dental hygiene field such as soft tissue curettage, root morphology and periodontal instrumentation, oral brush biopsy, non-surgical periodontal dressings, care for dental implants, oral maxillofacial surgery and orthodontics.

DNTL 34 CLINICAL PRACTICE II – 4 Units
Prerequisite: A grade of C or higher in each of the following courses: DNTL 20, DNTL 21, DNTL 23, DNTL 24, DNTL 25 and DNTL 26
Class Hours: 216 lab total
Advanced skills of dental hygiene practice, including assessment and treatment are practiced on patients in a clinical setting, with emphasis on planning and comprehensive treatment; all skills are taught to clinical competence. Expands on the procedures and techniques introduced in previous preclinical and clinical courses. Builds on basic and dental sciences and prepares for clinical dental hygiene practice.

DNTL 35 CLINICAL II SEMINAR – 1 Unit
Prerequisite: A grade of C or higher in each of the following courses: DNTL 20, DNTL 21, DNTL 23, DNTL 24, DNTL 25 and DNTL 26
Class Hours: 18 lecture total
Provides an expanded learning experience through discussion of dental hygiene care for the culturally diverse, tobacco cessation counseling, and seminar study of clinical cases. Builds on basic and dental sciences and prepares for clinical dental hygiene practice.
DNTL 40 PERIODONTOLOGY II – 1 Unit  
Prerequisite: A grade of C or higher in each of the following courses: DNTL 30, DNTL 31, DNTL 32, DNTL 33, DNTL 34 and DNTL 35  
Class Hours: 18 lecture total  
A course to enhance assessment skill applicable in the treatment of patients with advanced periodontal disease. To teach the dental hygienist ethical and clinical responsibility in periodontal disorders and to teach the relationship of the specialty practice of periodontics within the broad scope of dentistry and the legal ramifications thereof.

DNTL 41 PRACTICE AND FINANCIAL MANAGEMENT – 1 Unit  
Prerequisite: A grade of C or higher in each of the following courses: DNTL 30, DNTL 31, DNTL 32, DNTL 33, DNTL 34, and DNTL 35  
Class Hours: 18 lecture total  
Office practice management; ethical and legal aspects of dentistry and dental hygiene, and business matters relating to dental hygiene practice.

DNTL 42 CLINIC III SEMINAR – 2 Units  
Prerequisite: A grade of C or higher in each of the following courses: DNTL 30, DNTL 31, DNTL 32, DNTL 33, DNTL 34, and DNTL 35  
Class Hours: 18 lecture/54 lab total  
Provides an expanded clinical experience exposure through independent study or additional clinical experience.

DNTL 43 CLINICAL PRACTICE III – 4 Units  
Prerequisite: A grade of C or higher in each of the following courses: DNTL 30, DNTL 31, DNTL 32, DNTL 33, DNTL 34 and DNTL 35  
Class Hours: 216 lab total  
Provides students with the opportunity to become more proficient in the clinical skills learned and practiced in previous clinical courses and to prepare them for success on their state and national board examinations.

DNTL 44 COMMUNITY ORAL HEALTH – 3 Units  
Prerequisite: A grade of C or higher in each of the following courses: DNTL 30, DNTL 31, DNTL 32, DNTL 33, DNTL 34 and DNTL 35  
Class Hours: 54 lecture total  
Introduces students to the principles and practices of dental public health. The emphasis is placed on the role of the dental hygienist as an innovator of, and an educator in community health programs. Public health issues will be introduced and completely discussed.

DNTL 45 ETHICS AND JURISPRUDENCE – 2 Units  
Prerequisite: A grade of C or higher in each of the following courses: DNTL 30, DNTL 31, DNTL 32, DNTL 33, DNTL 34 and DNTL 35  
Class Hours: 36 lecture total  
The study of the fundamental factors necessary to be employed and practice within the ethical and legal framework of the State Dental Practice Act and the Code of Ethics of the American Dental Association.

DNTL 54 SUMMER CLINIC 54 – 1 Unit  
Grading: Pass/No Pass Only  
Prerequisite: A grade of C or higher in each of the following courses: DNTL 14, DNTL 20, DNTL 24, DNTL 30, DNTL 34, DNTL 43  
Class Hours: 54 lab total  
This course will provide students with the opportunity to become more proficient in the clinical skills learned and practiced during previous clinical courses and to prepare for success on their state clinical licensing examinations. This course is offered on a pass/no pass basis only.

DIES 48 HYDRAULICS – 3.5 Units  
Grading: Pass/No Pass Option  
Class Hours: 54 lecture/27 lab total  
A study of the theory, application, and component parts of hydraulic systems. This course will emphasize fundamentals in dismantling, inspection, and troubleshooting of hydraulic components and complete systems. Closed-loop application, inspection and trouble-shooting will be studied. This course is required for all Diesel Technology, Welding Technology and Equipment Operations and Maintenance majors.

DIES 49 ADVANCED HYDRAULICS (formerly AGRI 49) – 3 Units  
Grading: Pass/No Pass Option  
Prerequisite: A grade of C or higher in DIES 48  
Class Hours: 27 lecture/81 lab total  
This course will emphasize the application of cylinders and motor used to control fluid power systems. Hydraulic-pneumatic circuitry, maintenance, repair, and closed loop drives will be covered. Recommended for Equipment Operations and Maintenance, production, agriculture, and diesel majors.

DIES 94 DIESEL TECHNOLOGY WORKSITE LEARNING – 1-8 Units  
Limitation on Enrollment: Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.  
Class Hours: 75 hours paid or 60 hours non-paid per unit  
The Vocational Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acceptable to the student and related to the student’s major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on the job performance. A student may earn up to 16 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in a single semester.

DIES 160 DIESEL ENGINE ELECTRONIC CONTROL – 4 Units  
Class Hours: 54 lecture/54 lab total  
This course will cover electronic diesel engine control systems as related to testing, calibrating and diagnostic procedures. The use of industry software generated computer programs will be utilized.

DIES 161 DIESEL TECHNOLOGY FIELD TRAINING – 2 Units  
Prerequisite: A grade of C or higher in DIES 162  
Limitation on Enrollment: Student must be 18 years of age, provide his/her own transportation, DMV readout, and must be prepared to take a physical including drug test at the repair facility’s request.  
Class Hours: 36 lecture total (when offered in the Distance Education format, hours will total 108)  
This course is designed to prepare the student for a career in the diesel technology field. Classroom instruction will include work-site expectations, interview techniques, and assessment of work performance. The student will be placed with local industry at various diesel repair facilities to expose them to actual industry standards. This course may be offered in a distance education format.

DIES 162 HEAVY DUTY POWER TRAIN – 4 Units  
Class Hours: 54 lecture/54 lab total  
This course covers shop practices in service, repair, adjustment and preventive maintenance of heavy duty drive trains.

DIES 164 DIESEL PERFORMANCE ANALYSIS – 4 Units  
Class Hours: 54 lecture/54 lab total  
Diesel fuel systems, composition of fuels, combustion chamber design, manifolds, fuel and air filters, fuel transfer pumps, fuel-injection pumps and injectors are taught in this class. Mechanical and electronic fuel controls will be analyzed. You will learn testing, calibrating and diagnostic procedures, using modern test equipment. Performance analysis of diesel engines as related to the California Air Resources Board Heavy Duty Vehicle Smoke and Tampering Inspection Program as mandated by Senate Bill 1997 of 1988 will be covered.

DIES 166 DIESEL ENGINES – 6 Units  
Prerequisite: A grade of C or higher in DIES 164  
Class Hours: 54 lecture/162 lab total  
This course is an in-depth study of various diesel engines, theory of design, operation and application. This lab will provide training in the disassembly and inspection of diesel engines, practical assembly procedures and technical analysis of engine services.

DIES 170 HEAVY DUTY BRAKING SYSTEMS – 4 Units  
Class Hours: 54 lecture/54 lab total  
This course will cover the basic design and repair of foundation brakes and air systems pertaining to heavy duty vehicles.

DSS 10 FOOD PRODUCTION MANAGEMENT – 3 Units  
Grading: Pass/No Pass Option  
Advisory: A grade of C or higher in CULA 50  
Class Hours: 54 lecture (when offered in the Distance Education format, hours will total 162)  
This course will cover effective management skills in food production, food purchasing policies and procedures, and the role of the Dietary Service Supervisor. Basic institutional cooking skills will be presented including using weights and measures, choosing ingredients and food preparation methods. Students will be involved in menu planning and costing, recipe standardization and recipe costing. Instruction on the selection, safety and usage of institutional equipment will be provided. This course may be offered in a distance education format.

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.
DSS 63  DIETARY SERVICE SUPERVISOR OPERATIONS AND MANAGEMENT – 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course includes methods of supervision and leadership which are applicable to the food service industry. Methods and techniques of recruitment, selection, training and evaluation of personnel are covered. Record maintenance, enforcement of safety and sanitary standards; supervision of food service employees are stressed. This course may be offered in a distance education format.

DSS 94  DSS CERTIFICATE WORKSITE LEARNING – 1-8 Units
Prerequisite: A grade of C or higher in DSS 63 and CULA 50
Corequisite: Students must be concurrently enrolled in or have completed DSS 10 and FSS 27 with a grade of C or higher.
Limitation on Enrollment:
1. All students participating in DSS 94 must pass a drug screening and background check prior to enrollment in the course. Students are financially responsible for meeting these requirements according to the established program process.
2. Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.
Class Hours: 75 hours paid or 60 hours non-paid per unit
Students must complete 150 hours of verified, supervised field experience in a healthcare setting as required by the CA Department of Public Health (CADPH) for the DSS Certificate, and must follow the current requirements and regulations of the CADPH. The course stresses good work habits and meeting of required competencies through actual on-the-job performance with a preceptor. Students must complete a minimum of 150 hours, but may complete up to a maximum of 16 units in this WSL course in order to meet the required competencies.

EARLY CHILDHOOD EDUCATION (ECE)

ECE 1  HUMAN DEVELOPMENT – 3 Units
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course studies a study of development and behavior throughout the human life span. Classic and up-to-date research on the physical, cognitive, and psychosocial domains will be presented. Theories will be integrated with practical application concepts throughout the course, underscoring the importance of life-long learning and adaptation. This course may be offered in a distance education format.

ECE 2  CHILD, FAMILY, COMMUNITY – 3 Units
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
Child, Family, Community introduces the student to the interacting influences of family life and community experiences, with consideration of historical and socio-cultural factors, that affect the developing child. The course focuses on the primary social relationships and social settings within the context of dissimilar family patterns. The study encourages understanding and practical utilization of community systems and resources that promote quality outcomes for both preschool and school age children, families, schools, and communities. This course may be offered in a distance education format.

ECE 3  EARLY CHILDHOOD PROGRAM ADMINISTRATION – 3 Units
Prerequisite: A grade of C or higher in ECE 7
Note: This course meets the Title 22 requirements for Teacher/Director qualifications.
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course identifies and assesses the principles and practices of managing early childhood programs. Course content will focus on overall administrative procedures for various programs providing care and learning for children ages zero to eight. The topics include: regulatory agencies, licensing and compliance with local and state requirements, funding and budgeting, staff selection and scheduling, and enrollment and operational policies and reports. This course may be offered in a distance education format.

ECE 6  EXPLORING FAMILY CHILD CARE – 1 Unit (formerly ECE 153)
Class Hours: 18 lecture total (when offered in the Distance Education format, hours will total 54)
This course provides an introduction to family childcare. Topics presented include an overview of regulations, family childcare management, importance of culturally diverse and age appropriate activities, and safe and healthful setting in a family childcare. This course may be offered in a distance education format.

ECE 7  EARLY CHILDHOOD OBSERVATION & ASSESSMENT – 3 Units
Prerequisite: A grade of C or higher in ECE 1 or ECE 9
Note: Observation hours for this course will be obtained through the course lab hours at the Shasta College Early Childhood Education Center or a designated Early Childhood Mentor Site.
Class Hours: 54 lecture/54 lab total* (The lab portion of this course may be offered in a distance education format to accommodate lab hours completed at a designated Early Childhood Mentor Site. Lecture hours will be regularly scheduled hours.)
*Labs may be listed as TBA in course schedule. Specific times and meeting location(s) will be provided in the First Class Handout.
This course provides the student with opportunities for further study of development and behavior of young children by developing skills in observation and assessment. Recording strategies, rating scales, portfolios and multiple assessment tools are explored.

ECE 8  TEACHING PRACTICUM FOR YOUNG CHILDREN – 5 Units
(formerly ECE 8A)
Prerequisite: A grade of C or higher in ECE 7 and ECE 20
Note: Supervised field site experience for the California Child Development Permit will be obtained through the course lab hours at the Shasta College Early Childhood Education Center or a designated Early Childhood Mentor Site
Class Hours: 54 lecture/108 lab total* (when offered in the Distance Education format, lecture hours will total 162)
*Labs may be listed as TBA in course schedule. Specific times and meeting location(s) will be provided in the First Class Handout.
This course focuses on identifying, developing and refining skills and behaviors of developmentally appropriate practice that are essential for effective teaching of young children. The course is intended for students who are concurrently working or volunteering in center-based programs for young children (infant, toddler, preschool or after school care) where under guided supervision of early childhood education professionals, they have the opportunity to work directly with the children to test the methods and refine the teaching skills explored in the course. Students will have the opportunity to practice and demonstrate skills that focus on child centered, play based approaches to teaching, learning and assessment. Knowledge of curriculum design will be emphasized as students plan, prepare, present and evaluate experiences that promote positive development and learning for young children. The lecture component of this course may be offered in distant education format.

ECE 9  CHILD GROWTH AND DEVELOPMENT – 3 Units
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course provides an in-depth examination of the major physical, psychosocial, and cognitive/language developmental milestones for children, both typical and atypical, from conception through adolescence. There will be an emphasis on interactions between maturational processes and environmental factors. While studying developmental theory and investigative research methodologies, students will observe children, evaluate individual differences and analyze characteristics of development at various stages. This course may be offered in a distance education format.

ECE 10  EARLY CHILDHOOD LEARNING – 3 Units
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course focuses on the developmental learning process of children ages three to eight. Attention will be given to the application of current studies providing insight into the maturational stages as they relate to the acquisition of knowledge. Topics will include: individuality, readiness, transitions, competence, and developmentally appropriate strategies during the preschool and primary school years. This course may be offered in a distance education format.

ECE 12  INFANT TODDLER LEARNING – 3 Units
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course focuses on developmental research and current practices in care and learning during infancy and toddlerhood. Emphasis will be on understanding developmental stages, planning optimal environments and clarifying the care giving role of teachers and child care workers for children during the first two years of life. This course may be offered in a distance education format.

ECE 14  SCHOOL AGE AND ADOLESCENT DEVELOPMENT – 3 Units
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
A course focusing on growth, development and behavior of school age children and adolescents. Current research and theoretical concepts will be discussed and analyzed for practical implications and applications to assist those living with and/or working with school age children and adolescents. This course may be offered in a distance education format.
ECE 15  CHILD HEALTH, SAFETY AND NUTRITION – 3 Units  
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)  
Provides an opportunity for early childhood educators and caregivers to focus on health, safety and nutrition in children's programs. Fundamentals of a safe and healthful environment, including knowledge of state and local laws and regulations will be introduced. Key factors that ensure physical health, mental health and safety for both children and staff, and effective strategies for working collaboratively with families, current and end issues. This course will explore different types of special needs identified in children including children who are: gifted, developmentally delayed, learning disabled, as well as children with: emotional and behavioral disorders, communication disorders, sensory disorders, neurological disorders, and health impairments. This course may be offered in a distance education format.

ECE 16  FUNDAMENTALS OF EARLY CHILDHOOD MENTORING AND SUPERVISION – 2 Units  
Prerequisite: A grade of C or higher in ECE 7  
Advisory: A grade of C or higher in ECE 3  
Class Hours: 36 lecture total (when offered in the Distance Education format, hours will total 136)  
Designed to satisfy the Child Development Permit Master Teacher level and above requirement. Course content focuses on the methods and principles of supervising the adult learner in the early childhood program. Emphasis is on the role of the classroom. Students will examine as a mentor to new teachers and other adult participants while simultaneously meeting objectives for children, parents, and staff. Expanded modeling, guidance, and evaluation approaches will be examined. This course may be offered in a distance education format.

ECE 17  PRINCIPLES AND PRACTICES OF TEACHING YOUNG CHILDREN – 3 Units  
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)  
An examination of the underlying theoretical principles of developmentally appropriate practices applied to programs, environments, emphasizing the key role of relationships, constructive adult-child interactions, and teaching strategies in supporting physical, social, creative and intellectual development for all children. This course includes a review of the historical roots of early childhood programs and the evolution of the professional practices promoting advocacy, ethics, and professional identity. Emphasis will be placed upon increasing the student's skills in critically analyzing educational settings for young children. Special attention will be given to room arrangement, selection and storage of materials. This course may be offered in a distance education format.

ECE 20  INTRODUCTION TO CURRICULUM – 3 Units  
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)  
This course presents an overview of knowledge and skills related to providing developmentally appropriate curriculum and environments for young children from birth to age 8. Students will examine as a mentor to new teachers and other adult participants while simultaneously meeting objectives for children, parents, and staff. Expanded modeling, guidance, and evaluation approaches will be examined. This course may be offered in a distance education format.

ECE 22  E.C. CURRICULUM: INFANT/TODDLER CARE – 3 Units  
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)  
A course focusing on the planning, preparation, and presentation of developmentally appropriate curriculum activities, materials, and learning environments for use with infants and toddlers to support physical, emotional, cognitive and language development. Emphasis will be placed upon increasing the student's skills in critically analyzing education settings and materials for infants and toddlers. Special attention will be given to both indoor and outdoor environments and curriculum. This course may be offered in a distance education format.

ECE 24  E.C. CURRICULUM: SCHOOL AGE CARE – 3 Units  
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)  
This course will examine the planning and presentation of curriculum experiences for school age children in an extended care setting. Opportunities to develop skills in enhancing the school age child's day with developmental experiences and positive social interaction will be provided. Focus will be placed on individualized and small group activities to help students connect with children in healthy safety, motivation for learning, and recreational skills. Special attention will be given to both indoor and outdoor environments and curriculum. This course may be offered in a distance education format.

ECE 26  THE CHILD WITH SPECIAL NEEDS – 3 Units  
Prerequisite: A grade of C or higher in ECE 1 or ECE 9  
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)  
This course is designed to offer students strategies for supporting affective development with specific guidance directed to young children’s social, emotional, and creative needs. This study acquaints students with techniques for planning and implementing activities that help young learners achieve aesthetic and social awareness. An integrated curriculum will emerge with emphasis on art expression, creative dramatics, and self understanding. Students will learn to plan activities for young children with focus on language and literacy practices as well as inclusion and cultural strengths.

ECE 28  TEACHING IN A DIVERSE SOCIETY – 3 Units  
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)  
Examination of the development of social identities in diverse societies including theoretical and practical implications of oppression and privilege as they apply to young children, families, programs, classrooms, and teaching. Various early education classroom strategies will be explored emphasizing culturally and linguistically appropriate anti-bias approaches supporting all children in becoming competent members of a diverse society. Course includes self-examination and reflection on issues related to social identity, stereotypes and bias, social and educational access, media, and schooling. This course may be offered in a distance education format.

ECE 30  E.C. CURRICULUM: PHYSICAL DEVELOPMENT – 3 Units  
Prerequisite: A grade of C or higher in ECE 20  
Class Hours: 54 lecture total  
Students will explore the factors that affect and facilitate physical growth and development of young children. The course will first explore the developmental aspects of planning appropriate, educations with application of children’s development and perceptual and motor development. Curriculum planning for physical development will include documentation of integrated experiences, focusing on appropriate early childhood care and learning and literacy practices that strengthen children’s physical abilities.

ECE 40  E.C. CURRICULUM: AFFECTIVE DEVELOPMENT – 3 Units  
Prerequisite: A grade of C or higher in ECE 20  
Class Hours: 54 lecture total  
This course is designed to offer students strategies for supporting affective development with specific guidance directed to young children’s social, emotional, and creative needs. This study acquaints students with techniques for planning and implementing activities that help young learners achieve aesthetic and social awareness. An integrated curriculum will emerge with emphasis on art expression, creative dramatics, and self understanding. Students will learn to plan activities for young children with focus on language and literacy practices as well as inclusion and cultural strengths.

ECE 50  E.C. CURRICULUM: COGNITIVE DEVELOPMENT – 3 Units  
Prerequisite: A grade of C or higher in ECE 20  
Class Hours: 54 lecture total  
This course presents methods and rationale for enhancing young children’s thinking and language abilities. Students will acquire skills to coordinate experiences that integrate activities from curriculum areas including communication and literacy, mathematics, and science. The coursework will require students to organize and implement appropriately planned activities that meet young children's needs and instructional accountability. Students will acquire strategies with focus on intentional learning for integrating literacy practices that strengthen young children’s cognitive skills.

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.
ECE 51 EARLY CHILDHOOD STAFFING AND MANAGEMENT – 3 Units
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course offers an expanded study of operational resources to manage an early care and learning program for young children. The managerial process in an early childhood education setting will be reviewed with special attention given to staff interrelationships as well as communication skills with parents and volunteers. The selection process for staffing a program for young children will be explored with study of performance evaluation, retention and professional development. This course may be offered in a distance education format.

ECE 52 GUIDANCE IN ADULT-CHILD RELATIONS - 3 Units
Class Hours: 54 lecture total
This course explores principles and strategies of positive guidance that are both effective and flexible for adults interacting with young children. Cognitive, social, and emotional characteristics and needs of children will be examined. This course would be of interest to parents, educators, caregivers, and any adult involved with or interested in children.

ECE 94 EARLY CHILDHOOD EDUC. WORKSITE LEARNING – 1–8 Units
Limitation on Enrollment: Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.
Class Hours: 75 hours paid or 60 hours non-paid per unit
The Vocational Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acquired by the student and supervised by the student’s major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on the job performance. A student may earn up to 16 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in a single semester.

ECE 140 ESSENTIALS OF 40 DEVELOPMENTAL ASSETS – 1 Unit
Class Hours: 18 lecture total (when offered in the Distance Education format, hours will total 54)
This course offers an expanded study of the key elements necessary for children/youth to develop positive and healthy behaviors and habits. The research behind 40 Developmental Assets will be explored and action-based methods of using this research will be reviewed. Current strength-based approaches to building assets in children/youth will be analyzed. This course may be offered in a distance education format.

ECE 147 MENTAL HEALTH AWARENESS IN ECE PROGRAMS – 1 Unit
Class Hours: 18 lecture total (when offered in the Distance Education format, hours will total 54)
This course introduces the student to mental health issues in young children, their families, and their caregivers. It includes an overview of early childhood mental health from prenatal development to eight years of age, and the effects of environment and biology on mental health. Students will become aware of potential mental health concerns in early childhood, and how we can help children, parents, and caregivers in our programs. This course may be offered in a distance education format.

ECE 152 THE YOUNG CHILD: MOVEMENT, RHYTHM, AND SINGING – 1 Unit (formerly ECE 152A)
Class Hours: 18 lecture total
A course exploring advanced techniques in the planning and presentation of curriculum appropriate for young children in the areas of movement, rhythm and singing.

ECE 155 THE YOUNG CHILD: INTRODUCTION TO THE MONTESSORI METHOD – 1 Unit (formerly ECE 152F)
Class Hours: 18 lecture total
This course will introduce the student to the teaching and theory of Dr. Maria Montessori. This method of preparing a preschool environment, which promotes independence in the young child, will be presented through lectures and demonstrations.

EARTH SCIENCE (ESCI)
(formerly Geology and Physical Science)

ESCI 1 PHYSICAL GEOLOGY (formerly GEOL 1, 1A) – 4 Units
Note: Required field trips.
Class Hours: 54 lecture/54 lab total
An introduction to the physical processes that drive Earth as a dynamic planet. Both internal and external processes are considered as well as their interrelationships. Basic course will include 5 uniaxial and biaxial minerals, plate tectonics, minerals and rocks and their origins, surface processes, geologic structures such as faulting and folding, metamorphisms, sedimentation, soil formation, geologic time including radiometric methods, geologic hazards such as earthquakes, volcanism, mass wasting, flooding, and the vital nature of Earth materials to society. Laboratory activities will focus on the application of classroom concepts and will include mineral and rock identification, geologic structures, topographic and geologic map use, use of remote imagery, recognition of landform names, geologic time, seismology, and volcanism. Lecture and laboratory will consider geologically produced and influenced natural resources, their exploitation, and concepts centered about sustainable uses.

ESCI 2 HISTORICAL GEOLOGY – 4 Units (formerly GEOL 2, 1B)
Advisory: A grade of C or higher in ESCI 1, or ESCI 5, or ESCI 6, or ESCI 7, or ESCI 10, or ESCI 12, or ESCI 15, or ESCI 17
Note: Required day field trips.
Class Hours: 54 lecture/54 lab total
The study of Earth history as revealed in the rock record and the placement of varied geologic events through time. Discussion in this course will include the genesis of minerals and three rock types, principles of stratigraphy, geologic structures, organic evolution, relative and absolute geologic time, paleogeography, and mountain building episodes of North America with emphasis on the west coast. Plate tectonics and crustal evolution will provide a framework for the preceding. Laboratory exercises will include the description and classification of minerals and rocks; recognition of ancient metamorphic, igneous and sedimentary environments; recognition, occurrence, and use of fossil organisms; application of stratigraphic principles; recognition of geologic structures; and the development and use of different types of geologic maps and cross sections.

ESCI 3 MINERALS AND CRYSTAL OPTICS – 5 Units
(formerly GEOL 3)
Prerequisite: A grade of C or higher in ESCI 1
Corequisite: Students must be concurrently enrolled in, or have previously completed CHEM 1A with a grade of C or higher
Class Hours: 54 lecture/108 lab total
An exploration into the chemistry, classification, optics and crystalline structure of minerals. Topics covered in the course will include the chemistry, bonding, and crystalline structure of minerals, recognition of crystal types, physical properties of minerals, classification principles, and optical techniques to identify mineral crystals with an introduction to uniaxial and biaxial minerals.

ESCI 4 ROCK ORIGINS AND RELATIONSHIPS – 4 Units
(formerly GEOL 4)
Prerequisite: A grade of C or higher in ESCI 2 and a grade of C or higher in ESCI 3
Note: Required day field trips.
Class Hours: 54 lecture/54 lab total
A survey of igneous, sedimentary, and metamorphic rocks presented in the context of recognizing processes responsible for rock origins. Rock classification based both on mega- and microscopic textural and mineralogy is fundamental to interpretation and provides the main discussion of topic for the course and laboratory. Specialized topics include magmatic differentiation and emplacement, sedimentary rock provenance and depositional environments, and metamorphic rocks as pressure and temperature indicators. Rock assemblages will be considered with the purpose of interpreting their origins at larger scales. Field trips to various localities will observe rock assemblages that demonstrate different origins.

ESCI 5 INTRODUCTION TO GEOLOGY – 4 Units (formerly GEOL 5)
Note: Required field trip. The lecture portion of this course may be offered as a distance education.
Class Hours: 54 lecture/54 lab total (when offered in the Distance Education format, hours will total 162 for the lecture portion of the class and an additional 54 hours of lab totaling 216 hours for this course.)
A survey course for non-science majors designed to introduce the discipline of geology and its vital influence on society. Among the topics to be discussed are geologic hazards such as volcanoes and earthquakes, Earth materials and economic resources, processes which shape Earth’s surface, internal processes and their manifestations, environmental geology, geologic time, reconstruction of Earth’s history and the fossil record. Laboratory activities include mineral and rock identification, map use, evaluation of geologic hazards associated with different geologic threats, the impacts of environmental geology and natural resources consumption on society, and economic geology and exploration for ores and petroleum deposits. Lecture and laboratory will consider concepts centered about the sustainable use of natural resources. The lecture portion of this course may be offered in a distance education format.
ESCI 6  ANCIENT LIFE – 4 Units (formerly GEOL 6)  
Note: Required field day trips.  
Class Hours:  54 lecture/54 lab total (When offered in a Distance Education format, hours will total 162 for the lecture portion of the class and an additional 54 hours of lab totaling 216 hours for this course.)  
A survey of past life is presented through geologic and biologic investigation. This course is interdisciplinary in nature and provides geologic background and evidence for the origin and evolution of life. Associated methodologies and concepts are introduced including stratigraphic time and its measure, chemical and organic evolution, controls on evolution, cladistic analysis, ancient ecological reconstruction, mass extinction and adaptive radiation, fossilization, and ancient geologic distributions of flora and fauna. Anatomical investigations that define major classes of marine and terrestrial organisms are traced through ancestor-descendant relationships. Laboratory exercises include processes of fossilization, fossil recognition, clading analysis, genetics, stratigraphy, reconstruction of ancient biologic communities, ancient geographic reconstruction through fossil information, functional morphology, mass extinction and adaptive radiation in the fossil record. This course may be offered in a distance education format.  

ESCI 7  INTRODUCTION TO THE GEOLOGY OF CALIFORNIA – 4 Units (formerly GEOL 7, 23)  
Note: Required field trips (day trips and overnight trips)  
Class Hours:  54 lecture/54 lab total  
As the newest material added to North America, California geology records ancient and continued mountain building, which has shaped the state into landforms and geologic features. Each geomorphic province in California records unique rock packages indicative of ancient and modern processes. Discussions in the course will include geologic hazards such as earthquakes, volcanism, landslides, marine processes, plate tectonics, economic resources, state and national parks, ground and surface water, soils, glaciation, coastal processes, and climate trends. Laboratory activities will survey marine geology including plate tectonic and ocean basin studies, tides, erosion and deposition, and landforms are also considered. Laboratory exercises will include mineral and rock identification and classification, topographic and geologic maps; landforms; stratigraphy; aerial photo interpretation; and mineral, rock and data collection on field trips.  

ESCI 8  PLANETARY GEOLOGY: DEVELOPMENT, HISTORY AND PLANETARY PROCESSES – 3 Units (formerly GEOL 8, 22)  
Note: Required field trips and/or evening observations when possible  
Class Hours:  54 lecture total  
An introduction to the physical processes that shape planetary surfaces and guide their development through time. The course will explore the origins of the solar system and the use of Earth as a planetary “model” to perform systematic and comparative investigations of the planets and other bodies in the solar system. Recent information gathered by Earth-based and orbiting observation platforms and un-manned planetary probes will be used to investigate planetary processes, develop planetary histories and differentiate the varied pathways and processes that have influenced each planet’s evolution. The course will also consider the Sun and its influence on the planets and other bodies in the solar system, as well as asteroids, comets, meteors and impacts on planetary surfaces.  

ESCI 9  EARTHQUAKES, VOLCANOES, AND OTHER GEOLOGIC HAZARDS – 3 Units (formerly GEOL 9, 20)  
Note: Required field trips  
Class Hours:  54 lecture total (When offered in a Distance Education format, hours will total 162. A scheduled field trip will still be required for the online course.)  
This introductory course considers geologic hazards and their impact on society in part through the utilization of case histories, many of which are from California. The course will focus on earthquakes and volcanism specifically considering the dynamics of these two phenomena. Other topics to be discussed include tsunami origination and development, types of mass wasting and their controlling factors and influencing factors. A portion of the course will also describe geologic hazards that are human influenced or caused, such as soil erosion, acid rain, ground-water contamination and ground subsidence. Engineering mitigation, hazard preparedness and remediation strategies complete the course. This course may be offered in a distance education format.  

ESCI 10  ENVIRONMENTAL GEOLOGY – 4 Units (formerly GEOL 10/40)  
Note: Required field trips.  
Class Hours:  54 lecture/54 lab total  
Geology is related directly to the environment, both natural and human-influenced, provide the subject content for this course. Emphasis is placed on human and environmental interactions with discussions regarding natural resources and their exploitation, pollution and waste disposal, climate change, land use and engineering; and energy resources. Earth processes which result in environmental catastrophes, environmental change, and an impact on society are also considered including topics such as earthquakes, volcanism, flooding, mass wasting, coastal processes, and climate trends. Laboratory activities will focus on Earth materials, water resources and contamination, hazardous waste storage, mining and resource exploitation, and pollution.  

ESCI 11  ECONOMIC GEOLOGY – 3 Units (formerly GEOL 11)  
Prerequisite: A grade of C or higher in ESCI 1 and a grade of C or higher in ESCI 3  
Note: Required field trips.  
Class Hours:  36 lecture/54 lab total  
An introduction to economic geology, their origins and associations, and recovery. This course will review the basic geological concepts in the context of economic deposits and then apply those concepts to exploration, evaluation, and recovery. Laboratory activities will cover the following: (1) sedimentary deposits (oil, gas, and coal) providing the mineral resources of the course. Exploration techniques in geophysics, remote imagery, and computer-aided analysis will also be considered. Laboratory exercises will evaluate material for its economic potential using techniques such as X-ray diffraction and rock analysis, and geophysical and remote images, and geophysical techniques and data collection. Additionally, the volume, value, and recovery costs of an ore deposit will be reviewed.  

ESCI 12  GENERAL EARTH SCIENCE – 4 Units  
(formerly PHSC 2/PHSC 2 and PHSC 3)  
Note: Required field trips. The lecture portion of this course may be offered as distance education.  
Class Hours:  54 lecture/54 lab total (when offered in the Distance Education format, hours will total 162 for the lecture portion of the class and an additional 54 hours of lab totaling 216 hours for this course.)  
A survey course designed for non-science majors which spans the Earth-related sciences, including geology, oceanography, meteorology, and astronomy. In general, the course focuses on physical processes and materials as related to each discipline. Topics include the geologic evolution of the Earth, economic resources derived from the Earth, Earth materials, evolution and character of the ocean, weather and ocean-atmosphere interactions, atmospheric processes including weather and climate, the solar system and Earth as part of the universe. Using an Earth systems approach, lecture and laboratory will consider concepts centered about the inter-related study of the oceans, atmosphere and climate change. Lecture and laboratory will consider influences on the atmosphere that disrupt sustainable, stable climate conditions.  

ESCI 14  METEOROLOGY – 4 Units (formerly PHSC 4)  
Note: Required overnight field trip.  
Class Hours:  54 lecture/54 lab total  
Dynamic aspects of the atmosphere responsible for climate and weather. The major processes are described through the use of meteorological patterns, weather systems, and climate change. Lecture and laboratory will consider concepts about the interaction of the atmosphere and climate change. The course is an introduction to the study of the atmosphere and climate change. Laboratory activities will include the study of climate change using modern climate models, and using historical climate data to assess the impact of climate change on the environment. In the laboratory, students will use computer-based models to explore climate change scenarios, and to analyze the impact of climate change on various ecosystems. The course will also cover the role of human activities in climate change, and the potential for mitigation and adaptation strategies.  

ESCI 15  OCEANOGRAPHY – 4 Units (formerly PHSC 5)  
Note: Required overnight field trip.  
Class Hours:  54 lecture/54 lab total (when offered in the Distance Education format, hours will total 162 for the lecture portion of the class and an additional 54 hours of lab totaling 216 hours for this course.)  
Global ocean dynamics are part of an intricate system that influences world climate and both terrestrial and oceanic life. Basic principles and concepts are presented including ocean origins, ocean basin formation, seawater composition and characteristics, oceanic circulation, and the marine habitat. The course will provide an introduction to oceanography, including the study of the oceans and the processes that shape them. Laboratory activities will include the use of oceanographic data to understand the physical and chemical properties of the ocean. The course will also cover the role of human activities in oceanography and the potential for mitigation and adaptation strategies. In the laboratory, students will use computer-based models to explore oceanographic processes, and to analyze the impact of human activities on the ocean. The course will also cover the role of oceanography in earth science.  

ESCI 16  COASTAL OCEANOGRAPHIC FIELD STUDIES – 2 Units  
(formerly PHSC 6)  
Note: Required overnight field trip.  
Class Hours:  27 lecture/27 lab total  
An introduction to oceanography of northern California and coastal habitat evaluation. The course will include a three-day field trip along the northern California coast. In general, the course will focus on oceanographic concepts associated with estuaries, tidal flats, sandy shores, rocky shores, lagoons, and the shallow continental shelf. Lecture meetings will present basic concepts in oceanography including chemical, physical, geologic, and biologic realms, as related to the coastal zone and with an emphasis on the inter-related nature of these topics. Laboratory activities on campus will include charting and navigation, and data synthesis. The field trip itself will represent the bulk of the lab experience. Field trip exercises will be conducted at various stops including oceanographic sampling and data collection. Lecture and laboratory will consider marine produced and influenced natural resources, their exploitation, and concepts centered about sustainable uses. The lecture portion of this course may be offered in a distance education format.
ESCI 17 EARTH SYSTEM SCIENCE – 3 Units (formerly PHSC 7)

Note: Required day field trips.

Class Hours: 54 lecture total

Earth is a dynamic planet, changing in response to natural processes within the atmosphere, geosphere, hydrosphere and biosphere. Modern science is now viewing Earth as an entity in its entirety, the sum of its parts, in an effort to understand how processes in one sphere impact those in another. This course stresses the inter-relationships of these systems and reviews natural cycles and positive and negative feedback pathways that operate over various time scales to affect global environmental change. The impact of civilization on the Earth system is also analyzed as the course considers pollution, over population, global warming, deforestation, desertification, resource depletion, and biologic extinctions along with solutions developed within sustainable concepts and practices.

ESCI 18 GLOBAL CLIMATE CHANGE: PAST, PRESENT AND FUTURE – 3 Units

Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)

Atmospheric processes, on a local and global scale, are considered as they determine weather and climate through time. Natural influences on the atmosphere include the global ocean, the sun, and volcanism on planet Earth, each directing atmospheric responses in a different manner. Past climate conditions on Earth, and the science used to determine those conditions through rock, sediment and ice cores, will be explored. Human influences on the atmosphere will be considered as well as a review of the observations that have lead to scientific consensus on global climate change. Current trends in climate change will be extrapolated into the future as directed by climate modeling and their consequences considered. This course may be offered in a distance education format.

ESCI 23 INTRODUCTION TO GEOLOGY IN THE FIELD – 2 Units

(formerly GEOL 13, 13AB)

Grading: Pass/No Pass Option

Prerequisite: A grade of C or higher in ESCI 1, or ESCI 5, or ESCI 6, or ESCI 7, or ESCI 10, or ESCI 12 and a grade of C or higher in ESCI 2

Note: Includes required day field trips.

Class Hours: 27 lecture/27 lab total

An introduction to methods used to collect and interpret geologic data. Lecture sessions will provide theory and background for field excursions as well as compilation periods to devise interpretations, assemble geologic summary reports, graphics, and maps. Emphasis will be placed on field equipment and its use, outcrop examination and interpretation, rock and mineral identification, utilization of topographic maps, utilization and construction of geologic maps and cross sections, construction of stratigraphic columns, utilization of aerial and satellite imagery, recognition and interpretation of geologic structures, and recognition and interpretation of primary and secondary features in outcrops and different rock types. Two or more field sites will provide the focus of the course.

ESCI 26 GEOLOGY OF THE NORTH COAST RANGES – 2 Units

(formerly GEOL 26, 26AB)

Grading: Pass/No Pass Option

Prerequisite: A grade of C or higher in ESCI 1, or ESCI 5, or ESCI 6, or ESCI 7, or ESCI 10, or ESCI 12

Note: Includes two required overnight field trips.

Class Hours: 27 lecture/27 lab total

The North Coast Ranges geomorphic province represents a zone of active mountain building and the most recently added material to the North American Continent. The province will be explored through lecture topics and field excursions that will relate active tectonics, accretion, and mountain building to the rocks now exposed in the North Coast Ranges. Coastal exposures will demonstrate the tectonics processes that are actively shaping this province and have done so for over 100 million years. Structural, lithologic, economic, and geomorphologic aspects of the province, as well as geologic hazards are also investigated.

ESCI 27 GEOLOGY OF THE KLAMATH MOUNTAINS – 2 Units

(formerly GEOL 27, 27A)

Grading: Pass/No Pass Option

Prerequisite: A grade of C or higher in ESCI 1, or ESCI 5, or ESCI 6, or ESCI 7, or ESCI 10, or ESCI 12

Note: Two overnight field trips are required

Class Hours: 27 lecture/27 lab total

The diverse and complex geologic history of the Klamath Mountains geomorphic province will be explored through lecture topics and field excursions. Plate tectonics and mechanisms of continental growth will provide the conceptual background needed to frame the assembly of varied tectonostatigraphic terrains which result in this province. Structural, magmatic, lithologic, economic and, and geomorphologic aspects of the province, as well as geologic hazards are also investigated.

ESCI 31 GEOLOGY OF THE MODOC PLATEAU – 1.5 Units

(formerly GEO 31, 62AB)

Grading: Pass/No Pass Option

Prerequisite: A grade of C or higher in ESCI 1, or ESCI 5, or ESCI 6, or ESCI 7, or ESCI 10, or ESCI 12

Note: Includes required overnight field trip.

Class Hours: 27 lecture/27 lab total

An introduction to the geology of Lassen Volcanic Park that will culminate with a two-and-a-half day overnight field trip through this geomorphic province. Lecture meetings will present basic concepts in geology needed to understand the geologic history of the Modoc Plateau as well as outcrops visited during the field trip. Topics to be discussed include volcanic processes and features, geologic hazards, geothermal potential, economic resources, faulting, plateau development, basin and range development, and subsurface water. Field trip exercises will also be conducted at various stops. The lecture portion of this course may be offered in a distance education format.

ESCI 32 GEOLOGY OF THE NORTHERN SIERRAS – 1.5 Units

(formerly GEO 32)

Grading: Pass/No Pass Option

Note: Required day field trip.

Class Hours: 18 lecture/27 lab total (when offered in a Distance Education format, hours will total 54 for the lecture portion of the class and an additional 27 hours of lab totaling 81 hours for this course.)

An introduction to the geologic processes that have shaped the northern Sierras into a geologically diverse setting. The course will culminate with a three-day field trip through the northern Sierras. Lecture meetings will present basic concepts in geology as well as topics specific to the northern Sierras such as continental growth, multiple mountain building and landscape development, glaciation and related geomorphology, and ‘mother-lander’ economic geology. Field trip exercises will also be conducted at various stops. The lecture portion of this course may be offered in a distance education format.

ESCI 33 GEOLOGY OF THE SACRAMENTO VALLEY – 1.5 Units

(formerly GEO 33, 27B)

Grading: Pass/No Pass Option

Note: Required overnight field trip.

Class Hours: 18 lecture/27 lab total (when offered in a Distance Education format, hours will total 54 for the lecture portion of the class and an additional 27 hours of lab totaling 81 hours for this course.)

An introduction to the geology of the Sacramento Valley that will culminate with a two-and-a-half day overnight field trip through this geomorphic province. Lecture meetings will present basic concepts in geology needed to understand the geologic history of the Sacramento Valley as well as outcrops visited during the field trip. Topics to be discussed include geologic hazards, economic resources, volcanism, faulting, river processes, and the Pleistocene geology of the valley. Field trip exercises will also be conducted at various stops. The lecture portion of this course may be offered in a distance education format.

ESCI 34 GEOLOGY OF THE SACRAMENTO VALLEY – 1.5 Units

(formerly GEO 34, 61AB)

Grading: Pass/No Pass Option

Note: Required overnight field trip.

Class Hours: 18 lecture/27 lab total (when offered in a Distance Education format, hours will total 54 for the lecture portion of the class and an additional 27 hours of lab totaling 81 hours for this course.)

An introduction to the geologic processes that have shaped the northern Sierras into a geologically diverse setting. The course will culminate with a three-day field trip through the northern Sierras. Lecture meetings will present basic concepts in geology as well as topics specific to the northern Sierras such as continental growth, multiple mountain building and landscape development, glaciation and related geomorphology, and ‘mother-lander’ economic geology. Field trip exercises will also be conducted at various stops. The lecture portion of this course may be offered in a distance education format.

ESCI 35 GEOLOGY OF LASSEN VOLCANIC PARK – 1.5 Units

(formerly GEO 35, 62AB)

Grading: Pass/No Pass Option

Note: Required overnight field trip.

Class Hours: 18 lecture/27 lab total (when offered in a Distance Education format, hours will total 54 for the lecture portion of the class and an additional 27 hours of lab totaling 81 hours for this course.)

An introduction to the geology of Lassen Volcanic Park that will culminate with a two-and-a-half day overnight field trip through this geomorphic province. Lecture meetings will present basic concepts in geology needed to understand the geologic history of the Modoc Plateau as well as outcrops visited during the field trip. Topics to be discussed include volcanic processes and features, geologic hazards, geothermal potential, economic resources, faulting, plateau development, basin and range development, and subsurface water. Field trip exercises will also be conducted at various stops. The lecture portion of this course may be offered in a distance education format.

ESCI 36 GEOLOGY OF MOUNT SHASTA AND VICINITY – 1.5 Units

(formerly GEO 36, 64AB)

Grading: Pass/No Pass Option

Note: Required overnight field trip.

Class Hours: 18 lecture/27 lab total (when offered in a Distance Education format, hours will total 54 for the lecture portion of the class and an additional 27 hours of lab totaling 81 hours for this course.)

An introduction to the geologic processes that have shaped the northern Sierras into a geologically diverse setting. The course will culminate with a three-day field trip through the northern Sierras. Lecture meetings will present basic concepts in geology as well as topics specific to the northern Sierras such as continental growth, multiple mountain building and landscape development, glaciation and related geomorphology, and ‘mother-lander’ economic geology. Field trip exercises will also be conducted at various stops. The lecture portion of this course may be offered in a distance education format.
ESCI 37 GEOLGY OF THE NORTHERN CALIFORNIA COASTLINE – 1.5 Units (formerly GEOL 37)

Grading: Pass/No Pass Option
Note: Required overnight field trip.

Class Hours: 18 lecture/27 lab total (when offered in a Distance Education format, hours will total 54 for the lecture portion of the class and an additional 27 hours of lab totaling 81 hours for this course.)

An introduction to the geologic processes which have shaped and continue to shape northern California's coastline such as geologic hazards including earthquakes, tsunamis, mass wasting events, and stream erosion, and the role of active mountain building. Field trip explorations will demonstrate those concepts. Topics will include glaciation, river dynamics, and the evolution of the geologic record in the area. The lecture portion of this course may be offered in a distance education format.

ESCI 38 GEOLGY OF THE REDDING AREA – 1.5 Units (formerly GEOL 38)

Grading: Pass/No Pass Option
Note: Required overnight field trip.

Class Hours: 18 lecture/27 lab total (when offered in a Distance Education format, hours will total 54 for the lecture portion of the class and an additional 27 hours of lab totaling 81 hours for this course.)

An introduction to the geologic processes which have shaped and continue to shape the Redding area including the development of the geologic history of record in the area. The lecture portion of this course may be offered in a distance education format.

ESCI 42 GEOLGY OF THE REDDING AREA – 1 Unit (formerly GEOL 42, 100)

Grading: Pass/No Pass Option
Note: Two required day field trips.

Class Hours: 9 lecture/27 lab total (when offered in a Distance Education format, hours will total 27 for the lecture portion of the class and an additional 27 hours of lab totaling 54 hours for this course.)

This introductory, short-term field class will introduce the student to geologic features in the Redding area. Included in the lecture meetings is a basic introduction to geology and the concepts necessary to appreciate the geologic history recorded in the rocks near town. Mining aspects will also be introduced. Field trip activities will explore rock relationships and visit points of interest and significance around the Redding area over two 8-hour outings. The lecture portion of this course may be offered in a distance education format.

ESCI 43 GEOLGY OF THE SHASTA LAKE AREA – 1 Unit (formerly GEOL 43, 102)

Grading: Pass/No Pass Option
Note: Two required day field trips.

Class Hours: 9 lecture/27 lab total (when offered in a Distance Education format, hours will total 27 for the lecture portion of the class and an additional 27 hours of lab totaling 54 hours for this course.)

This course is an introductory, short-term field class that will introduce the student to geologic features in the Shasta Lake area including those that are associated with Shasta Dam and the Sacramento River. Included in the lecture meetings is a basic introduction to geology and the concepts necessary to appreciate the geologic history recorded in the rocks near town. Mining aspects will also be introduced. Field trip activities will explore rock relationships and visit points of interest and significance during two 8-hour outings. The lecture portion of this course may be offered in a distance education format.

ESCI 44 GEOLGY OF THE WHISKEYTOWN AREA – 1 Unit (formerly GEOL 44)

Grading: Pass/No Pass Option
Note: Two required day field trips

Class Hours: 9 lecture/27 lab total (when offered in a Distance Education format, hours will total 27 for the lecture portion of the class and an additional 27 hours of lab totaling 54 hours for this course.)

The geologic history recorded in the Whiskeytown National Recreational Area will be discussed. The lecture portion of this course may be offered in a distance education format.

ESCI 45 GEOLGY OF CASTLE CRAGS AND VICINITY – 1 Unit (formerly GEOL 45)

Grading: Pass/No Pass Option
Note: Two required day field trips.

Class Hours: 9 lecture/27 lab total (when offered in a Distance Education format, hours will total 27 for the lecture portion of the class and an additional 27 hours of lab totaling 54 hours for this course.)

Castle Craggs and the upper Sacramento River will provide the backdrop for an introduction to the geological processes which have shaped this area. Lecture meetings will present relevant geologic concepts while on-site explorations will demonstrate those concepts. Topics will include glaciation, river dynamics, sea floor accretion, magmatic chamber evolution and emplacement and ancient environments. The field trip will emphasize theory with field application as we visit points of interest and significance during two 8-hour outings. The lecture portion of this course may be offered in a distance education format.

ESCI 46 GEOLGY OF BURNEY FALLS AND VICINITY – 1 Unit (formerly GEOL 46)

Grading: Pass/No Pass Option
Note: Two required day field trips.

Class Hours: 9 lecture/27 lab total (when offered in a Distance Education format, hours will total 27 for the lecture portion of the class and an additional 27 hours of lab totaling 54 hours for this course.)

As a part of the southern Cascades and southern Modoc Plateau, the Burney Falls area presents an excellent backdrop for considering the evolution of volcanic mountain chains. In addition, water resources are among the most impressive in the country as springs in the area emit millions of gallons of water daily. Lecture meetings will focus on relevant concepts while on-site explorations will allow for the synthesis of those concepts with on-site observations. The field trip will emphasize theory with field application as we visit points of interest and significance during two 8-hour outings. The lecture portion of this course may be offered in a distance education format.

ESCI 98 SPECIAL LAB TOPICS IN EARTH SCIENCE – 5.1 Unit

Grading: Pass/No Pass Option
Note: Required field activities.

Class Hours: 27-54 lecture total

This course will provide students with an introduction to recent technological advances or multidisciplinary approaches to laboratory and field techniques in the geosciences. Topics will vary with each course offering and will be listed in the schedule of classes.

ECONOMICS (ECON)

ECON 1A PRINCIPLES OF ECONOMICS (MICRO) – 3 Units

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher (ECON 1A is a prerequisite for ECON 1B)

Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)

This course is a study of the basic institutions and principles of microeconomics and so it concentrates on the parts of an economic system; the markets, the producers, the consumers and the structures of basic industries along with systems for relative resource use and income determination. This course may be offered in a distance education format.

ECON 1B PRINCIPLES OF ECONOMICS (MACRO) – 3 Units

Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher (ECON 1A is a prerequisite for ECON 1B)

Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)

This course studies the basic economic institutions and principles as they pertain to the entire economic system such as money and banking, determinants of national income, employment, output and the roles played by government in using monetary and fiscal policy to promote the mandates of the Employment Act of 1946. This course may be offered in a distance education format.

EDUCATION (EDUC)

EDUC 1 INTRODUCTION TO EDUCATION AND TEACHING - 3 Units

Class Hours: 54 lecture total

For prospective classroom volunteers/mentors, and others interested in education, this introductory course focuses on contemporary education practices and theories. Topics include: educational history, organization, teacher-child relationships, teaching methods, school resources, staff relations, curriculum patterns, authority, and discipline in the schools.
EDUCATION – TEACHER EDUCATION (EDTE)

EDTE 51 CLASSROOM EXPERIENCE I – READING – 1 Unit
(formerly EDTE 55)
Corequisite: Students must be concurrently enrolled in EDUC 94
Class Hours: 18 lecture total
EDTE 51 is an introduction to the teaching profession designed for students wishing to obtain a multiple subject teaching credential. Classroom instruction is aligned with fieldwork so that prospective teachers acquire planned structured observations and experiences in K-8 classrooms that demonstrate exemplary practice as described in the California Standards for the Teaching Profession. Discussion sessions assist prospective teachers in making connections between college courses and instruction in elementary public schools. Emphasis is upon application in the content areas of reading and language.

EDTE 52 CLASSROOM EXPERIENCE II – READING – 1 Unit
(formerly EDTE 60)
Corequisite: Students must be concurrently enrolled in EDUC 94
Class Hours: 18 lecture total
EDTE 52 is designed to deepen awareness and knowledge regarding specific important aspects of the teaching profession, including in-depth examination of curriculum and assessment requirements specified in recent legislation, specific tests required for teacher certification, student teaching, specific education and content standards, lesson planning, and effective instructional strategies to promote learning. Classroom instruction is aligned with fieldwork so that prospective teachers acquire planned structured observations and experiences in K-8 classrooms that demonstrate exemplary practice as described in the California Standards for the Teaching Profession. Discussion sessions assist prospective teachers in making connections between college courses and instruction in elementary schools. Emphasis is upon application in the content areas of reading and language.

EDTE 61 MATH I CLASSROOM EXPERIENCE – 1 Unit
(formerly EDTE 65)
Corequisite: Students must be concurrently enrolled in EDUC 94
Class Hours: 18 lecture total
EDTE 61 is designed to deepen awareness and knowledge about the role, function, and responsibilities of the teacher in today’s public school setting. Prospective teachers learn theories related to child development, as well as various age-level cognitive, physical, emotional and social characteristics which impact learning. Prospective teachers gain knowledge and practice regarding tests required for teacher certification, including the CSET and RICA. Classroom instruction is aligned with fieldwork so that prospective teachers acquire planned structured observations and experiences in K-8 classrooms that demonstrate exemplary practice as described in the California Standards for the Teaching Profession. Discussion sessions assist prospective teachers in making connections between college courses and instruction in elementary schools. Emphasis is upon application in the content area of math.

EDTE 62 MATH II CLASSROOM EXPERIENCE – 1 Unit
(formerly EDTE 70)
Corequisite: Students must be concurrently enrolled in EDUC 94
Class Hours: 18 lecture total
EDTE 62 is designed to deepen awareness and knowledge about each of the six California Standards for the Teaching Profession, including topics addressed within the standards and ways in which the standards drive and support effective instructional practices. The class promotes understanding about math content standards and developmentally appropriate strategies to teach math at various grade levels. Prospective teachers learn about effective instructional practices for diverse student populations, including English language learners, students with various types of disabilities, and students with special needs associated with economics and culture. Classroom instruction is aligned with fieldwork so that prospective teachers acquire planned structured observations and experiences in K-8 classrooms that demonstrate exemplary practice as described in the California Standards for the Teaching Profession. Discussion sessions assist prospective teachers in making connections between college courses and instruction in elementary schools. Emphasis is upon application in the content area of math.

EDTE 71 INTERNSHIP IN SCIENCE TEACHING – LIFE SCIENCE – .5 Unit
Class Hours: 27 lab total
EDTE 71 is focused on current teaching methods for life science. It is designed to give students the opportunity to work with elementary and middle school students in a science teaching/learning environment in the hands-on Science Education Laboratory facility on campus. The hands-on lessons provide early teaching experience in science for undergraduates exploring teaching as a career. All lessons are based on the California content standards in science. Students cover instructional strategies as well as content as part of the two-hour teaching and one-hour follow-up laboratory experience.

EDTE 72 INTERNSHIP IN SCIENCE TEACHING – PHYSICAL SCIENCE – .5 Unit
Class Hours: 27 lab total
EDTE 72 is focused on current teaching methods in physical science. It is designed to give students the opportunity to work with elementary and middle school students in a science teaching/learning environment in the hands-on Science Education Laboratory facility on campus. The hands-on lessons provide early teaching experience in science for undergraduates exploring teaching as a career. All lessons are based on the California content standards in science. Students cover instructional strategies as well as content as part of the two-hour teaching and one-hour follow-up laboratory experience.

EDTE 73 INTERNSHIP IN SCIENCE TEACHING – EARTH SCIENCE – .5 Unit
Class Hours: 27 lab total
EDTE 73 is focused on current teaching methods for earth science. It is designed to give students the opportunity to work with elementary and middle school students in a science teaching/learning environment in the hands-on Science Education Laboratory facility on campus. The hands-on lessons provide early teaching experience in science for undergraduates exploring teaching as a career. All lessons are based on the California content standards in science. Students cover instructional strategies as well as content as part of the two-hour teaching and one-hour follow-up laboratory experience.

ENER (ENER)

ENER 50 RENEWABLE ENERGY AND SUSTAINABLE DEVELOPMENT – 2 Units
Grading: Pass/No Pass Option
Class Hours: 36 lecture
This course introduces students to the field of sustainable development and renewable energy. Participants will receive instruction in sustainable development, solar electrical theory and history, photovoltaic safety, related vocabulary and terminology, photovoltaic components and function, and types of photovoltaic systems. This course also introduces current developments in the photovoltaic industry including net metering laws, rebates, tax incentives, and its relationship to federal and state economic stimulus packages.

ENER 101 PHOTOVOLTAIC TECHNOLOGY I – 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in INDE 138
Class Hours: 36 lecture/54 lab
This course introduces students to the field of photovoltaics. Participants will receive instruction in solar electrical theory and history, photovoltaic safety, related vocabulary and terminology, photovoltaic components and function, and types of photovoltaic systems. This course also introduces current developments in national and international development efforts.

ENER 102 PHOTOVOLTAIC TECHNOLOGY II – 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENER 101
Class Hours: 36 lecture/54 lab
This course introduces students to the components of photovoltaic hardware and systems; photovoltaic system sizing and costing; site and grid electrical integration; system permitting and inspection; and system commissioning, maintenance, and troubleshooting.
ENGR 1A MEASUREMENTS AND PLANE SURVEYING – 3 Units  
Prerequisite: A grade of C or higher in MATH 10 or Math Placement Level 5 or higher  
Class Hours: 36 lecture/54 lab total  
Surveying fundamentals including the use and care of surveying instruments such as engineers' level, transits, and theodolite. Applications include survey procedures, vertical and horizontal measurements, traverses, layout, and survey calculations. Additional topics include legal descriptions, public land surveying, advanced equipment, and GPS.

ENGR 1B PLANE SURVEYING - 3 Units  
Prerequisite: A grade of C or higher in MATH 10 or Math Placement Level 5 or higher, and a grade of C or higher in ENGR 1A  
Class Hours: 36 lecture/54 lab total  
Application of plane surveying principles to control surveys, field astronomy, route and construction surveys and property surveys. Introduction to advanced survey equipment and related systems.

ENGR 2 CAREER PLANNING FOR ENGINEERING & ENGINEERING TECHNOLOGY – 1 Unit  
Grading: Pass/No Pass Option  
Class Hours: 18 lecture total  
Career opportunities and training requirements in the fields of engineering and engineering technology will be examined. Students will be assisted in developing career and educational goals. Emphasis will also be placed upon developing basic employment skills and resume writing. Student activities will develop teamwork and organizational skills appropriate to technology. The course is required of all engineering and engineering technology (electronics and drafting) majors.

ENGR 17 CIRCUITS AND DEVICES – 4 Units  
Prerequisite: A grade of C or higher in MATH 4A, and a grade of C or higher in PHYS 4B  
Corequisite: Students must be concurrently enrolled in, or have completed MATH 4B with a grade of C or higher  
Class Hours: 54 lecture/54 lab total  
This course covers Nodal and Mesh circuit analysis techniques, first and second order steady state and transient analysis using the methods of differential calculus, phasors, resonance, RLC circuits, the j operator, operational amplifiers, duality, basic digital circuits and Karnaugh mapping.

ENGR 20 RESIDENTIAL DESIGN – 2 Units (formerly ENGR 21A)  
Corequisite: Students must be concurrently enrolled in, or have completed ENGR 29 with a grade of C or higher  
Class Hours: 18 lecture/54 lab total  
This course teaches the theory of orthographic projections and its use in solving similar problems. The emphasis is on graphics with engineering applications. Course topics include cost, architectural styling, site consideration, room design and orientation, and preliminary drawings. The student designs one dwelling and develops the preliminary drawings in basic CAD for completion in the succeeding course, ENGR 21.

ENGR 21 ARCHITECTURAL DRAWING (formerly ENGR 21B) – 3 Units  
Grading: Pass/No Pass Option  
Prerequisite: A grade of C or higher in both ENGR 20 and ENGR 29  
Class Hours: 36 lecture/54 lab total  
The course describes the set of architectural drawings of a residence from preliminary drawings designed during ENGR 20 and approved by the instructor. This course teaches architectural specific CAD design software, including both 2D and 3D concepts as they relate to floor plans, elevations, foundations, roofs, and electrical plans.

ENGR 22 ENGINEERING GRAPHICS – 2 Units  
Prerequisite: A grade of C or higher in ENGL 270, or English Placement Level 4 or higher; and a grade of C or higher in MATH 220 or Math Placement Level 1 or higher  
Class Hours: 18 lecture/54 lab total  
This course teaches the theory of orthographic projections and its use in solving three-dimensional objects. The course begins with the basics. Topics include lettering, types of lines, geometric constructions, basic dimensioning practices, auxiliary views and a brief introduction to Computer-Aided Drafting (CAD).

ENGR 24 DESCRIPTIVE GEOMETRY – 2 Units  
Prerequisite: A grade of C or higher in ENGR 22  
Class Hours: 18 lecture/54 lab total  
This course is a continuation of study of the theory of engineering graphics and its use in solving three-dimensional problems through the application of principals of multi-view projections. Descriptive Geometry topics include the use of auxiliary views in finding true length, bearing and slope of lines, the true shape and edge view of surfaces, dihedral angles, shortest connectors, and the intersection between planes. Additionally, the method of revolutions is also explored in solving similar problems.

ENGR 25 STRUCTURAL DRAFTING – 3 Units  
Prerequisite: A grade of C or higher in each of the following courses: ENGR 22, ENGR 29, and ENGR 30  
Class Hours: 36 lecture/54 lab total  
This is a course in advanced drafting, focusing on structural drafting, in order to prepare drafters for industry. Topics include reference and standards research, graphic and mathematical analysis, and engineering notes. Emphasis is on structural steel design and detailing plus reinforced concrete detailing.

ENGR 26 INDUSTRIAL DRAFTING – 4 Units  
Prerequisite: A grade of C or higher in ENGR 22 and a grade of C or higher in ENGR 29  
Class Hours: 36 lecture/108 lab total  
The advanced study and application of industrial design and drafting strategies, techniques, and standards. Prepares the drafting technician for employment in industry. Includes advanced topics in tooling jigs and fixtures, welding, graphic layout, piping, fasteners, reference data, casting design, gears and bearings, precision geometric dimensioning and tolerancing, and American Society of Mechanical Engineers (ASME) and ANSI drafting standards, document management, and checking procedures. Both manual and CAD techniques and strategies are covered. The course places emphasis on group organization and teamwork.

ENGR 27 MAP & COMPUTER-AIDED DRAFTING – 3 Units  
Grading: Pass/No Pass Option  
Prerequisite: A grade of C or higher in ENGR 29  
Advisory: A grade of C or higher in ENGR 1A  
Class Hours: 36 lecture/54 lab total  
This course teaches the use of the computer and civil design software to produce maps. Course topics include input and processing of field data, digital terrain modeling, contours, subdivisions, roads, and deed descriptions.

ENGR 29 COMPUTER-AIDED DRAFTING (CAD) - 2 Units  
Grading: Pass/No Pass Option  
Corequisite: Students must be concurrently enrolled in, or have completed ENGR 22 with a grade of C or higher  
Note: Students taking the Internet format of this course must have access to and working knowledge of the Internet and Windows, plus access to the most recent version of the basic AutoCAD software.  
Class Hours: 18 lecture/54 lab total (when offered in the Distance Education format, hours will total 108)  
This course utilizes basic AutoCAD as a tool for efficient drafting and design development. This course helps prepare students for the growing numbers of jobs that require CAD, both for its greater efficiency and for its computer database drawings. The emphasis is on graphics with engineering applications. This course may be offered in a distance education format.

ENGR 30 INTERMEDIATE COMPUTER-AIDED DRAFTING – 2 Units  
Grading: Pass/No Pass Option  
Prerequisite: A grade of C or higher in ENGR 29  
Class Hours: 18 lecture/54 lab total  
This is an intermediate course using AutoCAD for drafting and design. This course builds on basic 2D CAD, develops management systems, and covers 3D CAD through solid modeling.

ENGR 31 ARCHITECTURAL DETAILING – 2 Units  
Grading: Pass/No Pass Option  
Prerequisite: A grade of C or higher in ENGR 21  
Class Hours: 18 lecture/54 lab total  
This is a continued study of CAD as it pertains to architectural applications. The student completes the set of architectural drawings designed from the previous courses. The emphasis is in detailing sections, interior elevations, structural
calculations, electrical loading, and building code compliance. The techniques for presentation renderings and commercial design considerations will also be discussed.

ENGR 32 ADVANCED CIVIL DESIGN APPLICATIONS FOR CAD – 3 Units
Prerequisite: A grade of C or higher in both ENGR 27 and ENGR 1A
Class Hours: 36 lecture/54 lab total
This course will further the student's knowledge obtained in ENGR 27, so that the student will be better prepared as an engineering/drafting technician in a civil engineering office. Course topics include use of the computer and currently available software to process surveying data into complex topographic maps. These maps can and will be used for planimetric and profile maps as well as to process complex earthwork calculations.

ENGR 33 SOLID MODELING COMPUTER-AIDED DRAFTING – 2 Units
(formerly ENGR 30C)
Prerequisite: A grade of C or higher in ENGR 29
Class Hours: 16 lecture/54 lab total
An advanced computer-aided drafting course using Solid Works, Mechanical Desktop and/or Inventor software to prepare students for drafting positions with high potential to advance to designer, etc. ENGR 33 builds on the skills and knowledge of ENGR 29. This course will focus on how to create 3D models, assemble and constrain assembly models. Students will use advanced drafting skills to solve design problems and to present solutions for production or engineering processes, and to visually communicate their solution.

ENGR 35 STATICS – 3 Units
Prerequisite: A grade of C or higher in PHYS 4A
Corequisite: Students must be concurrently enrolled in, or have completed MATH 4A with a grade of C or higher.
Advisory: A grade of C or higher in ENGR 190, or English Placement Level 6 or higher. Previous drafting experience is helpful.
Class Hours: 54 lecture total
A course in the study of the mechanics of equilibrium of force systems acting on engineering structures. Topics include equivalent force couple systems, equilibrium, truss analysis, multi-force member analysis, centroids, distributed forces, beam stress and strain diagrams, friction, cables, moments and products of inertia, and virtual work. This course is usually followed by a course in dynamics, offered at the university upper-division level.

ENGR 37 STATICS FOR ENGINEERING TECHNICIANS AND CONSTRUCTION MANAGEMENT – 3 Units
Prerequisite: A grade of C or higher in MATH 10, or Math Placement Level 5 or higher
Class Hours: 54 lecture total
This course analyzes the external forces induced in structures and machines by various types of loading. Basic vector analysis is used to determine equivalent force-couple systems and equilibrium of two-dimensional bodies. Analysis of simple frames and machines and trusses is discussed. Frictional forces within wedges and belts are considered within units. Centroids and Area Moments of Inertia are calculated for composite objects.

ENGR 38 STRENGTH OF MATERIALS FOR ENGINEERING TECHNICIANS AND CONSTRUCTION MANAGEMENT – 3 Units
Prerequisite: A grade of C or higher in ENGR 37 or a grade of C or higher in ENGR 35
Class Hours: 54 lecture total
This course analyzes the internal forces induced in structures and machines by various types of loading. Simple stresses, strains, basic mechanical properties of materials, torsion of circular shafts, shear forces and bending moments in beams, stresses in beams and beam design will be covered. Topics in deflection of beams and statically indeterminate beams are covered.

ENGR 45 PROPERTIES OF MATERIALS - 3 Units
Prerequisite: A grade of C or higher in PHYS 4A
Class Hours: 36 lecture/54 lab total
Study of atomic and crystal structures of metallic materials and their physical, mechanical and chemical properties, and the application of basic principles to the selection and use of engineering materials.

ENGR 64 ENGINEERING MATERIAL TESTING - 3 Units
Prerequisite: A grade of C or higher in ENGR 270 or English Placement Level 4 or higher, and a grade of C or higher in MATH 220 or Math Placement Level 1 or higher
Class Hours: 36 lecture/54 lab total
This course will provide the basic understanding and experience in testing civil engineering/construction materials. Various types of test equipment and testing procedures will be covered as well as the computations associated with the individual tests.
fction and fiction, and in writing essays of definition, cause/effect analysis, argumentation, refutation, and advocacy. Students will learn to use research strategies in analyzing others’ ideas and supporting their own. This course may be offered in a distance education format.

**ENGL 10A  WORLD LITERATURE (to 1500) – 3 Units**
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGL 1A or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)

This course introduces students to some representative masterpieces in world literature beginning with the ancient world and continuing to 1500. A majority of the works will be selected from non-Western literary traditions. The course involves critical analysis of these works within the context of the culture and time in which they were written. Emphasis centers on identifying and analyzing important themes that shape and define the human experience. This course may be offered in a distance education format.

**ENGL 10B  WORLD LITERATURE (after 1500) – 3 Units**
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGL 1A or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)

This course introduces students to some representative masterpieces in world literature beginning with 1500 and continuing to the present. A majority of the works will be selected from non-Western literary traditions. The course involves critical analysis of these works within the context of the culture and time in which they were written. Emphasis centers on identifying and analyzing important themes that shape and define the human experience. ENGL 10A is not a prerequisite to ENGL 10B. This course may be offered in a distance education format.

**ENGL 11A  A SURVEY OF AMERICAN LITERATURE–Pre-Colonial to 1860 – 3 Units**
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGL 1A or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)

This course involves a study of representative authors in the literary history of the United States from the pre-colonial period to the Civil War. This course may be offered in a distance education format.

**ENGL 11B  A SURVEY OF AMERICAN LITERATURE–1860 to Present – 3 Units**
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGL 1A or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)

This course involves a study of representative authors in the literary history of the United States from the Civil War to the present day. This course may be offered in a distance education format.

**ENGL 12  INTRODUCTION TO SHORT FICTION – 3 Units**
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGL 1A or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)

An introduction to the genre of the short story in English and translation, including the elements of the form: structure, narration, point of view, setting, character, plot, and metaphorical language. This course may be offered in a distance education format.

**ENGL 13A  SURVEY OF ENGLISH LITERATURE (Old English Period through Neoclassicism) – 3 Units**
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGL 1A or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)

ENGL 13A is the first semester of the basic two-semester English Literature survey course commonly offered in the sophomore year at colleges and universities. It involves the intensive study of and reading and writing upon representative masterpieces of the literary history of England from the Anglo-Saxon period to the end of the 18th century. This course may be offered in a distance education format.

**ENGL 13B  A SURVEY OF ENGLISH LITERATURE (from the Romantic Period to Present) – 3 Units**
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGL 1A, or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)

ENGL 13B is the second part of the basic two-semester English Literature survey course, commonly offered in the sophomore year at colleges and universities. It involves the intensive study of and reading and writing upon representative masterpieces of the literary history of England from the Romantic Period to the present. This course may be offered in a distance education format.

**ENGL 14  A SURVEY OF DRAMA AS LITERATURE – 3 Units**
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGL 1A, or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)

This course is designed to provide the student with an awareness of the origin and development of Western drama through an examination of representative plays from classical Greece to the present. Aesthetic values as well as social, political, and psychological implications expressed through the drama will be examined in order to enhance the student's understanding and appreciation of dramatic literature; therefore, students will be required to watch as well as read plays which are representative of the various movements in western civilization. This course may be offered in a distance education format.

**ENGL 15  LITERATURE BY AND ABOUT WOMEN - 3 Units**
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGL 1A, or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)

A survey of literature by and about women in different periods and countries. Genres studied include stories, diaries and letters, poetry and drama. Emphasis is on the human condition, especially among women, as expressed in literature. This course may be offered in a distance education format.

**ENGL 16  POETRY – 3 Units**
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGL 1A, or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)

An intensive course analyzing the techniques and forms of poetry in English with stress on the genre. Interpretation and appreciation are the primary goals. Emphasis is on extensive reading for pleasure, various types of writing including analytical, responsive and experiential, as well as group experiences in listening. In addition, this course seeks to equip the college literature student to understand literary materials in a new way. The course includes a number of written exercises. This course may be offered in a distance education format.

**ENGL 17  INTRODUCTION TO SHAKESPEARE - 3 Units**
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 1A or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)

This course offers an introduction to the representative works by Shakespeare including the characteristics of the different genres such as comedy, history, and tragedy as well as a study of the sonnets. A particular focus on theatre history and the historical and sociological influences of the Elizabethan/Jacobean era will highlight the study of the dramatic and literary conventions. This course may be offered in a distance education format.

**ENGL 18  AFRICAN AMERICAN LITERATURE - 3 Units**
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 1A or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)

This course is primarily a genre study of African American Literature from the colonial period to the present — including oral tradition, poetry, slave narratives, essays, short stories, plays, novels, and music. Included is an examination of the historical, cultural and social forces influencing these works.

**ENGL 19  A SURVEY OF THE BIBLE AS LITERATURE – 3 Units**
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGL 1A, or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)

A course designed to provide the student with an understanding of the origin and development of the bible canon and its rendering into English. Major Bible books will be examined from the perspectives of content, form, and scholarly criticism. This course may be offered in a distance education format.

**ENGL 20  WORLD MYTHOLOGY – 3 Units**
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGL 1A, or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)

This course introduces the major images and themes of myths from around the world. By analyzing various archetypal patterns found in the sacred stories, narratives, and legends of the great civilizations and tribal cultures, students understand both the uniqueness of each culture's world view and the commonality of human experience. This course may be offered in a distance education format.
ENGL 24 MULTICULTURAL PERSPECTIVES IN AMERICAN LITERATURE – 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGL 1A, or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course is an introduction to multietnic literary currents in American literature and will focus on African-American, Asian-American, Hispanic-American, Pacific-Islander, and/or Native-American literature (minimum of two) within “mainstream” American literature. Poetry, essays, short stories, novels, memoirs, and biography will be studied as works of individual artists and from a cultural perspective. An integral part of the course is an understanding of the political/cultural/historical context of the literature. This course stresses critical and analytical thinking, reading, and writing skills. Students from all backgrounds should benefit from the unique insights into American life afforded by these rich and varied traditions. This course may be offered in a distance education format.

ENGL 25 LINGUISTICS – 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGL 1A, or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
The course is an introduction to the study of language. Course content surveys linguistic concepts of the nature and diversity of language: morphology, syntax, semantics, phonetics, and phonology; language acquisition; social variation, and historical change. This course may be offered in a distance education format.

ENGL 31 CREATIVE WRITING – 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190 or ESL 138, or English Placement Level 6 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
The student learns the craft and principles of dramatic narrative and poetry through a variety of short assignments. A final project may be written in any field of interest: short story, article, movie/TV script, stage play, or book. Analysis and lecture are presented both for those desiring to write experimentally, and for those interested in the demanding world of publication. This course may be offered in a distance education format.

ENGL 33 FICTION AND FILM – 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGL 1A, or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
An examination of fiction and film as literary art forms. Course emphasizes critical reading of literature and viewing of film, with comparative, expository, and argumentative writing about those works. Through in-depth analysis of examples from both literature and film, students will become familiar with the major literary conversations in fiction and film, and learn to appraise a work on the basis of literary merit. This course may be offered in a distance education format.

ENGL 36 CHILDREN’S LITERATURE – 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGL 1A or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course provides an overview of the origins and developments of children’s literature and acquaints the student with different genres of literature written for and read by children. In addition to exploring ways of promoting children’s development through literature, students will also learn how to approach children’s literature from a critical and theoretical perspective. This course may be offered in a distance education format.

ENGL 91 ADVANCED COMPOSITION – 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ENGL 1A, or English Placement Level 7
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
Advanced instruction and practice in effective writing, with intensive study of the established rhetorical principles. Emphasis is upon excellence in writing and the application of grammar to the improvement of writing. Intended primarily for students who are working toward an elementary teaching credential; meets state certification requirements for an advanced course in writing. This course may be offered in a distance education format.

ENGL 129 GRAMMAR REVIEW: GRAMMATICAL AND EFFECTIVE SENTENCES – 1 Units
Grading: Pass/No Pass Option
Class Hours: 18 lecture total (when offered in the Distance Education format, hours will total 54)

ENGL 130 DIALOGUE AND BASIC ARGUMENTATION – 1 Unit
Prerequisite: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 72 lecture total (when offered in the Distance Education format, hours will total 216)
This course is designed to improve critical reading skills and to increase writing abilities so that students are able to read a text closely and produce organized, well-supported, and generally smoothly written essays. The course places emphasis on writing both as a process and as a presentable product. In addition, the course introduces students to academic research and the use of source materials in writing. This course may be offered in a distance education format.

ENGL 191 WRITING IN THE WORKPLACE: GRAMMAR IN CONTEXT AND BASIC ESSAY STRUCTURE – 2 Units
Prerequisite: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 36 lecture total
ENGL 191 is designed as the first in a module series specifically for those students who desire direct applications of writing skills to the workplace environment with a special emphasis on basic essay structure and the correct and effective use of grammar and mechanics required in vocational fields. Emphasis will be on both correctness and the writing process. If passed with a grade of “C” or higher, this course can be used in combination with ENGL 192, ENGL 193, and/or ENGL 194 (for a total of four units) to admit a student into ENGL 1A. The flexible scheduling of this course and the module approach allows students more freedom in choosing both their schedules and their curriculum.

ENGL 192 WRITING IN THE WORKPLACE: NARRATION – 1 Unit
Prerequisite: A grade of C or higher in ENGL 191
Class Hours: 18 lecture total
ENGL 192 is designed specifically for those students who have completed ENGL 191 and who desire direct applications of writing skills to the workplace environment with a special emphasis on narrative writing skills utilized in vocational fields. Emphasis will be on both correctness and the writing process. If passed with a grade of “C” or higher, this course can be used in combination with ENGL 191 and either ENGL 193 or ENGL 194 (for a total of four units) to admit a student into ENGL 1A. The flexible scheduling of this course, along with its module approach, allows students more freedom in choosing both their schedules and their curriculum.

ENGL 193 WRITING IN THE WORKPLACE: PROCESS AND REPORT WRITING – 1 Unit
Prerequisite: A grade of C or higher in ENGL 191
Class Hours: 18 lecture total
ENGL 193 is designed specifically for those students who have completed ENGL 191 and who desire direct applications of writing skills to the workplace environment with a special emphasis on process and report writing utilized in vocational fields. Emphasis will be on both correctness and the writing process. If passed with a grade of “C” or higher, this course can be used in combination with ENGL 191 and either ENGL 192 or ENGL 194 (for a total of four units) to admit a student into ENGL 1A. The flexible scheduling of this course, along with its module approach, allows students more freedom in choosing both their schedules and their curriculum.

ENGL 194 WRITING IN THE WORKPLACE: COMPARISON/CONTRAST AND BASIC ARGUMENTATION – 1 Unit
Prerequisite: A grade of C or higher in ENGL 191
Class Hours: 18 lecture total
ENGL 194 is designed specifically for those students who have completed ENGL 191 and who desire direct applications of writing skills to the workplace environment with a special emphasis on comparison/contrast and basic argumentative writing skills utilized in vocational fields. Emphasis will be on both correctness and the writing process. If passed with a grade of “C” or higher, this course can be used in combination with ENGL 191 and either ENGL 192 or ENGL 193 (for a total of four units) to admit a student into ENGL 1A. The flexible scheduling of this course, along with its module approach, allows students more freedom in choosing both their schedules and their curriculum.
ENGL 260 ELEMENTS OF READING 260 – 4 Units
Prerequisite: English Placement Level 2 or higher
Class Hours: 72 lecture total
This course is constructed to help students enhance personal reading and work-related language skills. Instruction will include word attack strategies, vocabulary development, word usage, study skills, sentence writing, paragraph writing, critical thinking opportunities, and interpretive comprehension. Materials at the sixth and seventh grade levels will be used. The student must be capable of working independently and in small groups.

ENGL 270 ELEMENTS OF READING 270 – 4 Units
Prerequisite: A grade of C or higher in ENGL 260 or English Placement Level 3 or higher
Class Hours: 72 lecture total
This course is intended to help vocational and transfer-oriented students to augment academic reading and writing ability to successfully complete college-level courses. Students will be evaluated in class to determine strong and weak skill areas. Instruction will focus on college-appropriate vocabulary development; writing cogent, clear, precise prose with correct usage including grammar and spelling; plus comprehension focused on in-depth analysis and abstract reasoning. Materials at the eighth and ninth grade levels will be used. The student must be capable of working independently and in small groups.

ENGL 280 READING AND WRITING I – 4 Units
Prerequisite: A grade of C or higher in ENGL 270, or English Placement Level 4 or higher
Class Hours: 72 lecture total (This course may offered as partial Internet and hours will total 54 lecture and 54 Internet)
This course builds towards college-level reading and writing skills. The reading component emphasizes such skills as previewing, locating main ideas and supporting evidence, and drawing sound inferences. The writing component consists primarily of narrative, reading responses, and summaries. The course aims to increase reading and writing proficiency, with some attention to correct usage and the ability to develop ideas in an organized fashion in various kinds of writing. Part of this course may be offered in a distance education format.

ENGL 348 ADULT LITERACY I – 0 Units
Class Hours: 54-108 lab total
This course is designed to help students reading below the fourth grade level improve their reading skills. The course will provide one-on-one tutoring in basic reading skills including symbol, sound, and letter relationships; phonics; short and long vowel sounds; consonant blends; letter formation; basic capitalization and punctuation rules; reading for details; and sequencing. Students will use materials below the fourth grade level. Students must be capable of working independently and in small groups to complete the program. Enrollment in sequential courses is based on measurable progress.

ENGL 350 ADULT LITERACY II – 0 Units
Prerequisite: English Placement Level 1 or higher
Class Hours: 54-108 lab total
This course is designed to help students reading below the sixth grade level improve their reading skills and prepare them to enter the credit English course sequence. The course will provide one-on-one and small group instruction in basic reading skills including decoding, sight vocabulary, basic writing conventions, comprehension at the literal level, and improved fluency. Students will use materials at the fourth and fifth grade levels. The student must be capable of working independently and in small groups to complete the program.

ENGL 382 READING AND WRITING WORKSHOP – 0 Units
Class Hours: 1-200 lab total
Students receive individualized tutoring to address problems they are having either in written expression or in reading.

ENGLISH AS A SECOND LANGUAGE (ESL)

ENGL 246 ORAL COMMUNICATION FOR COLLEGE SUCCESS – 4 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in ESL 236 or ESL Placement Level 7 or higher
Class Hours: 72 lecture total
This is a course designed to help non-native speakers of English to develop college-level writing fluency. Emphasis is on writing short compositions, developing process-writing skills and learning common methods of organization. This course includes an intensive review of English grammatical patterns. Development of these skills enhances students' fluency and proficiency in college-level writing.

ENGL 247 ENGLISH AS A SECOND LANGUAGE VOCATIONAL MATH – 1 Unit (formerly ENGL 247)
Grading: Pass/No Pass Only
Class Hours: 54 lab total
A course designed to help ESL students develop math skills needed for entry level employment. The course will provide one-on-one tutoring in basic vocational math skills including: basic computation of whole numbers and fractions, order of operations, decimals and percents; time lineal, weight and volume measurements (U.S. standard and metric), basic money skills graphs and calculator use. Based on individual assessments, programs of study will be written for each student. Delivery will be multi-sensory with direct teaching and self exploration. Independent work skills are necessary to complete the study program. No math credit will be given for this course.

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.
**ESL 249  ENGLISH AS A SECOND LANGUAGE READING LAB – 0 Units**  
(formerly ENGL 249)  
Grading: Pass/No Pass Only  
Class Hours: 54 lab total  
A course designed to help students with problems related to second language acquisition to improve their reading, writing, speaking and vocabulary skills. The course will provide one-on-one tutoring in reading related skills including symbol/sound relationships, sight word and spelling, and understanding at the concrete level. Based on individual assessments, programs of study will be developed for each student. Delivery will be multi-sensory with direct teaching along with individual exploration. Independent work skills are necessary to complete the study program.

**ESL 320  ORAL COMMUNICATION – 0 Units**  
Class Hours: 72 lab total  
Designed for the upper beginning to upper intermediate student of English as a Second Language. Major emphasis will be on refining and expanding the listening and speaking skills, aural-oral coping skills, and oral critical thinking and expression skills, which are necessary to function in routing social interactions, entry-level jobs, and/or further academic work.

**ESL 331  BEGINNING LOW – 0 Units**  
Class Hours: 180 lab total  
This is a course designed for the absolute beginner with zero competency in English. Emphasis is on oral language skills and basic vocabulary related to daily living.

**ESL 332  BEGINNING HIGH – 0 Units**  
Advisory: Successful completion of ESL 331  
Class Hours: 180 lab total  
This course builds on the basic language skills from ESL 331. Language skills are expanded in communicative contexts. Emphasis is placed on development of “social English.”

**ESL 333  INTERMEDIATE LOW – 0 Units**  
Advisory: Successful completion of ESL 332 or ESL Placement Level 4 or higher  
Class Hours: 180 lab total  
This course integrates intermediate language skills. Students at this level build the communicative ability to function in practical areas of daily life.

**ESL 334  INTERMEDIATE HIGH – 0 Units**  
Advisory: Successful completion of ESL 332 or ESL Placement Level 5 or higher  
Class Hours: 180 lab total  
This course reviews and expands the intermediate language skills learned in the previous level. Students will develop the ability to communicate in oral and written English beyond the familiar. They will read authentic materials on everyday topics, identify the main ideas and draw conclusions, and write routine correspondence and brief compositions with increasing complexity.

**ESL 336  ADVANCED – 0 Units**  
Advisory: Successful completion of ESL 334, a grade of C or higher in ESL 234, or ESL Placement Level 6 or higher  
Class Hours: 180 lab total  
At this level, students develop the ability to understand and engage in extended conversations and discussions and communicate with increasing fluency and grammatical accuracy. This course stresses the language skills necessary for further academic study. Students read authentic materials beyond the familiar, develop academic vocabulary, and write paragraphs and short compositions.

**ESL 378  AMERICAN CITIZENSHIP – 0 Units**  
Advisory: A grade of C or higher in ESL 234 or ESL Placement Level 4 or higher  
Class Hours: 90 lab total  
This is a course designed to prepare prospective citizens for citizenship. Class activities will focus on U.S. history, government, basic geography and American culture and customs as it relates to the knowledge required to become an American citizen. While improving their English language skills, students will learn how to complete naturalization forms and prepare for the written and oral test for citizenship.

**ESL 385  LITERACY – 0 Units**  
(formerly ENGL 385)  
Class Hours: 54-216 lab total  
This course emphasizes aural-oral language skills and basic literacy.

**ENVIRONMENTAL RESOURCES**  
See AG, AGMA, AGNR, AGPS and CONS for course listings

**FAMILY STUDIES AND SERVICES (FSS)**

**FSS 10  INTRODUCTION TO HUMAN SERVICES – 3 Units**  
Class Hours: 54 lecture total  
This course is an introduction to the Human Services field of study. It provides information to students who are interested in careers in the fields of welfare, medical, health, adult/child protective services, vocational rehabilitation, social services, employment and training, education, child care services, job development and others. Historical and theoretical perspectives of human services will be covered. The significance of social policy and prevention will be stressed throughout the course. Workplace attitudes, values, ethics and professionalism will also be covered.

**FSS 12  STANDARDS AND PRACTICES IN HUMAN SERVICES – 3 Units**  
Advisory: A grade of C or higher in FSS 10  
Class Hours: 54 lecture total  
This course explores the theoretical perspectives and professional standards involved in Human Services – with particular emphasis on Social Work Practices. Students will be introduced to the practices of engagement, assessment, intervention, documentation and conflict resolution while consistently integrating these with the systems framework and strengths perspective. Professional and personal ethics will be stressed throughout the course. Multicultural competence and policy development will also be covered.

**FSS 14  INTRODUCTION TO CASE MANAGEMENT – 3 Units**  
Class Hours: 54 lecture total  
This course introduces the student to the role and importance of the case manager within the field of Human Services/Social Work. The philosophical differences of various models will be explored along with the pragmatic skills and practices that combine for effective case management: engagement, interviewing, assessment, identification of goals and resources, monitoring progress and evaluating outcomes. Emphasis will be placed on professional standards and practices of conduct as well as documentation and record-keeping skills that align with legal mandates.

**FSS 16  MARRIAGE AND FAMILY – 3 Units**  
(formerly HEOC 16)  
Class Hours: 54 lecture total  
An introductory course to marriage and family. Topics studied include dating, courtship, marriage, family life, dual career marriages, divorce, single parenting, domestic violence and other contemporary issues.

**FSS 18  ADULTHOOD AND AGING – 3 Units**  
Grading: Pass/No Pass Option  
Class Hours: 54 lecture total  
A study of the developmental changes that occur during early, middle and late adulthood, as well as the continuities that exist within individuals throughout this time span. The physical, cognitive and psychosocial domains will be explored with a particular emphasis upon patterns that lead to successful aging within the societal context.

**FSS 22  NUTRITION THROUGH THE LIFE SPAN – 3 Units**  
(formerly HEOC 25)  
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)  
A study of the science of food, the nutrients and other substances therein, their actions, interactions and balance in relation to health and disease. The class emphasizes the positive contributions of nutrition to life and health. This course may be offered in a distance education format.

**FSS 26  NUTRITION – 3 Units**  
(formerly HEOC 26)  
Class Hours: 54 lecture total  
A course emphasizing the basic principles of nutrition as they apply to different age groups throughout the life cycle. The special concerns and nutritional needs of pregnancy and lactation, infancy and the preschool years, childhood and adolescence, adulthood and aging will be addressed. The course will also emphasize meal planning for the various stages of life utilizing current dietary recommendations and the most current revisions of nutrition labels.

**FSS 27  NUTRITION AND DISEASE – 2 Units**  
Prerequisite: A grade of C or higher in FSS 25  
Note: Upon successful completion of the course (a grade of B or better), licensed nurses will receive 30 CE hours under BRN Provider #586.  
Class Hours: 36 lecture total (when offered in the Distance Education format, hours will total 108)  
A comprehensive therapeutic study of the relationship between a patient, their diet and optimum health. Physiological conditions that necessitate dietary modifications in the clinical setting will be stressed. This course may be offered in a distance education format.
FSS 46 PERSONAL FINANCE – 3 Units (formerly HOEC 46)
Class Hours: 54 lecture total
Designed to provide students with the information and decision-making tools needed for planning and implementing a successful lifelong financial plan. Topics will include budgeting, debt management, savings and other investment vehicles, taxes, insurance, and retirement planning.

FSS 60 LIFE MANAGEMENT – 3 Units (formerly HOEC 60)
Class Hours: 54 lecture total
This course provides students with skills for understanding and using both internal and external resources to function effectively in our present and future society. The effects of cultural forces and future trends will be covered in reference to individual and family values, standards, and goals. Students will be required to analyze and integrate established principles with self-understanding in both decision-making and creating lifelong goals for themselves. Strategies in time management, energy management, stress management and conflict management will also be covered.

FSS 94 FAMILY STUDIES AND SERVICES WORKSITE LEARNING – 1-8 Units
Limitation on Enrollment: Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.
Class Hours: 75 hours paid or 60 hours non-paid per unit
The Vocational Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acquired by the student and related to the student's major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on the job performance. A student may earn up to 16 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in a single semester.

FIRE TECHNOLOGY (FIRS)

FIRS 70 FIRE PROTECTION ORGANIZATION – 3 Units
Class Hours: 54 lecture total
Provides an introduction to fire protection; career opportunities and related fields; philosophy and history of fire protection; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; introduction to fire strategy and tactics.

FIRS 71 FIRE BEHAVIOR AND COMBUSTION – 3 Units
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course of study presents theory and fundamentals of how and why fires start, spread, and are controlled; an in-depth study of fire chemistry and physics; fire characteristics of materials; extinguishing agents; and fire control techniques. This course may be offered in a distance education format.

FIRS 72 FIRE PREVENTION TECHNOLOGY – 3 Units
Class Hours: 54 lecture total
Provides fundamental information regarding the history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use of fire codes, identification and correction of fire hazards, and the relationships of fire prevention with built-in fire protection systems, fire investigation and fire safety education.

FIRS 73 WILDLAND FIREFIGHTER I ACADEMY – 4 Units
Class Hours: 54 lecture/108 lab total
Review of fire behavior, equipment, and apparatus; cover basic wildland firefighting tactics and strategy, methods of attack, and pre-planning fire problems. Course meets or exceeds the minimum requirements for entry-level firefighter positions in the California Department of Forestry (CDF) and the United States Forest Service (USFS). Note: To be considered for seasonal Firefighter positions by CDF, you must also hold additional certificates. Students should contact CALFIRE for additional information.

FIRS 74 FIRE PROTECTION EQUIPMENT AND SYSTEMS – 3 Units
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
Provides information relating to the features of design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection and portable fire extinguishers. This course may be offered in a distance education format.

FIRS 75 FIRE TECHNOLOGY CAREER PLACEMENT – 1 Unit
Gradning: Pass/No Pass Option
Class Hours: 40 lecture total
This course provides an in-depth analysis of the principles of fire command and fire control through utilization of personnel, equipment, and extinguishing agents on the fire ground.

FIRS 76 FIRE HYDRAULICS – 3 Units
Gradning: Pass/No Pass Option
Class Hours: 54 lecture/4 lab total
Review of basic mathematics, hydraulic laws and formulas as applied to the fire service, application of formulas and mental calculation to hydraulic problems, underwriters' requirements for pumps and equipment.

FIRS 79 FUNDAMENTALS OF PERSONAL FIRE SAFETY – 3 Units
Gradning: Pass/No Pass Option
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course will introduce the student to fundamental issues relating to fire fighting safety and survival. Students will evaluate case studies in which firefighters have been killed or injured. In addition, each student will be required to give an oral presentation based on an analysis of a "near miss" fatal fire/rescue scenario. This course may be offered in a distance education format.

FIRS 80 BUILDING CONSTRUCTION FOR FIRE PROTECTION – 3 Units
Gradning: Pass/No Pass Option
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course is the study of the components of building construction that relate to fire safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at fires. The development and evolution of building and fire codes will be studied in relationship to past fires in residential, commercial, and industrial occupancies. This course may be offered in a distance education format.

FIRS 85 FIRE COMMAND IA – 2 Units (formerly FIRS 85A)
Gradning: Pass/No Pass Option
Class Hours: 40 lecture total
This course covers company and multi-company fire command issues including wildland fires, hazardous materials incidents, and major medical incidents.

FIRS 86 BUILDING CONSTRUCTION FOR FIRE PROTECTION – 3 Units
Gradning: Pass/No Pass Option
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course is the study of the components of building construction that relate to fire safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at fires. The development and evolution of building and fire codes will be studied in relationship to past fires in residential, commercial, and industrial occupancies. This course may be offered in a distance education format.

FIRS 87 FIRE COMMAND IB – 2 Units (formerly FIRS 85B)
Gradning: Pass/No Pass Option
Class Hours: 40 lecture total
This course covers company and multi-company fire command issues including wildland fires, hazardous materials incidents, and major medical incidents.

FIRS 94 FIREFIGHTER TRAINEE WORKSITE LEARNING – 1-8 Units
Limitation on Enrollment: Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.
Class Hours: 75 hours paid or 60 hours non-paid per unit
The Vocational Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acquired by the student and related to the student’s major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on the job performance. A student may earn up to 16 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in a single semester.

FIRS 100 BASIC FIRE COMPANY OPERATIONS – 2 Units
Gradning: Pass/No Pass Option
Class Hours: 18 lecture/54 lab total
To provide the student with first hand knowledge of actual fire conditions. Student will learn terminology used in the field, and how to work in the chain of command under emergency conditions, company procedures, shift routine, and engine company evolutions. Note: This course may be repeated any number of times for credit by persons who are legally mandated to meet training requirements as a condition of continued paid or volunteer employment.

FIRS 101 FIRE TECHNOLOGY CAREER PLACEMENT – 1 Unit
Gradning: Pass/No Pass Option
Class Hours: 54 lab total
Designed to assist the student in the final semester of vocational program to learn interview techniques, to develop an employment portfolio, and to interview with several potential employers with the express purpose of assisting the student to obtain the best employment upon graduation.

FIRS 102 APPRENTICESHIP ACADEMY – 1.5 Units
Gradning: Pass/No Pass Option
Class Hours: 18 lecture/27 lab total
This course will cover hazardous building materials/construction methods, rescue strategies, ventilation techniques, pre-plan methods, cautions regarding lab fires and instructional techniques for new personnel. Note: This course may be repeated a number of times for credit by persons who are legally mandated to meet training requirements as a condition of continued paid or volunteer employment.
FIRS 104  FIREFIGHTER I ACADEMY – 21 Units
Class Hours: 234 lecture/450 lab total
This course exceeds the minimum educational requirements established by the California State Fire Marshal's Office for State Certification as a Firefighter I. This academy is an accredited regional academy approved by the California State Board of Fire Service. Final certification as a Firefighter I is verified by the State Fire Marshal's Office after the student completes the Academy, works as a volunteer Firefighter for one year or a full-time paid Firefighter for six months. Students successfully completing this course will receive numerous stand alone certifications such as: Certified Wildland Firefighter; State Fire Marshal's Auto Extermination, Confined Space Awareness, EMS First Responder and others. Note: Based on scheduling and instructor availability issues, this course may meet four or five days a week with occasional night classes, and additional weekend days may be required. Preset/scheduled dates and times may be shifted as needed to accommodate facility usage, equipment demands, weather, skills development needs and instructor availability. When dates and times are shifted, the total amount of required class time will not differ from those hours as listed on the first class handout.

FIRS 105  DRIVER/OPERATOR 1A: EMERGENCY VEHICLE OPERATIONS – 1.5 Units
Note: Student must provide a fire engine for the driving portion of the course. Student must possess a valid Class B California Driver's License.
Class Hours: 18 lecture/27 lab total
Designed to provide the student with information on driver techniques for emergency vehicles and techniques of basic inspection and maintenance for emergency vehicles, including actual driving exercises under simulated emergency conditions.

FIRS 106  DRIVER/OPERATOR 1B: PUMP OPERATIONS – 1.5 Units
Note: Student must provide a fire engine for the driving portion of the course. Student must possess a valid Class B California Driver's License.
Class Hours: 18 lecture/27 lab total
Course provides the student with the information, theory, methods and techniques for operating fire service pumps, including: types of pumps, engine and pump gauges maintenance, unsafe pumping conditions; pressure relief devices, cooling systems, water supplies, drafting field hydraulics, and pumping operations.

FIRS 108  FIREFIGHTER II ACADEMY – 5 Units
Notes:
1. Students will have to provide their own safety equipment, which meets NFPA standards. Equipment will include: helmet, gloves, structural fire fighting coat and pants, boots, eye protection, etc.
2. To receive a California State Fire Marshal's Certification, students must have completed FIRS 104 prior to enrollment in FIRS 108.
Class Hours: 72 lecture/54 lab total
An extended form of the Firefighter I course with advanced skills. Designed to provide the Firefighter I with both manipulative and technical skills. Course approved by the California State Board of Fire Services and California State Fire Marshal's Office. Upon successful completion of course work, Firefighter II certification will be granted. Note: This course may be repeated any number of times for credit by persons who are legally mandated to meet training requirements as a condition of continued paid or volunteer employment.

FIRS 113  FIRE CREW SUPERVISOR – 1 Unit
Grading: Pass/No Pass Option
Class Hours: 18 lecture total
The course is designed to complement existing fire crew captain training by presenting techniques for supervision of inmates, wards, and residents; conducting investigations; effective report writing; and understanding the legal rights of inmates, wards, and residents. The practical application of these supervision skills will be emphasized using simulated training experiences. Note: This course may be repeated any number of times for credit by persons who are legally mandated to meet training requirements as a condition of continued paid or volunteer employment.

FIRS 116  ENGINE ACADEMY – 3 Units
Grading: Pass/No Pass Option
Note: Students must have completed the following course prior to enrollment in FIRS 116 in order to receive a USDA certificate; Crew Boss S-230 114, U.S. Forest Operator's Permit for Engine Operator F-5.
Class Hours: 36 lecture/54 lab total
A course designed to give classroom training, field familiarization, and drills of all water-use and related equipment used in wildland fire suppression. The student will obtain information, practical experience and a working knowledge of all water-use and related equipment used in wildland fire suppression, fire safety suppression tactics, and meeting standards. A USDA certificate of training will be issued upon successful completion of this course.

FIRS 118  INTRODUCTION TO WILDLAND FIRE FIGHTING – 1.5 Units
Class Hours: 18 lecture/27 lab total
This course meets requirements in the natural resources and fire science programs. A review of fire chemistry, equipment, and manpower, basic fire fighting strategy, methods of attack, pre-planning fire problems, and fire line safety are included in the course. A U.S. Forest Service USDA Certificate of Training (Basic Firefighter's Training) may be issued after satisfactory completion of this course. Approximately 50 percent of labs will be in the field.

FIRS 120  INCIDENT COMMAND SYSTEM ICS-200 – 5 Unit
Grading: Pass/No Pass Option
Class Hours: 12 lecture total
Designed to introduce firefighters to the Incident Command System. Emphasis will be on system design principles, components of the system, positional responsibilities, and the common responsibilities of personnel assigned to the organization. (This course is a prerequisite to further positional training under the Incident Command System). Note: This course may be repeated any number of times for credit by persons who are legally mandated to meet training requirements as a condition of continued paid or volunteer employment.

FIRS 131  HAZARDOUS MATERIALS TECHNICIAN IA – 2.5 Units
Grading: Pass/No Pass Option
State Hours: 45 lecture total
An intense introduction to the nature and behavior of inorganic and organic chemicals. This course examines the physical and chemical properties of matter, its atomic structure, salts and non-salts, hydrocarbons and hydrocarbon derivatives, the forms of energy, flammable and combustible liquids, cryogenics, and combustion process. Study of chemistry are extended to other areas as they apply to organic compounds, flammable liquids and gases and other types of hazardous materials. Module 1 of 4 of the Haz-Mat Technician certification series. Note: To receive a Calif. State Fire Marshal's Office (CSFMO) Certification or a California Specialized Training Institute (CSTI) Certification, the student is strongly encouraged to take these courses in the following sequence: Hazmat Operations followed by FIRS 131, 132, 133, and 134 in that order. Students who want to receive CSFMO or CSTI Certification will be required to take a supplemental certification test and pay a certification fee to the CSFMO or CSTI.

FIRS 132  HAZARDOUS MATERIALS TECHNICIAN IB – 2.5 Units
Grading: Pass/No Pass Option
Class Hours: 45 lecture total
An application of the information covered in FIRS 131 Hazardous Materials Technician IA, including the chemistry and hazards of various materials, chemical incompatibilities, and the products of combustion. Provides the technical foundation for specific operational strategies, field monitoring and detection devices with an emphasis placed on the safety associated with working around chemicals. Module 2 of 4 Haz-Mat Technician certification series. CSTI certification fees and materials fees will be charged. Note: To receive a California State Fire Marshal's Office (CSFMO) Certification or a California Specialized Training Institute (CSTI) Certification the student is strongly encouraged to take these courses in the following sequence: Hazmat Operations followed by FIRS 131, 132, 133, and 134 in that order. Students who want to receive CSFMO or CSTI Certification will be required to take a supplemental certification test and pay a certification fee to the CSFMO or CSTI.

FIRS 133  HAZARDOUS MATERIALS TECHNICIAN IC – 2.5 Units
Grading: Pass/No Pass Option
Class Hours: 45 lecture total
A study of the legal, organizational, technical, and practical aspects of response to hazardous materials emergencies including the laws and regulations related to hazardous materials, the use of the Incident Command System, and protective actions, clothing, and equipment. Examines the Hazardous Materials Group I depth and the positions are exercised in a practical evaluation scenario. Module 3 of 4 of Haz-Mat Technician certification series. CSTI certification fees and materials fees will be charged. Course meets CSFMO certification requirements and is graded Credit/No Credit. Note: To receive a California State Fire Marshal's Office (CSFMO) Certification or a California Specialized Training Institute (CSTI) Certification the student is strongly encouraged to take these courses in the following sequence: Hazmat Operations followed by FIRS 131, 132, 133, and 134 in that order. Students who want to receive CSFMO or CSTI Certification will be required to take a supplemental certification test and pay a certification fee to the CSFMO or CSTI.

FIRS 134  HAZARDOUS MATERIALS TECHNICIAN ID – 1.5 Units
Grading: Pass/No Pass Option
Class Hours: 18 lecture/27 lab total
Hands-on training in tactical field operations with various tools and specialized equipment including the collection of evidence, containment methods, and techniques. Methods for identifying hazardous materials transported by rail car and highway motor vehicles are examined as well as clandestine drug labs, pipelines, and fixed facilities. Module 4 of 4 of Haz-Mat Technician certification
series. Note: To receive a California State Fire Marshal's Office (CSFMO) Certification or a California Specialized Training Institute (CSTI) Certification the student is strongly encouraged to take these courses in the following sequence: Hazmat Operations followed by FIRS 131, 132, 133, and 134 in that order. Students who want to receive CSFMO or CSTI Certification will be required to take a supplemental certification test and pay a certification fee to the CSFMO or CSTI.

**FIRS 135 INTERMEDIATE INCIDENT COMMAND SYSTEM: FOR EXPANDING INCIDENTS, I 300 – 1.5 Units**
Grading: Pass/No Pass Option  
Class Hours: 27 lecture total  
A course of study describing the responsibilities of the organizational elements within each section of the ICS, staffing considerations, and reporting relationships. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

**FIRS 136 ADVANCED INCIDENT COMMAND SYSTEM I-400 – 1 Unit**
Grading: Pass/No Pass Option  
Class Hours: 18 lecture total  
A course of study that presents Incident Command System relationships and duties of Command Staff members, Agency Representatives, and activation of the Command and General Staff positions. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the U.S. Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Tech Division or at the National Interagency Fire Center Web Site (NIFC.gov).

**FIRS 145 LOW ANGLE RESCUE – .5 Unit**
Grading: Pass/No Pass Option  
Class Hours: 9 lecture/9 lab total  
A course designed to train firefighters and emergency medical personnel in low angle rescue techniques. Students will learn about equipment, identification, and care. Note: Students will have to provide their own safety equipment which meets NFPA standards. Equipment will include helmet, gloves, structural fire fighting coat and pants, boots, eye protection, etc.

**FIRS 146 STANDARD FOR SURVIVAL – 1 Unit**
Grading: Pass/No Pass Option  
Class Hours: 15 lecture total  
This course examines significant areas of firefighter fatalities and injuries associated with emergency and non-emergency situations. The course addresses causes of fatalities and injuries, and methods to implement recommended solutions. This course may be repeated any number of times for credit by persons who are legally mandated to meet training requirements as a condition of continued paid or volunteer employment.

**FIRS 147 CONFINED SPACE AWARENESS AND RESCUE – .5 Unit**
Grading: Pass/No Pass Option  
Class Hours: 9 lecture total  
This introductory level training will familiarize public safety personnel with codes and laws impacting confined space rescue, define terms, identify hazards, and prepare them for operational level training. This course may be repeated any number of times for credit by persons who are legally mandated to meet training requirements as a condition of continued paid or volunteer employment.

**FIRS 148 RESCUE SYSTEMS I – 1.5 Units**  
Note: Students are required to provide personal safety equipment at a significant cost to the student. This course may be repeated any number of times for credit by persons who are legally mandated to meet training requirements as a condition of continued paid or volunteer employment.  
Class Hours: 18 lecture/27 lab total  
A course designed to train firefighters, in paid or volunteer fire departments and emergency medical personnel, in vertical rescue techniques. Students will learn about equipment, identification, and care, applying techniques, belaying and raising and lowering the rescue basket, and safety. This course is designed to train students for vertical or high angle or rope rescue situations. Students may be required to train at heights of up to 200' above ground.

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.
FIRS 194 TRAINING INSTRUCTOR 1B (PSYCHOMOTOR) – 1.5 Units
Prerequisite: A grade of C or higher in FIRS 193
Class Hours: 18 lecture/27 lab total (when offered in the Distance Education format)
This is the second of a three-course series. Topics include methods and techniques for training in accordance with the latest concepts in career education; selecting, adapting, organizing, and using instructional materials appropriate for teaching psychomotor lessons; criteria and methods to evaluate teaching and learning efficiency; and an opportunity to apply major principles of learning through teaching demonstrations. Two (2) student instructor teaching demonstrations are required of all. The lecture portion of this course may be offered in a distance education format.

FIRS 195 TRAINING INSTRUCTOR 1C (INSTRUCTIONAL DEVELOPMENT TECHNIQUES) – 1.5 Units
Prerequisite: A grade of C or higher in FIRS 193 and FIRS 194
Class Hours: 18 lecture/27 lab total (when offered in the Distance Education format)
This is the third of a three-course series. Topics include methods and techniques for developing lesson plans, ancillary components, and tests in accordance with the latest concepts in career education. The course offers the opportunity to develop, receive feedback, and finalize instructional materials and deliver a teaching demonstration. Two (2) student instructor teaching demonstrations are required of all. The lecture portion of this course may be offered in a distance education format.

FIRS 360 LIVE FIRE TRAINING, BASIC STRUCTURAL OPERATIONS – 0 Units
Class Hours: 9 lecture/9 lab total
This course provides the student with hands-on fire fighting experience in fire behavior, ventilation, overhaul, interior and exterior fire attack operations.

FIRS 361 ROPE RIGGING FOR RESCUE – 0 Units
Class Hours: 9 lecture/9 lab total
This course provides the student with hands-on rescue experience in utilizing ropes and related rope rescue equipment. Topics will include: incident and scene assessment, ropes and hardware, knots, rappelling techniques and mechanical advantage systems.

FIRS 362 BASIC FIRE BEHAVIOR AND CHEMISTRY – 0 Units
Class Hours: 18 lecture total
This course provides the student with the concepts of the fire triangle and tetrahedron, fire chemistry, fire behavior, products of combustion, types of extinguishing agents, hazardous materials properties and effects, and oxidizing agents.

FIRE TECHNOLOGY/WILDLAND FIREFIGHTER SAFETY AND SURVIVAL (FTWL)
FTWL 101 WILDLAND FIRE BEHAVIOR – 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
This course of study is to provide the information necessary to understand wildland fire behavior. The course includes influences that affect wildland fire behavior, the seven wildland fire environment factors which must be continuously monitored in making wildland fire behavior predictions, and providing the tools to make spot fire behavior predictions.

FTWL 102 WILDLAND FIREFIGHTER SAFETY AND SURVIVAL – 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
This course of study places emphasis on avoiding situations and conditions which have resulted in fire shelter deployments, serious injuries and fatalities for wildland firefighters.

FTWL 103 WILDLAND FIRE OPERATIONS – 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
This course of study presents the command structure and operational processes for ground and air operations in the control of wildland fires.

FTWL 110 DISPLAY PROCESS S-245 – 5 Unit
Grading: Pass/No Pass Option
Class Hours: 9 lecture total
A course of study that presents information to enable the student to be able to function as a Display Processor on a wildland fire incident. The course includes how to determine logistical needs, including work materials and work area, how to identify sources of information and collect data, and to identify and be able to create required maps, overlays and displays. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 118 INCIDENT COMMUNICATIONS TECHNICIAN S-258 – 2 Units
Grading: Pass/No Pass Option
Class Hours: 36 lecture total
This course of study presents information necessary for the student to be able to function as a Communications Unit Leader on a wildland fire incident. This course includes clear text radio communications, interrelationships between ICS functions and the Communications Unit Leader, organize and staff the Communications Unit, and develop an effective communications plan based on the needs for each operational period and complete the necessary paperwork and forms. NOTE: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 132 SUPPLY UNIT LEADER S-356 – 1.5 Units
Grading: Pass/No Pass Option
Class Hours: 27 lecture total
This course of study presents the information necessary for the student to be able to function as a Supply Unit Leader on a wildland fire incident. This course includes description of the activities of the Supply Unit, what is needed to set up and staff Supply Unit, organization of and staffing of Supply Unit, and demobilization. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWL 134 COMMUNICATIONS UNIT LEADER S-358 – 4 Units
Grading: Pass/No Pass Option
Class Hours: 72 lecture total
This course of study presents the information necessary for the student to be able to function as a Communications Unit Leader on a wildland fire incident. The course includes how to assess communications capabilities/limitations during preparation of the incident action plan, preparation and implementation of the incident radio communications plan, and supervise communications unit activities. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FIRE TECHNOLOGY/WILDLAND FIRE TECHNOLOGY OPERATIONS (FTWO)
FTWO 110 BASIC WILDLAND FIRE ORIENTATION S-110 – 5 Unit
Grading: Pass/No Pass Option
Class Hours: 9 lecture total
This course of study provides information that is essential for a non-operations individual assigned to a wildland fire incident to have a successful first assignment. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-1 standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-1 standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-1 can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).
FTWO 111 FIREFIGHTER TRAINING S-130 – 2 Units
Class Hours: 36 lecture total
This course of study is designed to train new firefighters in basic firefighting skills, and the knowledge necessary to effectively handle wildland firefighting situations.
Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 112 ADVANCED FIREFIGHTER TRAINING S-131 – .5 Unit
Class Hours: 9 lecture total
This course of study provides advanced wildland firefighting training and education for those who wish to become qualified in the first level supervision position of Advanced Firefighter/Squad Boss. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 113 INTRODUCTION TO WILDLAND FIRE BEHAVIOR S-190 – .5 Unit
Class Hours: 18 lecture total
This course of study provides an introduction to wildland fire behavior issues that are important to wildland fire spread and safety to firefighters involved in suppression. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 114 INITIAL ATTACK INCIDENT COMMANDER TYPE 4 (ICT4) S-200 – 1.5 Units
Class Hours: 27 lecture total
This course of study is designed to provide the initial attack commander of small non-complex wildland fires with the ability to safely suppress the fire within the guidelines of the Incident Command System, and agency guidelines. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 115 SUPERVISORY CONCEPTS AND TECHNIQUES S-201 – 1 Unit
Class Hours: 18 lecture total
This course of study is for the experienced wildland firefighter to be able to apply the principles of communication and supervision required of a single resource boss to perform on a wildland fire incident. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 117 PORTABLE PUMPS AND WATER USE S-211 – 1.5 Units
Class Hours: 27 lecture total
This course of study provides firefighters needing formal training in order to gain competency in the use of portable pumps and water in wildland fire fighting. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 118 WILDFIRE POWERSAWS S-212 – 1 Unit
Class Hours: 16 lecture/12 lab total
Wildfire Powersaw is a required course for those planning to operate, or directly supervise, the operation of chain saws on wildfires. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 121 CREW BOSS S-230 – 1.5 Units
Grading: Pass/No Pass Option
Class Hours: 27 lecture total
This course of study is to identify the hazards and risks on wildland fires and teach the tactics which are appropriate for crew bosses during the various wildland fire situations. The course also identifies crew boss responsibilities prior to and during mobilization, on the incident and during demobilization. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 122 ENGINE BOSS S-231 – .5 Unit
Grading: Pass/No Pass Option
Class Hours: 9 lecture total
This course of study is to prepare advanced firefighters/squad bosses with the ability to understand the function as an engine boss in the control of wildland fires. This course presents the issues of tactics and safety in the control of wildland fires, and identifies the mobilization and demobilization procedures of an engine crew on a wildland fire incident. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 125 IGNITION OPERATIONS S-234 – 1 Unit
Grading: Pass/No Pass Option
Class Hours: 18 lecture/8 lab total
This course of study presents the application of safety considerations involved in a firing operation. It also provides the student with the necessary information to operate, maintain and use firing devices, and to use backfire as an indirect attack method against a rapidly spreading wildfire. The student will also learn the proper application of fire suppression firing methods and practices. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 128 FIELD OBSERVER S-244 – 1.5 Units
Class Hours: 18 lecture/27 lab total
A course of study providing a student with the necessary skills to function as a Field Observer on a wildland fire incident. This course presents an understanding of the various types of maps used in wildland fire control, map scale and use in determining location of wildland fire, topographic maps and how to use them, and be able to perform calculations to determine the size of fire on a map. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).
changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 129 INTERAGENCY INCIDENT BUSINESS MANAGEMENT S-260 – 1.5 Units
Grading: Pass/No Pass Option
Class Hours: 27 lecture total
This course of study is designed to teach the basic concepts of fiscal management of wildland fire incidents. It includes correct and fiscally sound personnel and equipment procurement, time recording, and proper documentation. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 130 BASIC AIR OPERATIONS S-270 – 1 Unit
Grading: Pass/No Pass Option
Class Hours: 18 lecture total
This course of study presents an understanding of the duties and responsibilities of the Supply Unit Leader in a wildland fire incident. The course presents factors in determining requirements for each facility, layouts of incident facilities and activation of incident facilities. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 132 INTERMEDIATE WILDLAND FIRE BEHAVIOR S-290 – 2 Units
Class Hours: 36 lecture total
This course of study presents the information necessary for the student to be able to function as a Supply Unit Leader on a wildland fire incident. This course includes description of the activities of the Supply Unit, what is needed to plan and staff Supply Unit, organization of and staffing the Supply Unit, and demobilization. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 133 INCIDENT COMMANDER EXTENDED ATTACK S-300 – 1 Unit
Class Hours: 18 lecture total
This course of study presents the information necessary for the student to be able to function as an Incident Commander Type 3 (ICT 3). The course is presented in a lecture/discussion format and supplemented with group exercise. The six instructional units cover: Information Gathering; Planning; Supporting Organization; Operations; Transitioning; and demobilization/Administrative Requirement. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 134 LEADERSHIP & ORGANIZATIONAL DEVELOPMENT – 3 Units
Class Hours: 27 lecture/81 lab total
This course of study is designed to provide the experienced wildland firefighter with the communication and supervision skills necessary to perform as a unit leader on a wildland fire incident. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).
FTWO 144 INTRODUCTION TO WILDLAND FIRE BEHAVIOR
CALCULATIONS S-390 – 2 Units
Grading: Pass/No Pass Option
Class Hours: 36 lecture total
This course of study teaches the concepts required in calculating wildland fire behavior for safe and effective fire management operations. It includes local and regional fire behavior issues that are critical to wildland firefighting, comparison of the effects of daytime solar radiation and nighttime heat losses from various sources, the effects of terrain, heat and wind on relative humidity, three types of inversions, and description of their effects on wildland fire behavior. The relationship among general, local (convective), 20-foot, and mid-flame winds is presented along with a description of how topography affects their availability and distribution. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

Class Hours: 9 lecture total
This course presents the introductory information for wildland firefighters on the safety aspects of how to fight fire aggressively but provide for safety first. This course includes information on how to initiate all action based on current and expected fire behavior, how to recognize when to request additional resources and obtain forecasts, obtain current information on fire status, and to remain in communication with crew members, your supervisor, and adjoining forces. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 150 COMMAND & GENERAL STAFF S-420 – 2 Units
Grading: Pass/No Pass Option
Class Hours: 36 lecture total
This course of study presents advanced training for those individuals who will be assigned to the Command and General Staff positions on a wildland fire incident. This course presents topics that will develop the skills and knowledge that are necessary to perform on wildland Type 2 incidents in a command or general staff position. Information is provided about how to establish the incident command, information necessary to set up organizational elements necessary to mitigate the wildland fire incident, how to direct and coordinate incident management, how to perform incident management functions, and how to request additional resources as needed, and supervision issues related to coordination of staff activity. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 155 INCIDENT TRAINING SPECIALIST S-445 – 1 Unit
Grading: Pass/No Pass Option
Class Hours: 18 lecture total
A course of study that presents the information needed to organize and implement an incident training program. This course includes how to analyze and prescribe training assignments to fulfill individual development needs of trainees, and to properly document individual trainee performance and the incident training program. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 158 FACILITATIVE INSTRUCTOR M-410 – 2 Units
Class Hours: 40 lecture total
This course of study is to provide experienced wildland firefighting personnel with technical competence in the facilitative role to instructors and other disciplines to become effective adult education instructors. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 160 HAZARDOUS MATERIALS FIRST RESPONDER UPDATE – .5 Unit
Grading: Pass/No Pass Option
Class Hours: 9 lecture total
This course of study prepares the student to respond to a Hazardous Materials incident in a safe and competent manner and be able to function at an operational level. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FTWO 114 WILDFIRE ORIGIN AND CAUSE DETERMINATION P-151 – 1.5 Units
Grading: Pass/No Pass Option
Class Hours: 18 lecture/27 lab total
This course presents the information necessary for the student to be able to conduct a wildland fire investigation. This course includes how to identify and collect equipment and supplies to conduct a wildfire investigation, record information about the fire, determine the origin of the fire, determine the cause of the fire, properly collect and preserve evidence, interview witnesses and obtain suspect information, prepare and write reports, and how to present testimony before a judge and/or jury. Note: While any student can take this course, for National Wildland Coordinating Group Certification, the student must meet a complex set of prior training, prior certification, field trainee assignments, previous education requirements and current employees recommendations for certification (as stated in the United States Forest Service NWCG 310-I standards). This document changes frequently. Students shall ensure that they meet the current NWCG 310-I standards for this course if they desire to receive a course completion certificate. A copy of NWCG 310-I can be found in the Fire Technology Division or at the National Interagency Fire Center Web Site (NIFC.gov).

FIRST AID/CPR/EMT (FAID)
FAID 130 PUBLIC SAFETY FIRST AID (EMS) – 1 Unit
Class Hours: 9 lecture/27 lab total
This course meets Public Safety Training Standards covered by the U.S. Department of Transportation and is recognized by the local EMS Agency.
FAID 132  EMERGENCY MEDICAL RESPONDER (EMR) – 2 Units
Class Hours: 27 lecture/27 lab total
This course teaches techniques in emergency medical care for the First Responder, which includes Automatic External Defibrillator training. This course also meets Public Safety Training Standards covered by the U.S. Department of Transportation curriculum and approved by the local EMS agency. Note: Students must make application through NorCal E.M.S. for certification.

FAID 133  CERTIFICATION CPR FOR THE PROFESSIONAL RESCUEER – .5 Unit
Grading: Pass/No Pass Option
Note: Meets criteria for either the American Red Cross or American Heart Assoc.
Class Hours: 9 lecture total
This course will cover CPR and how to treat for foreign body obstruction in adults, children, and infants. Designed for the professional rescuer. Upon successful completion of this course, students may apply to be certified in CPR by the agency having jurisdiction.

FAID 175  EMERGENCY MEDICAL TECHNICIAN 1 BASIC – 5 Units*
Prerequisite: A grade of C or higher in FAID 133, Certification CPR for the Professional Rescuer or any course equivalent to the 2005 American Heart Association’s Guidelines for Cardiopulmonary Resuscitation and Emergency Cardio Vascular Care at the Healthcare Provider Level. Contact Fire Technology Program for information.
Notes:
1. Twenty-four hours of clinical experience at a hospital emergency room or on an ambulance or authorized rescue squad will be required. Providers in the area have requirements for participation in ambulance observation time. Requirements include proof of a current TB skin test, Hepatitis B vaccination, or declination. A proof of vaccination, past history of or titer for MMR. Proof of Tetanus vaccination less than ten years old and either a past history of or a titer for Varicella (Chicken Pox). Check with the instructor for details.
2. State certification as an EMT requires that the student is at least 18 years old, has a current "Healthcare provider" CPR card or "CPR for the Professional Rescuer" card, passes a recognized EMT course, has not been convicted of specific crimes, and completes the statewide written and skills examination. (As of 1/1/2006 the state has adopted the National Registry EMT exam as its statewide exam. Upon successful completion of the statewide exam, the student must submit an application to the Local EMS Agency for certification, which is valid statewide).
3. This class meets for additional time "outside" of the scheduled weekly meeting time. This may include Saturdays, Sundays or night shifts.
4. State regulations require the EMT students possess CPR training equivalent to the 2010 American Heart Association’s Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care at the Healthcare Provider level as a prerequisite for admission to an EMT-1 basic course.
5. Students are required to purchase nitrate gloves, 1-way pocket mask valve and a Shasta College EMT Program student ID card.
6. Students must submit proof of a drug screening and a background check through a Shasta College approved vendor prior to going into clinical facilities. Shasta college personnel must review and approve test results prior to students participating in clinical observations.
Class Hours: 58 lecture/109 lab
An intensive course to assist the student with developing skill in recognition of symptoms of illness and injuries, and proper procedures in emergency care. Upon successful completion of the course, the student must make application through Northern California Emergency Medical Services, Inc., for certification.

FAID 178  EMT 1 BASIC RECERTIFICATION – 1 Unit
(formerly FAID 178AD)
Class Hours: 18 lecture/14 lab total
A comprehensive review of signs and symptoms of illness and traumatic injuries. Skills necessary to provide immediate temporary care of such victims are also reviewed. Course is approved by Northern California Emergency Medical Services, Inc. and Sierra-Sacramento Valley EMSA for the purpose of EMT recertification. Upon successful completion of the course, the student may make application through Northern California Emergency Medical Services, Inc. (Trinity County only), and Sierra-Sacramento Valley EMSA (Shasta & Tehama Counties only) for recertification. Note: This course may also be taken to satisfy the requirements for recertification as a first responder. Note: This course may be repeated any number of times for credit by persons who are legally mandated to meet training requirements as a condition of continued paid or volunteer employment.

FRENCH (FREN)
Two years of high school foreign language with grades of “C” or better is equivalent to one semester of foreign language at Shasta College.

FREN 1  ELEMENTARY FRENCH – 5 Units
Grading: Pass/No Pass Option
Class Hours: 90 lecture total
This introductory course is designed to give the student intensive practice in speaking and listening to French, and reading and writing in French, with additional emphasis on grammar and pronunciation. The class will focus on communication relating to daily life and routine activities, such as people and places, family life, weather, leisure-time activities, and the foods we eat. Also, students are introduced to the culture of French-speaking people.

FREN 2  ELEMENTARY FRENCH – 5 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in FREN 1 or Foreign Language Placement Level 2 or higher
Class Hours: 90 lecture total
In this continuation of Elementary French, there is continued emphasis on listening to oral French and on speaking the language, along with writing and reading French. Students expand their language skills and vocabulary, improving their ability to ask and answer questions, to discuss daily life, events in the past or present, travel, leisure-time activities and shopping. Students will read short texts about French history and culture, as well as watch videos about French-speaking countries.

FREN 3  INTERMEDIATE FRENCH – 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in FREN 2, or Foreign Language Placement Level 3 or higher
Class Hours: 54 lecture total
A thorough review of basic communication skills (speaking, listening, reading, and writing) and formal study of the patterns of French. Students continue to strengthen their speaking skills as they work toward mastery of the language. The course includes reading expository writing along with pieces of French literature.

FREN 4  INTERMEDIATE FRENCH – 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in FREN 3 or Foreign Language Placement Level 4 or higher
Class Hours: 54 lecture total
The fourth semester of the language emphasizes conversation, contemporary literature, French culture and composition. Reading selections include poetry, theatre, and journalistic expressions.

GEODESY AND GEOSpatial TECHNOLOGIES (GEOG)

GEOG 1A  PHYSICAL GEOGRAPHY– 3 Units
Class Hours: 54 lecture total
This course explores Earth’s physical systems, their dynamic processes, and surface expressions. Topics include weather, climate, hydrology, tectonics, geomorphology, and the biosphere. Attention is given to spatial patterns and impacts of human activities.

GEOG 1AL  PHYSICAL GEOGRAPHY LAB – 1 Unit
Grading: Pass/No Pass Option
Corequisite: GEOG 1A
Class Hours: 54 lab total
This course explores Earth’s physical systems, through lab and field activities. Scientific method of inquiry is employed to the interpretation of climate, landforms, water, and living communities. Scientific data will be collected, displayed, and interpreted, for a range of Earth processes and formations. Students will use map products to make observations, take geographic measurements, and interpret phenomena, Students will also interpret physical phenomena, such as temperature, pressure, and humidity as they relate to geographic location.

GEOG 1B  CULTURAL GEOGRAPHY – 3 Units
Advisory: A grade of C or higher in ENGL 280 or English Placement Level 5 or higher
Class Hours: 54 lecture total
This course examines the relationships among world cultures in order to investigate population, religion, language, and other societal characteristics. It also analyzes spatial differences among cultures including housing types, family usage of space within the house, and city planning. The role that physical geography plays in determining cultural attitudes and the influence that cultural geography has on the natural ecology are also discussed.
This course may be offered in a distance education format.

Geography and global positioning systems (GPS) are among the topics that illustrate the interactions between humans and the environment. Each course will emphasize a particular topic in cultural geography, with unique field sites selected to demonstrate the topic in question. Students will be exposed to field techniques including note taking, interviews, field mapping, and document research. Field excursions will vary throughout California, Southern Oregon, and Western Nevada over a three-day weekend or over a series of three Saturdays. Students will also attend three 3-hour lecture sessions. Additional field trip fees for lodging, entrance fees and related items will be specified in the course schedule.

GEOG 2A FIELD GEOGRAPHY (PHYSICAL) – 1 Unit
Grading: Pass/No Pass Option
Note: Field excursions will vary throughout California, Southern Oregon and Western Nevada over a three-day weekend or over a series of three Saturdays.
Class Hours: 9 lecture/27 lab total
Field observation of physical processes and formations are essential to the study of geography. Landforms, water resources, erosion hazards, soil conditions, and vegetation patterns are among the topics that illustrate the interactions between humans and the environment. Each offering will emphasize a particular topic in physical geography, with unique field sites selected to demonstrate the topics in question. Students will be exposed to a range of field techniques including sampling and the use of various types of measurement equipment. Field excursions will vary throughout California, Southern Oregon and Western Nevada over a three-day weekend or over a series of three Saturdays. Students will also attend three 3-hour lecture sessions. Additional field trip fees for lodging, entrance fees and related items will be specified in the course schedule.

GEOG 2B FIELD GEOGRAPHY (CULTURAL) – 1 Unit
Grading: Pass/No Pass Option
Note: Field excursions will vary throughout California, Southern Oregon and Western Nevada over a three-day weekend or over a series of three Saturdays.
Class Hours: 9 lecture/27 lab total
Field observation and analysis of human landscapes is essential to the student cultural geography. Topics including land-use patterns, economic and transportation systems, wealth disparities, cultural practices and historical legacies will be explored in the field. Each course offering will emphasize a particular topic in cultural geography, with unique field sites selected to demonstrate the topic in question. Students will be exposed to field techniques including note taking, interviews, field mapping, and document research. Field excursions will vary throughout California, Southern Oregon and Western Nevada over a three-day weekend or over a series of three Saturdays. Students will also attend three 3-hour lecture sessions. Additional field trip fees for lodging, entrance fees and related items will be specified in the course schedule.

GEOG 5 DIGITAL PLANET: GIS AND SOCIETY – 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher
Class Hours: 52 lecture total (when offered in the Distance education format, hours will total 162)
This course will explore the technologies and the societal implications of our digital planet. Specific attention is given to geospatial technologies which provide locational services, imagery, mapping, and other capabilities. In addition to use in industry, government, and non-profit sectors, these technologies are also common on mobile devices and in Internet applications. Investigation of issues related to society, population, and geopolitics will be undertaken using a variety of Internet-based technologies that are ideally suited to analyzing sociological data and geographic patterns. This course will also consider issues of geographic perception, social justice, equity, privacy, and representational accuracy of our digital planet. This course may be offered in a distance education format.

GEOG 7 CALIFORNIA GEOGRAPHY – 3 Units
Advisory: A grade of C or higher in ENGL 280 or English Placement Level 5 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course provides an introduction to California's diversified geography including climate, landscape, natural vegetation, and mineral and water resources. The cultural landscapes of ethnic diversity, our Native American past, urban and agricultural regions and the economic challenges of the future are also examined. California Geography examines these topics, their spatial distributions, and their impact on the environment. Class includes a Saturday field trip; Internet offering includes a virtual field trip. This course may be offered in a distance education format.

GEOG 8 WORLD REGIONAL GEOGRAPHY – 3 Units
Advisory: A grade of C or higher in ENGL 280 or English Placement Level 5 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course will introduce students to the world’s major geographic regions. This course will increase student awareness of geographic concepts by examining the physical, cultural, economic and political characteristics of the major regions of the world through the unifying concept of the geographic region. This course will illustrate the importance of the world’s geographic regions and how they interrelate. The location of important geographic features such as mountain ranges, rivers, countries, and major cities will be an important part of the course. This course may be offered in a distance education format.

GEOG 9 MAP AND GEOSPATIAL PRINCIPLES – 3 Units
Grading: Pass/No Pass Option
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 162)
This course is an introduction to maps, imagery, and geospatial technologies. Students will learn geographic techniques for data collection, interpretation, and representation. Map principles along with types of maps and their applications are covered. Methodologies for map reading, use of imagery, geographic information systems (GIS), global positioning systems (GPS), and map creation. This course may be offered in a distance education format.

GEOG 10 INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS – 3 Units (formerly GIS 10, NR 64)
Grading: Pass/No Pass Option
Corequisite: Students must be concurrently enrolled in GEOG 9, or have completed GEOG 9 with a grade of C or higher
Advisory: A grade of C or higher in GIS 1 or demonstrated computer literacy.
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 162)
This course covers the theory and practice of geographic information systems (GIS). Students learn essential GIS procedures for data viewing, manipulation, geographic referencing, and map creation. GIS data types, properties, database operations and applications are covered. Basic methods of GIS analysis are also included. This course may be offered in a distance education format.

GEOG 12 GIS DATA DESIGN AND CAPTURE – 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in GEOG 10
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 162)
This course covers design and implementation of geographic databases for GIS data capture and management. Included are essential concepts and practices of relational database management systems, with specific application to GIS. Data is captured using GPS and mobile GIS methods. GIS digitizing and editing are also covered. This course may be offered in a distance education format.

GEOG 13 GIS SPATIAL ANALYSIS – 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in GEOG 10
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 162)
This course covers GIS for investigating geographic patterns, relationships and connections. Spatial analysis methods are employed for both raster and vector data. Emphasis is on problem-solving and decision making using GIS. Models and scripts for automating GIS processes also undertaken. This course may be offered in a distance education format.

GEOG 14 GIS CARTOGRAPHY AND VISUALIZATION – 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in GEOG 10
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 162)
This course covers fundamental concepts of cartography and visualization using geographic information systems (GIS). Students employ design principles to create effective maps, incorporating data from a variety of formats. Hardcopy and web maps are produced. Animations, 3D maps, and other visualization techniques are explored. This course may be offered in a distance education format.

GEOG 15 INTRODUCTION TO REMOTE SENSING – 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in GEOG 9
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 162)
This course covers remote sensing fundamentals as they apply to mapping of Earth’s surface. Electromagnetic spectrum of radiant energy and the radiation emitted from Earth surface provide a foundation for understanding of the types of imagery available and their characteristics. Image enhancement, classification and quantitative techniques are explored with attention to integration with GIS datasets. Application of remote sensing for land cover change, vegetation classification, and environmental quality are explored. This course may be offered in a distance education format.

GEOG 21 GIS-CAD INTEGRATION – 1 Unit (formerly GIS 21)
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in GEOG 10 or working experience with CAD or GIS
Class Hours: 9 lecture/27 lab total (when offered in the Distance Education format, hours will total 162)
This course covers computer-aided drafting (CAD) structure, principles and processes as they apply to geographic information systems (GIS). CAD data management is a critical aspect of GIS. Students will work with various CAD data to learn processing and manipulation techniques for displaying data and working with CAD data in a GIS. Preparation and georeferencing of CAD data will be key components of the course. AutoCAD and ArcGIS software will be used in this course. This course may be offered in a distance education format.
GEOG 24  CUSTOMIZING GIS – 1 Unit  (formerly GIS 24)
Grading:  Pass/No Pass Option  
Advisory:  A grade of C or higher in GEOG 10  
Class Hours:  9 lecture/27 lab total  
This course introduces students to customizing GIS applications to improve efficiency for specific editing and data manipulation scenarios. Several methods for customizing ArcGIS will be introduced including loading pre-built third party tools, creating custom toolbars, custom buttons, geoprocessing toolboxes, geoprocessing models, along with a brief introduction to writing scripts. The course will briefly introduce the students to programming ArcObjects with VBA and Python for programming scripts. This course may be offered in a distance education format.

GEOG 25  GIS PROJECTS – 1 Unit  (formerly GIS 25)
Grading:  Pass/No Pass Option  
Advisory:  A grade of C or higher in GEOG 10 or working GIS experience  
Class Hours:  9 lecture/27 lab total  
This course provides students with skills in GIS project design, implementation and management. Successful GIS projects require a systematic approach to identification of system objectives, required resources and implementation approach. Acquisition and management of data, along with project documentation, will also be covered. Students will apply these skills through the design and implementation of a project. Projects will be presented to other GIS users. ArcGIS, ArcPad, and ArcIMS will be the primary software used for the course. This course may be offered in a distance education format.

GEOG 94  GEOGRAPHIC INFORMATION SYSTEMS WORKSITE LEARNING – 1-8 Units  (formerly GIS 94)
Limitation on Enrollment:  Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.  
Class Hours:  75 hours paid or 60 hours non-paid per unit  
The Vocational Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acquired by the student and related to the student’s major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on the job performance. A student may earn up to 16 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in a single semester.

GEOL 2  ELEMENTARY GERMAN – 5 Units  
Grading:  Pass/No Pass Option  
Class Hours:  90 lecture total  
This course is designed to give the student training in spoken German at a basic level, including some reading, writing, and much speaking. Students gain aural comprehension level of German through basic conversation and listening skill development. Customs and culture are also emphasized.

GEOG 3  INTERMEDIATE GERMAN – 3 Units  
Grading:  Pass/No Pass Option  
Prerequisite:  A grade of C or higher in GEOG 10 or Foreign Language Placement Level 3 or higher  
Class Hours:  54 lecture total  
This course is designed to give the student advanced training in German pronunciation, essentials of German grammar, reading, writing and speaking. Composition and literature are introduced. The student also learns about customs and culture of German-speaking people.

GEOG 4  INTERMEDIATE GERMAN – 3 Units  
Grading:  Pass/No Pass Option  
Prerequisite:  A grade of C or higher in GEOG 10 or Foreign Language Placement Level 4 or higher  
Class Hours:  54 lecture total  
This course builds on the higher language skills acquired in GEOG 3 with greater emphasis on the linguistic diversity of the language. Emphasis is placed on more extensive study of composition and conversation together with greater stress on extensive reading in German literature.

HEALTH  (HLTH)

HLTH 1  HEALTH AND WELLNESS – 3 Units  (formerly PE 1, HPE 11)
Grading:  Pass/No Pass Option  
Class Hours:  54 lecture total  
This course focuses upon those elements of human behavior which influence the health status of both the individual and the community. Topics include personal fitness, nutrition, sexuality, sexually transmitted disease, drug dependence including alcohol and tobacco. Also included are topics dealing with lifestyle disease, especially cancer, cardiovascular disease and lung disease.

HLTH 2  NUTRITION AND FITNESS – 3 Units  (formerly PE 2, HPE 7)
Grading:  Pass/No Pass Option  
Class Hours:  54 lecture total  
Analysis and evaluation of current practices and theories regarding nutrition and exercise, and their relationship to weight control and physical fitness. Each student will learn to prepare an individual physical assessment, exercise prescription and nutritional analysis to promote optimum healthful living.

HLTH 3  SUBSTANCE ABUSE AWARENESS – 3 Units  
(formally PE 3, HPE 57)
Grading:  Pass/No Pass Option  
Class Hours:  54 lecture total  
An introductory course for individuals who wish to increase their knowledge and understanding of substance abuse and chemical addiction. This course will introduce students to a variety of substances that can become abused and can lead to addiction. The substances covered in this course include: Tobacco (including smokeless tobacco), alcohol, street/recreational drugs, performance enhancing drugs, and sexual stimulants. Information will focus on the physical and societal affects of the misuse and abuse of these substances and methods that can lead to the control and/or elimination of use of these substances.

HEALTH OCCUPATIONS  (HEOC)

HEOC 10  APPLIED PHARMACOLOGY – 3 Units  (formerly HEOC 197)
Grading:  Pass/No Pass Option  
Class Hours:  54 lecture total  
This course is designed to introduce the principles of applied pharmacology to the current or prospective nursing and allied health student. Students will explore the names, classifications, actions, uses, side effects, pharmacokinetics, pharmacodynamics, contraindications, and drug to drug interactions of medications presented using a body systems approach. Implications for medication administration are discussed using a case study approach. Topical pharmacological issues will be discussed. Additionally, students will learn how to use a drug guide to gain basic knowledge about medications and to prepare patient drug education plans. This course may be offered in a distance education format.

HEOC 94  HEALTH OCCUPATIONS WORKSITE LEARNING – 1-8 Units  
Limitation on Enrollment:  Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.  
Class Hours:  75 hours paid or 60 hours non-paid per unit  
The Vocational Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acquired by the student and related to the student’s major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on the job performance. A student may earn up to 16 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in a single semester.
HEOC 100 PREPARING FOR A NURSING CAREER – 2 Units  
Class Hours: 36 Lecture total (when offered in the Distance Education format, hours will total 108)  
This course presents the role of the Associate Degree Nurse and the Vocational Nurse within various healthcare settings. Students will assess their own learning styles and compare their abilities to those required in nursing. Critical thinking skills will be introduced and applied to various scenarios using the knowledge base acquired from prerequisite courses and life experiences. Written, verbal, and math skills will be emphasized, along with exercises in examination, presentation, and interview skills. Learning resources, study strategies and stress management will be addressed to prepare the Associate Degree Nursing and Vocational Nursing candidate for the rigors of being a nursing student. This course may be offered in a distance education format.

HEOC 160 STRESS MANAGEMENT – 2 Units (formerly HEOC 185)  
Class Hours: 36 lecture total  
This class is designed to teach students the skills needed to recognize that all stressors affecting our actions are driven by our beliefs and values and how they affect the choices we make in dealing with stress. It will provide students with the opportunity to practice a variety of coping techniques that will assist them in making their lives less stressful. These techniques will include relaxation, the development of a survival strategy, effective communication and listening. Students will gain the knowledge necessary to recognize their uniqueness and the importance of developing their personal power. Upon completion of this course, students will have the skills necessary to know how choices affect the quality of their lives and how to bring about positive life-style change.

HEOC 180 NURSE AIDE/HOME HEALTH AIDE – 13 Units  
Limitation on Enrollment: Students must meet health and safety clinical requirements. See www.shastacollege.edu/HSUP/NA-HHA/generalinformation or call 530-339-3600 for detailed information on requirements.  
Note: All students enrolling in a NA/HHA Program must be fingerprinted and cleared of all criminal convictions before they can be certified.  
Class Hours: 144 lecture/288 clinical total  
Course is designed to prepare students to perform the basic nursing skills required in acute hospitals, long-term care facilities, and home health agencies. Special emphasis is placed on health care provisions and modifications in the community health care settings. The State Department of Health Services approves this course, and certificates will be issued upon successful completion of the course. Students are then eligible to apply for the state competency examination for certification.

HEOC 181 NURSE AIDE – 9 Units  
Limitation on Enrollment: Students must meet health and safety clinical requirements. See www.shastacollege.edu/HSUP/NA-HHA/generalinformation or call 530-339-3600 for detailed information on requirements.  
Note: All students enrolling in a NA/HHA Program must be fingerprinted and cleared of all criminal convictions before they can be certified.  
Class Hours: 96 lecture/192 clinical total  
This course is designed to prepare students to perform the basic skills required of a nurse aide. Course content consists of theory, laboratory, and clinical experience in long term care facilities. The course is approved by the California Department of Health Services. A certificate will be issued upon successful completion of the course. Students are then eligible to apply for the state competency examination for certification.

HISTORY (HIST)  
HIST 1A HISTORY OF WESTERN CIVILIZATION – 3 Units  
Grading: Pass/No Pass Option  
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher, or a grade of C or higher in ESL 138  
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)  
A survey of the origins and development of civilization in the western world from pre-history to 1600, with special emphasis on institutions, thought, and culture. The course is designed to show the continuity of western civilization and to overview the heritage of the present generation. This course may be offered in a distance education format.

HIST 1B HISTORY OF WESTERN CIVILIZATION – 3 Units  
Grading: Pass/No Pass Option  
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher, or a grade of C or higher in ESL 138  
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)  
A survey of the development of civilization in the western world from 1600 to the present, with special emphasis on institutions, thought, and culture. The course is designed to show the continuity of western civilization and to overview the heritage of the present generation. This course may be offered in a distance education format.

HIST 2 WORLD CIVILIZATION TO 1500 C.E. – 3 Units  
Grading: Pass/No Pass Option  
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher, or a grade of C or higher in ESL 138  
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)  
A comparative survey of the major ancient world civilizations which developed between 3500 B.C.E. and 1500 C.E. Political institutions, religious ideologies, rise and fall of empires and the major cultural innovations of each of the major world civilizations will be considered. This course may be offered in a distance education format.

HIST 3 WORLD CIVILIZATION: 1500 to Present – 3 Units  
Grading: Pass/No Pass Option  
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher, or a grade of C or higher in ESL 138  
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)  
A survey of the development of the major civilizations of the world from 1500 to the present. The focus is on the political, economic, social, intellectual and religious aspects of the world from 1500 to the present day. The study of the dynamic interaction of peoples and cultures will give a multi-perspective view of world history. This course may be offered in a distance education format.

HIST 17A UNITED STATES HISTORY – 3 Units  
Grading: Pass/No Pass Option  
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher, or a grade of C or higher in ESL 138  
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)  
This course is a survey of the history of the United States from Pre-Columbian Peoples to the end of Reconstruction. Topics include contact and settlement of America, the movement toward independence, the formation of a new nation and Constitution, westward expansion and manifest destiny, the causes and consequences of the Civil War, and Reconstruction. This course satisfies the CSU requirement for US History (US-1). This course may be offered in a distance education format.

HIST 17B UNITED STATES HISTORY – 3 Units  
Grading: Pass/No Pass Option  
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher, or a grade of C or higher in ESL 138  
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)  
This course is a survey of the history of the United States from 1877 to the present. The course covers the rise of industrialization, the expansion of America into world affairs, the causes and results of the Great Depression, the world wars of the 20th century, the Cold War, and post-9/11 America. This course satisfies the CSU requirement for US History (US-1). This course may be offered in a distance education format.

HIST 25 AFRICAN AMERICAN HISTORY – 3 Units  
Grading: Pass/No Pass Option  
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher, or a grade of C or higher in ESL 138  
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)  
This course is a survey of the historical development and contributions of African Americans in the United States. Topics include African civilizations, the African slave trade and Diaspora, the development of African American culture, colonial and Antebellum slavery, Emancipation and Reconstruction, Jim Crow, the Harlem Renaissance, civil rights in Africa, African American war, and the concepts of race, ethnicity, race relations, and social activism. This course may be offered in a distance education format.

HIST 35 HISTORY OF MEXICAN AMERICANS – 3 Units  
Grading: Pass/No Pass Option  
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher, or a grade of C or higher in ESL 138  
Class Hours: 54 lecture total  
History 35 traces the social, economic, and political history of Mexican Americans from the Spanish conquest to the present. Focus will be on the historical trajectory of Mexican Americans as they emerged from a series of migrations, conflicts, and negotiations with Native Americans, Anglo Americans, and others. The course will also explore the unique social, economic, and political forces that shaped U.S. policies toward Mexican migrants and Mexican Americans.

HIST 36 HISTORY OF THE FAR EAST – 3 Units  
Grading: Pass/No Pass Option  
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher, or a grade of C or higher in ESL 138  
Class Hours: 54 lecture total  
An introduction to the contemporary Far East. Designed primarily for the student who has had no previous contact with the region. Survey of the people, cultures, economics, and current problems, with major emphasis on China and Japan. The majority of the survey deals with events since 1800.
Chapter 6 – Course Descriptions

HIST 38 HISTORY OF WORLD RELIGIONS – 3 Units  
Grading: Pass/No Pass Option  
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6, or higher or a grade of C or higher in ESL 138  
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)  
A course designed to give the student an understanding of the beliefs systems and historical development of the world’s religions and an appreciation of the contribution of religion to the cultural heritage in which he lives. This course may be offered in a distance education format.

HIST 40 HISTORY AND GOVERNMENT OF CALIFORNIA – 3 Units  
Grading: Pass/No Pass Option  
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6, or higher or a grade of C or higher in ESL 138  
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)  
A survey of the history and government of California. Topics will include California Indians, Spanish colonization, Califormics, US annexation, economic development, demographic shifts, and current social, political, and economic issues. This course may be offered in a distance education format.

HIST 55 HISTORY OF THE AMERICAN WEST – 3 Units  
Grading: Pass/No Pass Option  
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6, or higher or a grade of C or higher in ESL 138  
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)  
This course is designed as a survey of the history of the North American West. The course covers the history of North American Indians, wars, statehood, resource extraction, demographic shifts, the relationship with the federal government, through the economic, political, and social issues of the present day. The course will introduce various ways of analyzing the history of the American West, including the Frontier Thesis, New Western History, and regionalism. In addition, the course will examine how the American West has been portrayed in popular literature, television, and film. This course may be offered in a distance education format.

HIST 57 RUSSIAN HISTORY – 3 Units  
Grading: Pass/No Pass Option  
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher, or a grade of C or higher in ESL 138  
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)  
A general survey of the Russian State from the beginning of the Kievan era (1054) to modern Soviet Russia. Included will be an analysis of the cultural, religious, economic, and social institutions of each century. Particular emphasis will be placed on contemporary Soviet Russia. Contributions of individual Russian Leaders will be discussed. This course may be offered in a distance education format.

HIST 178 LOCAL HISTORY OF TEHAMA COUNTY – 3 Units  
Grading: Pass/No Pass Option  
Class Hours: 54 lecture total  
A survey of the history of Tehama County. The course will examine the historical development of the country including the impact of geography, native peoples, economic development as shown in lumbering, agriculture, tourism and manufacturing and the impact and development of transportation including river navigation, roads and highways, railroads and flight. Special topics such as significant individuals, organizations, rise and fall of towns and cities will also be considered.

HORTICULTURE  
See AGEH and AGVIT for course listings

HOSPITALITY (HOSP)  

HOSP 10 INTRODUCTION TO THE HOSPITALITY INDUSTRY – 3 Units  
Grading: Pass/No Pass Option  
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)  
Overview of structure and relationship of components within the hospitality and travel industry. Economic and employment impact and review of food service, lodging, resorts, recreation enterprises, attractions, cruise, destination bureaus, travel agencies and related operations. Focuses on orientation to customer service, cultural/economic trends and career opportunities. This course may be offered in a distance education format.

HOSP 20 HOSPITALITY OPERATIONS MANAGEMENT – 3 Units  
Grading: Pass/No Pass Option  
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)  
Principles of organization, management, and decision models applied to the tasks and challenges of hospitality operations. Involves techniques of problem solving (including planning, organizing, staffing, directing and controlling operations) in areas of front office operations, housekeeping, personnel and security. The course also examines a systematic approach to front office procedures by detailing the flow of business through a lodging operation beginning with the reservation process and ending with check-out and settlement. This course may be offered in a distance education format.

HOSP 35 COMPUTER APPLICATIONS IN THE HOSPITALITY INDUSTRY – 3 Units  
Grading: Pass/No Pass Option  
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)  
Provides an overview of the information needs of lodging properties and food service establishments; addresses essential aspects of computer systems, such as hardware, software, and generic applications; focuses on computer-based property management systems for both front office and back office functions; and focuses on computer-based restaurant management systems for both service-oriented and management-oriented functions. This course may be offered in a distance education format.

HOSP 40 HUMAN RESOURCE MANAGEMENT IN THE HOSPITALITY INDUSTRY – 3 Units  
Grading: Pass/No Pass Option  
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)  
Practical approach to the problems of human resource management in the hospitality industry. Introduction to the personnel function; selection and placement of personnel; the role of supervision with emphasis on induction, training, communications, performance, appraisal, and leadership style. Study of age and salary administration; motivation; and discussion of union-management relations. This course may be offered in a distance education format.

HOSP 45 RESTAURANTS, HOTELS, AND LAWFUL MANAGEMENT – 3 Units  
Grading: Pass/No Pass Option  
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 108)  
This course explores potential legal issues and pitfalls that might impact the hospitality industry. The course covers legislation, such as the Civil Rights Act of 1991 and other federal discrimination laws dealing with employment and sexual harassment, Occupational Safety and Health Administration (OSHA) regulations, the Family and Medical Leave Act of 1993, the Americans with Disabilities Act, the Hotel and Motel Fire Safety Act of 1990, antitrust regulations, the National Labor Relations Act, copyright music laws, tax laws, tip reporting regulations, telephone resale regulations, consumer protection laws, franchise regulations, and product liability laws. The course is not intended to make the student a legal expert, but for the subject reviewed nor is it intended to be a substitute for the services or legal opinion of an attorney. Students will, however, be better able to recognize potential legal problems or potential lawsuits, which will assist them when consulting with an attorney on strategies to prevent legal issues from becoming more serious in their hospitality organization. This course may be offered in a distance education format.

HOSP 50 HOSPITALITY MARKETING, SALES, AND ADVERTISING – 3 Units  
Grading: Pass/No Pass Option  
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)  
Application of marketing principles and techniques in the hospitality industry. Emphasis on developing an understanding of consumers and using that knowledge to provide value and create consumer satisfaction while meeting financial goals. This course will also focus on practical sales techniques, proven approaches to selling to targeted markets, and advertising's role in sales. This course may be offered in a distance education format.

HOSP 60 HOSPITALITY AND FINANCIAL MANAGEMENT – 3 Units  
Grading: Pass/No Pass Option  
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)  
This course focuses on the generation and analysis of quantitative information for the purpose of planning, control and decision-making by managers at various levels in hospitality industry operation. Emphasis is placed on the need for and use of timely and relevant information as a vital tool in the management process. Also examines accounting functions to support hospitality management analysis. Special attention on: internal controls, cost-volume profit relationships, relevant costs for special decisions, flexible budgets, profit centers and tax implications of decisions. This course may be offered in a distance education format.
HOSP 65 HOSPITALITY SUPERVISION – 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture (when offered in the Distance Education format, hours will total 162)
This course offers insight into the various aspects of supervision in the hospitality industry. Supervisory roles, responsibilities, and essential managerial skills shall be discussed. The goal of the course is to equip students with the necessary authoritative and decision-making skills to be used in the workplace. This course may be offered in a distance education format.

HOSP 94 HOSPITALITY WORKSITE LEARNING – 1-8 Units
Limitation on Enrollment: Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.
Class Hours: 75 hours paid or 60 hours non-paid per unit
The Vocational Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acquired by the student and related to the student’s major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on the job performance. A student may earn up to 16 units through repeating this course since content covers and varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in one fall semester.

HOSP 97 SPECIAL TOPICS IN HOSPITALITY – .5-2 Units
Grading: Pass/No Pass Option
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge in hospitality. A different topics will be addressed each time the class is taught and will be listed in the schedule of classes.

HOSP 98 SPECIAL LAB TOPICS IN HOSPITALITY – .5-2 Units
Grading: Pass/No Pass Option
Class Hours: 27-108 lab total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing topics/knowledge in hospitality. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes.

HUMANITIES (HUM)
A series of interdisciplinary courses designed to meet Humanities General Education requirements for Transfer and the Associate in Arts Degree. Courses in the Fine Arts, Literature and Philosophy also meet this requirement. See a complete list of courses in the current College class schedule.

HUM 2 EXPLORING THE HUMANITIES - 3 Units
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course is designed to explore the humanities by examining expression of human values, ideas, concerns, and experience through the arts, literature, media and the social sciences. The reading of important works in the humanities, written analysis, and attendance at selected performances are major requirements of this course. This course may be offered in a distance education format.

HUM 4 HUMANITIES THROUGH THE FILM - 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
An examination of the motion picture as an art form. Films from the silent era through contemporary works will be examined in order to analyze and appreciate them from philosophical, historical, literary, aesthetic and cultural perspectives.

HUM 70 EXPLORING CONTEMPORARY TELEVISION – 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course is designed to explore the effect that television has had on contemporary culture, with regard to language, art, history, and aesthetics. The changing content of the television medium and its influence on society will be examined through the humanities perspective. This course may be offered in a distance education format.

HUM 304 ADVENTURES IN THE PERFORMING ARTS – 0 Units
Class Hours: 3-54 lecture total
Informal explorations of personalities, works and major themes in symphonic and chamber music, opera, modern drama, the American musical, and films, designed to promote increased personal appreciation and enjoyment of these forms of artistic expression.

INDEPENDENT STUDY (IS)
IS 99/199 INDEPENDENT STUDY – 5-3 Units
Class Hours: 27 hours for each ½ unit
Independent study provides a forum for advanced work in a given field of study. A student may contract with a full-time instructor to do independent study in a specific subject area in which he/she has exhausted the regular curricular offerings. For transfer level courses, the student must have a declared major or already possess a degree and have completed a minimum of 12 transfer units at Shasta College. For non-transfer level courses, the student has completed a minimum of 12 units at Shasta College. Note: Any combination of these courses may be repeated three times for a total of four enrollments or a maximum of six independent study units.

INDUSTRIAL TECHNOLOGY (INDE)
INDE 1 CAREER PLANNING FOR INDUSTRIAL TECHNOLOGY – 1 Unit
Class Hours: 18 lecture total
Career opportunities and training requirements in automotive, heavy duty diesel and welding will be examined. Students will be assisted in identifying career opportunities and developing career goals. This class is required of all auto, diesel, and welding majors.

INDE 101 INDUSTRIAL TRADE BASICS – 3 Units
Class Hours: 54 lecture total
The course provides an overview of basic skills required for individuals seeking entry-level employment in industrial occupations. The subjects covered include workplace, safety and regulations, hand and power tools, basic rigging, introduction to blueprints, and an overview of soft skills related to effective communications and employability requirements necessary for sustainable employment.

INDE 102 INDUSTRIAL TRADE ESSENTIALS – 3 Units
Grading: Pass/No Pass Option
Class Hours: 36 lecture/54 lab total
The course provides an overview to fundamental industrial mechanical concepts, principles and equipment. The subjects covered include precision measurement, print reading, hydraulics/pneumatics, lubrication, bearings, flexible belt / mechanical drives and an introduction to basic electricity.

INDE 105 UNIVERSAL TROUBLESHOOTING PROCESS – 3 Units
Grading: Pass/No Pass Option
Class Hours: 36 lecture/54 lab total
This course provides techniques and procedures to systematically approach and resolve problems/malfunctions associated with a variety of operational systems related to electronic, hydraulic, and mechanical industrial applications.

INDE 138 FUNDAMENTALS OF ELECTRONICS AND ELECTRICITY – 3 Units (formerly ELEC 138, ELEC 138/139)
Advisory: A grade of C or higher in MATH 101 or Math Placement Level 3 or higher, and a grade of C or higher in ENGL 270 or English Placement Level 4 or higher
Class Hours: 36 lecture/54 lab total
This course is designed for students who wish to be introduced to the basic principles of electronics and electricity for various vocational and industrial applications. Topics include basic theory of DC and AC circuits, semiconductor theory, digital concepts, circuits and systems and their applications.

JAPANESE (JAPN)
Two years of high school foreign language with grades of "C" or better is equivalent to one semester of foreign language at Shasta College.

JAPN 1 ELEMENTARY JAPANESE – 5 Units
Grading: Pass/No Pass Option
Class Hours: 90 lecture total
This course is designed to give the student training in pronunciation, essentials of higher, and a grade of C or higher in ENGL 190 or English Placement Level 6 or higher

JAPN 2 ELEMENTARY JAPANESE – 5 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in JAPN 1 or Foreign Language Placement Level 2 or higher
Class Hours: 90 lecture total
This course is a continuation of JAPN 1. Greater emphasis is placed on writing and the writing system in JAPN 2. Students will learn 90 Kanji characters. Further Japanese culture, history and traditions are provided.
JAPN 3 INTERMEDIATE JAPANESE – 5 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in JAPN 2 or Foreign Language Placement Level 3 or higher
Class Hours: 90 lecture total
This course will give the student higher level language skills necessary to function in an adult environment. Great emphasis is placed on learning how to read and write a number of Kanji characters, and understanding Japan and its people through further Japanese culture, history, life and traditions.

JAPN 4 INTERMEDIATE JAPANESE – 5 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in JAPN 3 or Foreign Language Placement Level 4
Class Hours: 90 lecture total
This course builds on the higher level language skills acquired in JAPN 3 with greater emphasis on the linguistic diversity needed to function in an adult environment. Emphasis will be on learning to read and write an additional 150 Kanji characters. Stress is placed on Japanese culture.

JAPN 19 JAPANESE CONVERSATION 1 – 2 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in JAPN 1 or Foreign Language Placement Level 2
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 18 lecture/54 lab total
Intensive practice in the spoken language. Course focuses on development of fluency by perfecting speech patterns, increasing vocabulary, and reinforcing pronunciation through simple sentence patterns, audio CDs, oral presentations, interactive communication in activities such as thematically centered conversations and conducting interviews. This course is for the practical use of Japanese. Cultural presentations will also be made through film, filmstrips, anime, music, TV programs, etc.

JAPN 20 JAPANESE CONVERSATION 2 – 2 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in JAPN 19 or Foreign Language Placement Level 3
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 18 lecture/54 lab total
Continuation of JAPN 19. Further intensive practice in the spoken language. Course focuses on development of higher fluency by perfecting speech patterns, increasing vocabulary, and reinforcing pronunciation through additional sentence patterns, audio CDs, oral presentations, interactive communication in activities such as thematically centered conversations and conducting interviews. This course is for more advanced practical use of Japanese. Further cultural presentations will also be made through film, filmstrips, anime, music, TV programs, etc.

JOURNALISM (JOUR)

JOUR 21 INTRODUCTION TO MASS COMMUNICATIONS – 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
This course is designed principally as a survey of the mass media, including newspapers, magazines, radio, television, motion pictures, books, the Internet and new technologies. The course will include study of mass communication theories, the effect of new technologies on society and the history of mass communication media. Students will research and analyze current mass media phenomena and will produce a term paper reflecting their discoveries.

JOUR 24 NEWSPAPER PRODUCTION – 2 Units (form. JOUR 24/A/24B)
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher, and ability to type 25 wpm
Class Hours: 18 lecture/54 lab total
Designed as a practicum in print production, primarily newspaper. Students will be required to work for a print publication, typically the college newspaper, the Lance. Instructional topics include advanced writing (first semester), principles of editing (second semester), publication design (third semester), and management issues (fourth semester). The two-hour instructional component is a mixture of lectures, discussion and group work. The lab component will include staff meetings for the college print production. Assessment in the course is based on a mastery of the instructional content and quality of work done for a print publication. Students are required to turn in weekly work activity reports and keep files of their published work during the semester. Students who work for a print publication other than the Shasta College Lance must sign up for 1 to 2 units of worksite learning to be taken concurrently with JOUR 24.

JOUR 27 NEWSWRITING AND REPORTING – 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6, and ability to type 25 wpm
Class Hours: 54 lecture total
Instruction and practice in writing news stories, feature articles, journalistic interviews, critical reviews and editorials. Prepares students for writing and reporting in mass media environments including: newspapers, television and radio news organizations, magazines, public relations agencies, Internet news services and other telecommunications media.

KINESIOLOGY (KINES)

KINES 1 FOUNDATIONS OF KINESIOLOGY – 3 Units (formerly PE 10, HPE 8)
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
An introduction of the professional foundations of human movement to include career opportunities in areas of teaching, coaching, Allied Health and fitness; and an overview of the sub-disciplines in kinesiology. Course topics will include history, philosophy, concepts, programs, qualification, careers, issues, and future of the discipline.

KINES 2 SPORTS EMERGENCY CARE – 3 Units (formerly HLTH 10, PEAT 1, HPE 91)
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
Theory and practice in care and prevention of injuries. Course will cover basic injury prevention, recognition, emergency care and immediate treatment of injuries. Students will have the opportunity to become certified in standard first aid, CPR, and AED upon completion of requirements.

MATHEMATICS (MATH)

MATH 2 PRECALCULUS – 5 Units
Prerequisite: A grade of C or higher in MATH 102, or Math Placement Level 4 or higher
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 90 lecture total (when offered in the Distance Education format, hours will total 270)
A course to prepare the student for MATH 3A (Calculus) utilizing function graphing technology. The content includes linear, polynomial, rational, logarithmic, exponential and trigonometric functions, conic sections, matrices, parametric equations, and their applications. This course may be offered in a distance education format.

MATH 3A CALCULUS 3A – 4 Units
Prerequisite: A grade of C or higher in MATH 2, or a grade of C or higher in both MATH 10 and MATH 13, or Math Placement Level 5 or higher
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 72 lecture total (when offered in the Distance Education format, hours will total 216)
First semester of a four-semester sequence covering differentiation of single variable functions, applications of the derivative, introduction to integration, and introduction to differential equations. This course may be offered in a distance education format.

MATH 3B CALCULUS 3B – 4 Units
Prerequisite: A grade of C or higher in MATH 3A or Math Placement Level 6 or higher
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 72 lecture total (when offered in the Distance Education format, hours will total 216)
Techniques of integration, including substitution, integration by parts and partial fractions. Improper integrals. Applications of integration to geometry and physics: finding areas, volumes and arclength, work, center of mass and fluid force. Sequences, series, absolute convergence and convergence tests, power series and Taylor and MacLaurin series. First-order ordinary differential equations and linear second-order differential equations. This course may be offered in a distance education format.
MATH 4A  CALCULUS 4A – 4 Units
Prerequisite: A grade of C or higher in MATH 3B, or Math Placement Level 7 or higher
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 72 lecture total
This course covers vectors in two and three dimensions, partial differentiation, multiple integrals, line integrals, divergence, gradient, curl, Stokes' and Green's Theorems.

MATH 4B  DIFFERENTIAL EQUATIONS – 4 Units
Prerequisite: A grade of C or higher in MATH 3B, or Math Placement Level 7 or higher
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 72 lecture total
A course in ordinary differential equations covering first and second order differential equations, with applications; Laplace transforms; series solutions at an ordinary point; matrices and linear algebra; and systems of linear differential equations.

MATH 6  LINEAR ALGEBRA – 3 Units
Prerequisite: A grade of C or higher in MATH 3B, or Math Placement Level 7 or higher
Class Hours: 54 lecture total
A first course in linear algebra, this course provides a thorough treatment of systems of linear equations, including row operations, Gaussian elimination, and matrix algebra. Properties of vectors and the theory of vector spaces are covered. Topics include linear independence, inner products, orthogonality, eigenvectors, eigenvalues, and linear transformations. Applications are included throughout the course.

MATH 8  FINITE MATHEMATICS – 3 Units
Prerequisite: A grade of C or higher in MATH 102, or Math Placement Level 4 or higher
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 54 lecture total
The course covers sets, matrices, and systems of equations and inequalities; linear programming; combinatorial techniques, introduction to probability, and mathematics of finance. The course is intended to provide (along with MATH 9) the mathematical skills needed for entry into upper division Business, Social, and Behavioral Science courses.

MATH 9  SURVEY OF CALCULUS – 4 Units
Prerequisite: A grade of C or higher in MATH 102, or Math Placement Level 4 or higher
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 72 lecture total
A course in analytical geometry, differential and integral calculus for students whose majors require a short course in calculus without the depth offered in MATH 3A.

MATH 10  PLANE TRIGONOMETRY – 3 Units
Prerequisite: A grade of C or higher in MATH 102, or Math Placement Level 4 or higher
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 54 lecture total
A basic course in trigonometry. Topics covered include angles, units of measurement, trigonometric functions, solutions of right and oblique triangles, identities, graphs, vectors, conic sections and polar coordinates. Algebraic and numerical methods are used in problem solving. Graphic calculators are utilized throughout the course.

MATH 11  PATTERNS OF MATHEMATICAL THOUGHT – 3 Units
Prerequisite: A grade of C or higher in MATH 102 or Math Placement Level 4 or higher
Class Hours: 54 lecture total
A one-semester survey course emphasizing mathematical reasoning. Various applications of mathematics are covered with topics selected from: Geometry, Statistics, Management Science, Number Theory, Social Science, and Computer Science. The course is designed to give students an understanding of some of the vocabulary and methods of mathematics with a focus on ideas.

MATH 13  COLLEGE ALGEBRA – 3 Units (formerly MATH 1)
Prerequisite: A grade of C or higher in MATH 102 or Math Placement Level 4 or higher
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course introduces functions and function algebra. The main focus is on linear, polynomial, rational, logarithmic and exponential functions. Students will learn algebraic techniques, modeling techniques and technology-based techniques for solving equations involving these functions and for investigating the graphs of these functions. This course may be offered in a distance education format.

MATH 14  INTRODUCTION TO STATISTICS – 4 Units
Prerequisite: A grade of C or higher in MATH 102, or Math Placement Level 4 or higher
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher
Class Hours: 72 lecture total (when offered in the Distance Education format, hours will total 216)
An introductory course in statistics designed to show the role of modern statistical methods in the process of decision making. Concepts are introduced by first lecture rather than by rigorous mathematical theory. The following topics will be covered: measures of central tendency and dispersion, regression and correlation, probability, sampling distributions including the normal, t, and chi-square, statistical inference using confidence intervals and hypothesis testing. This course may be offered in a distance education format.

MATH 17  CALCULUS FOR SOCIAL AND LIFE SCIENCES – 4 Units
Prerequisite: A grade of C or higher in MATH 3A, or Math Placement Level 6 or higher
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 72 lecture total (when offered in the Distance Education format, hours will total 216)
Continued study of differential and integral calculus with applications to Social and Life Sciences. Includes integration methods, modeling with systems of differential equations, calculus of several variables, and partial derivatives. This course may be offered in a distance education format.

MATH 41A  CONCEPTS OF ELEMENTARY MATHEMATICS – 3 Units
Prerequisite: A grade of C or higher in MATH 102, or Math Placement Level 4 or higher
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher, or a grade of C or higher in ESL 138, or ESL Placement Level 8 or higher
Note: This course is valuable for students intending to become elementary school teachers.
Class Hours: 54 lecture total
Emphasis is on development of quantitative reasoning skills through in-depth investigations of mathematics topics, which include: patterns and sequences, inductive and deductive reasoning, problem solving, logic, set theory, set of real numbers and its subsets.

MATH 41B  CONCEPTS OF ELEMENTARY MATHEMATICS – 3 Units
Prerequisite: A grade of C or higher in MATH 102 or Math Placement Level 4 or higher (MATH 41A is not a prerequisite for MATH 41B)
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher, or a grade of C or higher in ESL 138, or ESL Placement Level 8 or higher
Note: This course is valuable for students intending to become elementary school teachers.
Class Hours: 54 lecture total
Survey of the elements of mathematics usually taught in the elementary grades from an advanced standpoint. Emphasis is on geometry, probability and statistics.

MATH 100  TECHNICAL APPLICATIONS OF MATHEMATICS – 3 Units
Prerequisite: A grade of C or higher in MATH 240 or MATH 260, or Math Placement Level 2 or higher
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 54 lecture total
This course blends mathematical topics with practical technical applications. Emphasis is placed on the use of mathematics in solving problems involving arithmetic, algebra, and plane geometry. Practical applications are provided for specific technical occupations.

MATH 101  BASIC ALGEBRA – 3 Units
Prerequisite: A grade of C or higher in MATH 240 or MATH 260, or Math Placement Level 2 or higher
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 54 lecture total
A first course in algebra designed to cover the basic concepts and operations of algebra including solving linear equations, exponent laws, arithmetic and factoring of polynomials, and graphing linear equations in two variables. Applications are encountered throughout the course.

MATH 101L  BASIC ALGEBRA LAB – 1 Unit
Class Hours: 54 lab total
This course provides students with hands-on activities that reinforce the concepts of the lecture course, MATH 101. The laboratory is designed to provide students with an opportunity to further investigate the solving of linear equations, exponent laws, arithmetic and factoring of polynomials, and graphing linear equations in two variables.
MATH 102 INTERMEDIATE ALGEBRA – 5 Units  
Prerequisite: A grade of C or higher in MATH 101 or Math Placement Level 3 or higher  
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher  
Class Hours: 90 lecture total (when offered in the Distance Education format, hours will total 270)  
A second course in algebra at the developmental level. This course prepares the student to take a baccalaureate level general education mathematics course. Topics covered include equations and functions of the following types: quadratic, exponential, logarithmic, rational, and radical. The course also covers systems of linear equations and inequalities in two variables and quadratic inequalities in one variable. Applied problems are encountered throughout the course. This course may be offered in a distance education format.

MATH 110 ESSENTIAL MATH (FOR AN ASSOCIATE DEGREE) – 3 Units  
Prerequisite: A grade of C or higher in MATH 101, MATH 100, or Math Placement Level 3 or higher  
Advisory: A grade of C or higher in ENGL 260, or English Placement Level 5 or higher  
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)  
This course is designed to provide a survey of mathematical topics that are appropriate for students pursuing an Associate Degree. Topics include number sense, algebra, geometry, probability and statistics. This course may be offered in a distance education format.

MATH 150 MATH STUDY SKILLS – 1 Unit (formerly GS 100)  
Grading: Pass/No Pass Option  
Note: Students do not necessarily need to be concurrently enrolled in a math class.  
Class Hours: 18 lecture total  
This course is designed to assist students in learning mathematics through the development of successful study skills and exam-taking methods. This course addresses learning styles, how to read a math book, completing homework assignments, how to take notes and exams, strategies for solving word problems, and techniques for overcoming math anxiety.

MATH 220 BASIC MATHEMATICS – 3 Units  
Advisory: A grade of C or higher in ENGL 260 or English Placement Level 3 or higher  
Class Hours: 54 lecture total  
A course covering the basic skills of addition, subtraction, multiplication and division of whole numbers, fractions, and decimals, with word problem applications. Subjects also taught include prime numbers, order of operations, ratios, and proportions.

MATH 240 PRE-ALGEBRA – 3 Units  
Prerequisite: A grade of C or higher in MATH 220, or Math Placement Level 1 or higher  
Advisory: A grade of C or higher in ENGL 260 or English Placement Level 3 or higher  
Class Hours: 54 lecture total  
This course provides a transition from arithmetic to algebra, covering a review of arithmetic operations; introducing the concepts of variables and signed numbers, the properties of addition, subtraction, multiplication and division containing variables; solution of equations and word problems. This course prepares the student for entry into MATH 101, 100, and/or BUAD 106.

MATH 260 BASIC MATH AND PRE-ALGEBRA – 5 Units  
Advisory: A grade of C or higher in ENGL 260 or English Placement Level 3 or higher  
Class Hours: 90 lecture total  
This course covers topics from arithmetic through an introduction to algebra. Topics include basic operations on whole numbers, fractions, mixed numbers, decimal numbers, and signed numbers, along with presenting word problem applications for each. Additional topics include order of operations, ratio and proportion, solving percent problems, and an introduction to variables and beginning concepts of algebra. Algebraic concepts to be introduced include addition, subtraction, multiplication, and division of algebraic expressions and solving algebraic equations.

MATH 382 SUPERVISED MATH TUTORING – 0 Units  
Class Hours: TBA  
A non-credit course offered to help students improve and/or develop good math study skills and achieve mathematical success. Support is provided by tutoring from instructors, advanced math students trained in effective tutoring techniques, and support materials. Any student that is enrolled in a Shasta College math course is eligible to enroll in this course.
MUS 5  TWENTIETH CENTURY HARMONY – 5 Units  
Grading: Pass/No Pass Option  
Prerequisite: A grade of C or higher in MUS 4  
Class Hours: 72 lecture/54 lab  
A study of the composition techniques and harmonic practices of the Twentieth Century and the development of critical judgments about the Century's styles. Not only does this course incorporate the concepts from Music 3, but also in addition, through writing and analysis, it will include: post-Romantic techniques such as: dissonated chords and modal mixture, chromatic mediant, Neapolitan and augmented-sixth chords, 9th, 11th and 13th chords, altered chords and dominants; and 20th Century techniques such as: Impressionism, tone rows, set theory, pantodicticism and polytonality, meter, rhythm, and minimalist ideas. This course applies and develops the rhythmic, melodic, and harmonic materials of Music 4 through ear training, sight singing, analysis, and dictation. The course may culminate in the writing of a composition, probably theme and variations. This course utilizes a lab period to build and apply keyboard skills, sight singing dictation and rhythm skills. This is the fourth semester music theory sequence required to satisfy the Music Core Program and lower division music transfer.

MUS 10  MUSIC APPRECIATION – 3 Units  
Grading: Pass/No Pass Option  
Class Hours: 54 lecture total  
A survey course that covers the characteristics of sound, sources of musical sounds and media, instruments, voices, texture, forms, program and dramatic music, vocal and instrumental music, sacred and secular music, folk, popular, jazz, music of other cultures, and historical music from primitive times to the present. Emphasis is placed on listening to music and attending performances and rehearsals. Recommended for AA Humanities elective, CSU General Ed arts elective, and Pre-Music Program.

MUS 11  HISTORY OF JAZZ AND ROCK – 3 Units  
Class Hours: 54 lecture total  
A survey course that covers the characteristics of jazz forms, including ragtime, stride, blues, swing, progressive jazz and rock. Course gives the student the opportunity to become familiar with all of the various styles of jazz and provides an understanding of the social and technical influences that cause stylistic change. This course is designed to create an interest in music for the non-music major. Course is recommended for the Humanities elective.

MUS 14  WORLD MUSIC – 3 Units  
Class Hours: 54 lecture total  
World Music is a global exploration of musical traditions of various representative world musical cultures and musical techniques in a variety of cultural contexts not included in the broad genre of European based art music.

MUS 21A  BEGINNING GUITAR – 1 Unit (formerly MUS 21, 21A)  
Grading: Pass/No Pass Option  
Note: Students must provide their own instruments  
Class Hours: 9 lecture/27 lab  
A beginning course in the techniques of guitar, including basic chords, strums, finger-picking, and tuning. Guitar history and styles and music fundamentals are also presented.

MUS 21B  INTERMEDIATE GUITAR – 1 Unit  
Grading: Pass/No Pass Option  
Prerequisite: A grade of C or higher in MUS 21A  
Note: Students must provide their own instruments  
Class Hours: 9 lecture/27 lab  
A course designed to move the guitar player beyond basic chord use, to further implement notational skills, right hand skills, and to expand the beginner into the active use of E movable chords, A movable chords and the movable scales that enhance the guitarist’s basic skills.

MUS 21C  ADVANCED INTERMEDIATE GUITAR – 1 Unit  
Grading: Pass/No Pass Option  
Prerequisite: A grade of C or higher in MUS 21B  
Note: Students must provide their own instruments  
Class Hours: 9 lecture/27 lab  
This course expands the intermediate guitar player beyond the E and A movable chord forms and scales into the use of the C movable chord and scale form and the G movable chord and scale. The course will include more advanced right hand techniques and a review of notation, tablature, and song writing skills.

MUS 21D  ADVANCED GUITAR – 1 Unit  
Grading: Pass/No Pass Option  
Prerequisite: A grade of C or higher in MUS 21C  
Note: Students must provide their own instruments  
Class Hours: 9 lecture/27 lab  
This course expands the intermediate guitar player beyond the E and A movable chord forms and scales into the use of the C movable chord and scale form and the G movable chord and scale. The course will include more advanced right hand techniques and a review of notation, tablature, and song writing skills.

MUS 22A  BEGINNING PIANO – 1 Unit (formerly MUS 22)  
Grading: Pass/No Pass Option  
Class Hours: 9 lecture/27 lab  
A fundamental course in keyboard techniques (simple piano music, accompaniments, chords, scales, and exercises) and music fundamentals (notation, melody, harmony and rhythm). Course is recommended for Music and Elementary Education majors.

MUS 22B  INTERMEDIATE PIANO – 1 Unit (formerly MUS 23, 22BD)  
Grading: Pass/No Pass Option  
Prerequisite: A grade of C or higher in MUS 22A  
Class Hours: 9 lecture/27 lab  
Students will formulate and play several Major scales, their chords and primary cadences; analyze the same in simple music; harmonize simple melodies and perform pieces of a lengthier nature from 4 historic periods. The course will interpret subdivided and more complex rhythms and build confidence in class performance.

MUS 22C  ADVANCED INTERMEDIATE PIANO – 1 Unit  
Grading: Pass/No Pass Option  
Prerequisite: A grade of C or higher in MUS 22B  
Class Hours: 9 lecture/27 lab  
Students will play in more sophisticated keys, with 3 or more accidentals. This course will be a continuation of Major and relative minor scales and cadences and will implement and analyze secondary dominants, 4-part Chorale style and considerably longer pieces from all periods. In-class performances required.

MUS 22D  ADVANCED PIANO – 1 Unit  
Grading: Pass/No Pass Option  
Prerequisite: A grade of C or higher in MUS 22C  
Class Hours: 9 lecture/27 lab  
Students will play in more sophisticated keys, with 3 or more accidentals. This course will be a continuation of Major and relative minor scales and cadences and will implement and analyze secondary dominants, 4-part Chorale style and considerably longer pieces from all periods. In-class performances required.

MUS 25A  BEGINNING STRINGS – 1 Unit (formerly MUS 25, 25AB)  
Grading: Pass/No Pass Option  
Advisory: A grade of C or higher in MUS 1  
Note: Instruments provided if available  
Class Hours: 9 lecture/27 lab  
A beginning course in violin, viola, violincello, and string bass organized to establish basic skills of tuning, pitch and bow production, both pizzicato and bowed, beginning in the first position until security in the frame of the hand and correct playing position is established. Elementary shifting first to third position on violins/violas. Normal and extended first position on the cello. Half and first position on string bass.

MUS 25B  INTERMEDIATE STRINGS – 1 Unit  
Grading: Pass/No Pass Option  
Prerequisite: A grade of C or higher in MUS 25A  
Note: Instruments provided if available  
Class Hours: 9 lecture/27 lab  
Study of off the string bowings, vibrato, special effects. The major goals of the course are to establish more advanced intermediate skills with sound pedagogy while playing representative string solo music, simple chamber music, duos, trios, quartets, and Baroque & Classic Orchestra music with correct bowings and proper style.

MUS 25C  ADVANCED INTERMEDIATE STRINGS – 1 Unit (formerly MUS 25CD)  
Grading: Pass/No Pass Option  
Prerequisite: A grade of C or higher in MUS 25B  
Note: Instruments provided if available  
Class Hours: 9 lecture/27 lab  
An intermediate course in violin, viola, violincello, and string bass utilizing more advanced positions and shifting on all instruments. Bowing techniques include on-the-bow string bowings, détaché, linked, legato and mixed bowings when appropriate.

MUS 25D  ADVANCED STRINGS – 1 Unit (formerly MUS 25CD)  
Grading: Pass/No Pass Option  
Prerequisite: A grade of C or higher in MUS 25C  
Note: Instruments provided if available  
Class Hours: 9 lecture/27 lab  
Advanced study of off the string bowings, vibrato, and special effects. The major goals of the course are to establish advanced skills with sound pedagogy while playing representative string solo music, advanced chamber music, duos, trios, quartets, and orchestra music of Romantic and Contemporary repertoire with correct bowings and proper style.
MUS 29 BEGINNING VOICE – 1 Unit (formerly MUS 27A)
Class Hours: 9 lecture/27 lab
A beginning course in vocal technique, repertoire, stage department, and performance. Course utilizes a variety of vocal genres to teach tone quality, breath control, posture, diction and interpretation. Class performances required. Course recommended for Music, Theater Arts, and Elementary Education Majors.

MUS 30 INTERMEDIATE VOICE – 1 Unit (formerly MUS 27B)
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in MUS 29
Class Hours: 9 lecture/27 lab
An intermediate course in vocal technique and performance. Course utilizes a variety of vocal literature to teach tone quality, breath control, posture, lyric diction and interpretation. Class performances required. Course recommended for Music Core Program, Theatre Arts majors and Elementary Education majors.

MUS 31 CHAMBER CHOIR -1 Unit (formerly MUS 31AD)
Limitation on Enrollment: Admission to this class will be by audition to determine performance ability. This course is a restricted elective for the Music certificate and Music AA Degree. Non-audition courses that fulfill this requirement: MUS 40 Concert Choir, and MUS 41, Shasta College Women’s Ensemble.
Note: Performances are required
Class Hours: 54 lab total
Organized for advanced singers. Admission to the class will be by audition to determine performance capability. This course provides performance by solos, duets, trios, quartets and full ensemble. Literature is selected from all periods of music with the emphasis on madrigals. Field trips and performances are required. This course cannot be challenged, must be taken for a grade, and is transferable. Students are expected to progress in skill level to be able to master more advanced material. Note: This course may be repeated three times for a total of four enrollments since skills are enhanced by supervised repetition and practice.

MUS 33 JAZZ ENSEMBLE – 1 Unit (formerly MUS 33AD)
Note: Field trips and performances are required.
Class Hours: 54 lab total
This class offers experience in the study and performance of big band commercial and jazz arrangements. Note: This course may be repeated three times for a total of four enrollments since skills are enhanced by supervised repetition and practice.

MUS 35 VOCAL JAZZ ENSEMBLE – 1 Unit (formerly MUS 35AD)
Limitation on Enrollment: Admission to this class will be by audition to determine performance ability. This course is a restricted elective for the Music certificate and Music AA Degree. Non-audition courses that fulfill this requirement: MUS 40 Concert Choir, and MUS 41, Shasta College Women’s Ensemble.
Note: Performances are required
Class Hours: 54 lab total
Organized for students interested in singing jazz and commercial music. Note: This course may be repeated three times for a total of four enrollments since skills are enhanced by supervised repetition and practice.

MUS 40 CONCERT CHOIR – 1 Unit (formerly MUS 40AD)
Note: Field trips and performances may be required.
Class Hours: 54 lab total
A performing mixed choir (S.A.T.B.) that sings a variety of music, both historical and contemporary. This course teaches fundamentals of reading choral music, using examples from choral literature. Note: This course may be repeated three times for a total of four enrollments since skills are enhanced by supervised repetition and practice.

MUS 41 SHASTA COLLEGE WOMEN’S ENSEMBLE – 1 Unit
Grading: Pass/No Pass Option
Note: Performances are required (SSA)
Class Hours: 54 lab total
A performing choir that sings choral works for women’s chorus from all musical period and styles. Works are selected from every era. Note: This course may be repeated three times for a total of four enrollments since skills are enhanced by supervised repetition and practice.

MUS 42 SHASTA COLLEGE CHORALE – 1 Unit (formerly MUS 42AD)
Limitation on Enrollment: Admission to this class will be by audition to determine performance capability. This course is a restricted elective for the Music Certificate and Music AA Degree. Non-audition courses that fulfill this requirement: MUS 40 Concert Choir, and MUS 41, Shasta College Women’s Ensemble.
Note: Performances are required.
Class Hours: 54 lab total
A performing mixed choir (S.A.T.B.) that sings a variety of music, both historical and contemporary, with an emphasis on large choral forms such as oratorios and cantatas, accompanied by instruments. Note: Field trips and performances are required. This course may be repeated three times for a total of four enrollments since skills are enhanced by supervised repetition and practice.

MUS 43 SHASTA COLLEGE SYMPHONY ORCHESTRA – 1 Unit (formerly MUS 43AD)
Grading: Pass/No Pass Option
Limitation on Enrollment: Admission to this class will be by audition to determine performance ability. This course is a restricted elective for the Music Certificate and Music AA Degree. Non-audition courses that fulfill this requirement: MUS 46 Shasta College Symphonic Band or MUS 25, Strings.
Note: Field trips and performances are required.
Class Hours: 54 lab total
A college symphony orchestra providing an opportunity for instrumentalists to perform standard and contemporary orchestral literature. Field trips and performances are required. All groups rehearse evenings only. Note: This course may be repeated three times for a total of four enrollments since skills are enhanced by supervised repetition and practice.

MUS 44 SHASTA COLLEGE YOUTH SYMPHONY – 5-1 Unit
Grading: Pass/No Pass Option
Limitation on Enrollment: Admission to this class will be by audition to determine performance capability. This course is a restricted elective for the Music Certificate and Music AA Degree. Non-audition courses that fulfill this requirement: MUS 46 Shasta College Symphonic Band or MUS 25 Strings
Note: Field trips and performances are required.
Class Hours: 27-54 lab total
A college based symphony orchestra for the training of young musicians, providing an opportunity to perform standard and contemporary literature for younger musicians. Note: This course may be repeated three times for a total of four enrollments since skills are enhanced by supervised repetition and practice.

MUS 46 SHASTA COLLEGE SYMPHONIC BAND – 1 Unit (formerly MUS 46AD)
Note: Field trips and performances are required.
Class Hours: 54 lab total
A course in music techniques of both standard and contemporary band literature. Rehearses evenings only. Note: Field trips and performances are required. Note: This course may be repeated three times for a total of four enrollments since skills are enhanced by supervised repetition and practice.

MUS 47 SHASTA COLLEGE JAZZ ENSEMBLE – 1 Unit (formerly MUS 47AD)
Limitation on Enrollment: Admission to this class will be by audition to determine performance ability. This course is a restricted elective for the Music Certificate and Music AA Degree. Non-audition courses that fulfill this requirement: MUS 33 Jazz Ensemble.
Note: Field trips and performances are required.
Class Hours: 54 lab total
This class offers experience in the study and performance of big band jazz arrangements. Rehearses evenings only. Admission to the class will be by formal audition to determine performance ability [Ed. Code Sect. 58106 (b) (3)].
Note: This course may be repeated three times for a total of four enrollments since skills are enhanced by supervised repetition and practice.

MUS 50 VOCAL INSTITUTE – 1-3 Units
Note: Field trips and performances are required.
Class Hours: 9-27 lecture/27-81 lab total
The Vocal Institute is an intensive course of both vocal and dramatic instruction in an applied performance setting for students who are interested in dramatic vocal performance. Content includes repertoire instruction in art song, musical theater and opera. It is an applied activity course that includes lectures, assignments, rehearsals and studio tutorials. Students learn vocal technique, lyric diction, solo and ensemble performance, character development, stagecraft and movement, and score reading. Art songs and scenes are performed in original languages, including Italian, French, German and English. Skills are built through supervised application resulting in improved performance. Class includes staged performance of art song, opera and musical theater literature.
Note: Course may be repeated three times for a total of four enrollments.

MUS 51 OPERA IN PERFORMANCE – 1-3 Units
Note: Field trips and performances are required.
Class Hours: 54-162 lab total
This course provides for skill development, both vocal and dramatic, at all levels, beginning through advanced, in an applied performance setting for students who are interested in classical dramatic vocal performance. It is an applied activity course in which skills are built through supervised application resulting in improved performance. Emphasis is on solo, small ensemble and chorus performance. Class culminates with fully- or partially-staged performances of opera literature.
Note: Course may be repeated three times for a total of four enrollments.
MUS 61A BEGINNING PERFORMANCE ANALYSIS – .5 Unit (formerly MUS 61, 61AD)
Grading: Pass/No Pass Option
Note: Attendance at a musical event is required. It is recommended that students have a fine arts performance track, such as a solo instrument, voice proficiency, or drama.
Class Hours: 27 lab
A course in the experience of listening, analyzing, and criticizing classical music performances in class and the community. Applied Music students, local musicians, and professional musicians perform and lecture. Required for Pre-Music and Music Core Program.

MUS 61B INTERMEDIATE PERFORMANCE ANALYSIS – .5 Unit
Advisory: A grade of C or higher in MUS 61A
Note: Attendance at a musical event is required. It is recommended that students have a fine arts performance track, such as a solo instrument, voice proficiency, or drama.
Class Hours: 27 lab
An intermediate level course in the experience of listening, analyzing, and criticizing classical music performances in class and the community. Students must perform on an applied solo instrument using intermediate level literature appropriate for an upper-division audition. Applied Music students, local musicians, and professional musicians perform and lecture. Required for Pre-Music and Music Core Program.

MUS 61C ADVANCED INTERMEDIATE PERFORMANCE ANALYSIS – .5 Unit
Advisory: A grade of C or higher in MUS 61B
Note: Attendance at a musical event is required. It is recommended that students have a fine arts performance track, such as a solo instrument, voice proficiency, or drama.
Class Hours: 27 lab
An intermediate level course in the experience of listening, analyzing, and criticizing classical music performances in class and the community. Students must perform on an applied solo instrument using intermediate level literature appropriate for an upper-division audition. Applied Music students, local musicians, and professional musicians perform and lecture. Required for Pre-Music and Music Core Program.

MUS 61D ADVANCED PERFORMANCE ANALYSIS – .5 Unit
Advisory: A grade of C or higher in MUS 61C
Note: Attendance at a musical event is required. It is recommended that students have a fine arts performance track, such as a solo instrument, voice proficiency, or drama.
Class Hours: 27 lab
An advanced course in the experience of listening, analyzing, and criticizing classical music performances in class and the community. Applied Music students, local musicians, and professional musicians perform and lecture. Students are expected to perform at a level close to that of an upper division student on a solo or vocal instrument. Required for Pre-Music and Music Core Program.

MUS 98 SPECIAL MUSIC TOPICS – .5-2 Units (formerly MUS 98AD)
Grading: Pass/No Pass Option
Class Hours: 9-36 lecture total
This course is designed to give students an opportunity to study a variety of topics dealing with performance, musicology, changing knowledge and contemporary issues in the field of music. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for Music majors; open to anyone with an interest in the topic.

MUS 301 ORCHESTRA FOR SENIORS – 0 Units
Note: While this is an open enrollment class, an assessment will be conducted by the instructor at the start of the class to determine if the student has the required ability to participate in performances.
Class Hours: 9-64 lab total
A course designed to offer opportunities for older adults to participate in ensemble music with the Symphony Orchestra.

MUS 302 SYMPHONIC BAND FOR SENIORS – 0 Units
Note: While this is an open enrollment class, an assessment will be conducted by the instructor at the start of the class to determine if the student has the required ability to participate in performances. Field trips and performances are required.
Class Hours: 54 lab total
A course designed to offer opportunities for adults to participate in ensemble music with the Symphonic Band.

MUS 303 MUSIC FOR SENIORS – 0 Units
Note: While this is an open enrollment class, an assessment will be conducted by the instructor at the start of the class to determine if the student has the required ability to participate in performances.
Advisory: Demonstrated proficiency in the performance medium.
Class Hours: 18-54 lab total
A course designed to offer opportunities for older adults to participate in music performance.

NATIVE AMERICAN SUSTAINABILITY STUDIES (NASS)

NASS 1 SUSTAINABILITY AND NATIVE AMERICANS – 3 Units
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course examines the environmental practices and philosophies of Native American tribes and cultures. A focus of this course is to show that these practices and philosophies can benefit and substantially impact the current sustainability movement in the United States. This course also examines the contributions, recognized and non-recognized, that Native American tribes and cultures have made in the development of the United States. The study of the true history of Native Americans and their sustainable practices shows how their contributions have been beneficial for society throughout the development of the United States. This course may be offered in a distance education format.

NASS 2 TECHNOLOGY’S IMPACT ON NATIVE AMERICANS – 3 Units
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course examines the impact of technology on Native American tribes and cultures as well as technology’s impact on the environment of the United States. Using Native American tribes and culture as a baseline in this examination, evidence is presented assessing the cause of environmental damage in this country and to its original inhabitants. This course analyzes technology in an effort to better understand its impact with regard to the future of sustainability. This course also examines technology in relationship to the profit motive and compares this ideology with Native American philosophies and ways of life. This course may be offered in a distance education format.

NASS 3 FEDERAL INDIAN LAW AND SUSTAINABILITY – 3 Units
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course examines Federal Legislative Acts, case law, doctrines and constitutional law that shape the legal and historical relationships between Native Americans, Tribes, States and Federal governments with a focus on sustainability and environment issues for Native Americans. This course also examines the current status of Native American tribes, focusing on sustainable topics such as Native American religious freedom, sovereignty, water and land rights. This course may be offered in a distance education format.

NASS 4 NATIVE AMERICAN TRADITIONS/SUSTAINABILITY – 3 Units
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course examines Native American oral stories and traditions and their relationship to sustainability. By examining oral traditions, the philosophical and cultural ideologies of Native Americans come to the forefront. A clear understanding of Native American cultural ideologies evolves and provides the best environmental philosophies and practices to support the current sustainability movement. This course shows what can be learned by better understanding the Native American oral traditions and stories, as well as, showing the Euro-American oral traditions and stereotypes that were used to suppress Native American philosophies and sustainable practices. This course may be offered in a distance education format.

NASS 5 NATIVE AMERICAN GLOBALIZATION CONCEPTS – 3 Units
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course examines the concepts of globalization and compares those concepts against indigenous environmental philosophies and practices. Through the analysis of the expected outcomes of each philosophy, different cultural ideologies become evident. The focus is the best environmental practices supporting the current sustainability movement. This course will also examine the past sustainable practices of Native Americans, as well as, their current sustainable response to globalization efforts. This will include examining traditional, local and tribal economic alternatives to globalization. This course may be offered in a distance education format.

NATURAL HISTORY (NHIS)

NHIS 15 NATURAL HISTORY – 3 Units
Grading: Pass/No Pass Option
Note: Required day field trips
Class Hours: 54 lecture total
Designed to give the student a unified view of the natural history of California with an emphasis on Northern California. The geology, weather, ecology, life zones, plant and animal species, and aquatic and mountain environments are emphasized.

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.
NHIS 55  NATURAL HISTORY OF PATRICK’S POINT – 1 Unit
(formerly NHIS 55AB)
Grading: Pass/No Pass Option
Note: Students must provide their own camping gear and food. The college supplies and requires bus transportation for no additional cost.
Class Hours: 9 lecture/27 lab total - includes one orientation meeting plus one weekend
A three day, two night field trip to Patrick's Point State Park to familiarize students with the organisms and ecological interactions occurring in the various plant communities and intertidal zones. One pre-trip introductory lecture will be held.

NHIS 105  NATURAL HISTORY OF THE SOUTHERN CASCADES – 1 Unit
(formerly GEOL 105)
Grading: Pass/No Pass Option
Note: Required overnight field trip.
Class Hours: 9 lecture/27 lab total
This course is an introductory, short-term field class in which the development of land forms and occupation of niches associated with a volcanic site will be covered. Types of volcanoes, life zones, specimen identification (rock, plant, and animal), and reading topographic maps will be introduced in the classroom and expanded upon during a two-day overnight field trip.

NATURAL RESOURCES
See AGNR for course listings.

NURSING
See Registered Nursing or Vocational Nursing

OFFICE ADMINISTRATION  (OAS)

OAS 10  EXCEL FOR WINDOWS – I – 1 Unit (formerly CIS 10, MIS 73)
Grading: Pass/No Pass Option
Note: Internet and classroom students will require access to a computer with the same version of Microsoft Operating System and Office Suite being used in the course. Computer access is provided on campus at the Learning Resource Center and the Tehama Campus.
Class Hours: 13.5 lecture/13.5 lab total (when offered in the Distance Education format, hours will total 54)
This is an introductory course that introduces the concepts, principles, and uses of the EXCEL spreadsheet through multi-media lecture, demonstration, and discussion. Instruction will include use of the Windows environment; creating, editing, formatting, and printing a worksheet; charts/graphs development; and formulas/functions using relative and absolute cell reference. This course may be offered in a distance education format.

OAS 11  EXCEL FOR WINDOWS – II – 1 Unit (formerly CIS 11, MIS 74)
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in OAS 10
Note: Internet and classroom students will require access to a computer with the same version of Microsoft Operating System and Office Suite being used in the course. Computer access is provided on campus at the Learning Resource Center and the Tehama Campus.
Class Hours: 13.5 lecture/13.5 lab total (when offered in the Distance Education format, hours will total 54)
Designed to expand and improve worksheet skills through multi-media lecture, demonstration, and discussion. Instruction will include managing workbook data, using tables, analyzing table data, automating worksheet tasks, enhancing charts, and using what-if analysis. This course may be offered in a distance education format.

OAS 12  EXCEL FOR WINDOWS – III – 1 Unit (formerly CIS 11, MIS 75)
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in OAS 11
Note: Internet and classroom students will require access to a computer with the same version of Microsoft Operating System and Office Suite being used in the course. Computer access is provided on campus at the Learning Resource Center and the Tehama Campus.
Class Hours: 13.5 lecture/13.5 lab total (when offered in the Distance Education format, hours will total 54)
Designed to expand and improve worksheet skills to a more advanced level of proficiency through multi-media lecture, demonstration, and discussion. Instruction will include analyzing data using PivotTables, exchanging data between programs, sharing files using the web, customizing Excel, and advanced worksheet management and programming in Excel. This course may be offered in a distance education format.

OAS 30  CREATING AND MANAGING THE VIRTUAL OFFICE – 3 Units
(formerly BUSI 51)
Grading: Pass/No Pass Option
Note: Internet and classroom students will require access to a computer with the same version of Microsoft Operating System and Office Suite being used in the course. Computer access is provided on campus at the Learning Resource Center and the Tehama campus.
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 162)
An intermediate course in keyboarding and Microsoft Word. This course continues the development of keyboarding speed and accuracy while emphasizing the formatting of various kinds of business correspondence, reports, tables, forms, and desktop publishing projects from rough drafts. This course may be offered in a distance education format.

OAS 51  INTRODUCTION TO KEYBOARDING AND WORD – 3 Units
(formerly BUSI 52)
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in OAS 51
Note: Internet and classroom students will require access to a computer with the same version of Microsoft Operating System and Office Suite being used in the course. Computer access is provided on campus at the Learning Resource Center and the Tehama campus.
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 162)
An intermediate course in keyboarding and Microsoft Word. This course continues the development of keyboarding speed and accuracy while emphasizing the formatting of various kinds of business correspondence, reports, tables, forms, and desktop publishing projects from rough drafts. This course may be offered in a distance education format.

OAS 52  INTERMEDIATE KEYBOARDING AND WORD – 3 Units
(formerly BUSI 53)
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in OAS 52
Note: Internet and classroom students will require access to a computer with the same version of Microsoft Operating System and Office Suite being used in the course. Computer access is provided on campus at the Learning Resource Center and the Tehama campus.
Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 162)
An advanced course in keyboarding and Microsoft Word. This is the capstone course allowing the student to meet any business document requirement. The course is designed to give additional practice in building speed and accuracy and to apply previously learned document formatting competencies to a variety of integrated office projects in international marketing, hospitality, travel, energy, electronics, insurance, government, law, and medicine. This course may be offered in a distance education format.

OAS 53  ADVANCED KEYBOARDING AND WORD – 3 Units
(formerly BUSI 64)
Grading: Pass/No Pass Option
Class Hours: 27 lab total (when offered in the Distance Education format, hours will total 27)
A course designed to teach the numeric 10-key pad by touch on the computer with speed and accuracy using industry standards for data entry. Proficiency on three employment tests used by three large interstate corporations help the student meet employment standards. The course has been designed to accommodate hearing impaired students. This course may be offered in a distance education format.

OAS 64  COMPUTERIZED TEN-KEY – .5 Unit (formerly BUSI 64)
Grading: Pass/No Pass Option
Class Hours: 27 lab total (when offered in the Distance Education format, hours will total 27)
A course designed to teach the numeric 10-key pad by touch on the computer with speed and accuracy using industry standards for data entry. Proficiency on three employment tests used by three large interstate corporations help the student meet employment standards. The course has been designed to accommodate hearing impaired students. This course may be offered in a distance education format.
OAS 80  OUTLOOK – 1 Unit  
Grading:  Pass/No Pass Option  
Advisory:  Ability to type 25 wpm  
Note:  Class will require outside time using a computer with appropriate software.  
Computer access is provided on campus at the Learning Resource Center and  
the Tehama Campus.  Students taking the Internet format of this course must  
have access to the same version of Microsoft Operating System and Office Suite  
being used in the course.  
Class Hours:  13.5 lecture/13.5 lab total  (when offered in the Distance Education  
format, hours will total 54)  
This course introduces the student to the use of Microsoft Outlook, a desktop  
information management program in the Microsoft Office Suite.  Instruction will  
include creating and managing email messages, scheduling appointments and  
activities with the Calendar, entering and updating names and addresses as  
contacts, and creating and maintaining an electronic to-do list with Tasks, and  
using Categories to organize, sort, and search.  This course may be offered in a  
distance education format.

OAS 84  OFFICE ADMINISTRATION WORKSITE LEARNING – 1-8 Units  
Limitation on Enrollment:  Financial aid students must maintain concurrent  
enrollment in the Business Group, which include worksite learning units.  Students  
not receiving financial aid do not need to enroll in other courses in order to  
participate in Worksite Learning Classes.  
Class Hours:  75 hours paid or 60 hours non-paid per unit  
The Vocational Worksite Learning Program is designed to help students gain  
on-the-job experience through employment/volunteerism at an approved job site  
that is acquired by the student and related to the student’s major.  A faculty  
member supervises all WSL courses to ensure that the work experience meets  
educational value.  Work experience stresses good work habits and meeting  
of competencies through actual on the job performance.  A student may earn up  
to 16 units through repeating this course since course content varies and skills  
are enhanced by supervised repetition and practice.  A maximum of 8 units may  
be earned in a single semester.

OAS 91  WORD FOR WINDOWS – I – 1 Unit  
Grading:  Pass/No Pass Option  
Advisory:  Ability to type 25 wpm  
Note:  Class will require outside time using a computer with appropriate software.  
Computer access is provided on campus at the Learning Resources Center  
and the Tehama Campus.  Students taking the Internet format of this course  
must have access to the same version of the Microsoft Operating System  
and Office Suite being used in the course.  
Class Hours:  13.5 lecture/13.5 lab total  (when offered in the Distance Education  
format, hours will total 54)  
This course introduces word processing through using Microsoft WORD for  
Windows.  Microsoft WORD will be used to complete the functions of creating,  
editing, saving, opening and printing documents with varying degrees of difficulty.  
Topics to be covered include:  file management; creating new documents using  
both the blank Word document screen or wizards and templates; selecting text to  
move/copy/delete/format or utilize the clipboard; creating and formatting tables,  
including calculations; spilling and these also include the tools to paragraph and  
page formatting; customized tabs; indents; bullets and numbering; borders and  
shading; headers, footers, and page numbering; finding and replacing.  This  
course may be offered in a distance education format.

OAS 92  WORD FOR WINDOWS – II – 1 Unit  
Grading:  Pass/No Pass Option  
Advisory:  A grade of C or higher in OAS 91 or OAS 95.  Ability to type 25 wpm  
Note:  Class will require outside time using a computer with appropriate software.  
Computer access is provided on campus at the Learning Resources Center and  
the Tehama Campus.  Students taking the Internet format of this course  
must have access to the same version of the Microsoft Operating System  
and Office Suite being used in the course.  
Class Hours:  13.5 lecture/13.5 lab total  (when offered in the Distance Education  
format, hours will total 54)  
This course introduces word processing through using Microsoft WORD for  
Windows.  Microsoft WORD will be designed to expand and improve basic word  
processing skills to a higher level of proficiency through multi-media  
lecture/demonstration/discussion.  Instruction will include a review of basic  
concepts and commands, illustrating documents with graphics, creating a web  
site, merging word documents, working with styles and templates, developing  
multi-page documents; and integrating Word with other programs.  This course  
may be offered in a distance education format.

OAS 93  WORD FOR WINDOWS – III – 1 Unit  
Grading:  Pass/No Pass Option  
Prerequisite:  A grade of C or higher in OAS 92  
Advisory:  Ability to type 25 wpm  
Note:  Class will require outside time using a computer with appropriate software.  
Computer access is provided on campus at the Learning Resources Center and  
the Tehama Campus.  Students taking the Internet format of this course  
must have access to the same version of the Microsoft Operating System  
and Office Suite being used in the course.  
Class Hours:  13.5 lecture/13.5 lab total  (when offered in the Distance Education  
format, hours will total 54)  
Designed to expand and improve word processing skills to a more advanced  
level of proficiency through multi-media lecture/demonstration/discussion on an  
IBM compatible microcomputer.  Instruction will include a review of word  
processing concepts and commands; exploring advanced graphics, building  
forms, working with charts and diagrams, collaborating with workgroups, using  
macros and customizing Word.  This course may be offered in a distance  
education format.

OAS 94  POWERPOINT – 1 Unit  
Grading:  Pass/No Pass Option  
Note:  Class will require outside time using a computer with appropriate software.  
Computer access is provided on campus at the Learning Resources Center and  
the Tehama Campus.  Students taking the Internet format of this course must  
have access to the same version of the Microsoft Operating System and  
Office Suite being used in the course.  
Class Hours:  13.5 lecture/13.5 lab total  (when offered in the Distance Education  
format, hours will total 54)  
This is a hands-on course designed to familiarize students with Microsoft  
PowerPoint.  Students will learn how to create effective slide show presentations  
with emphasis on customizing text, graphics and charts.  Students will work with  
embedded and linked objects as well as hyperlinks and use PowerPoint’s many  
slide show features.  This course may be offered in a distance education format.

OAS 110  BEGINNING MEDICAL TERMINOLOGY – 3 Units  
(formerly HEOC 110, MEDA 151)  
Class Hours:  54 lecture total  (when offered in the Distance Education format,  
hours will total 162)  
This course provides students with an understanding of the language of medicine  
through the study of basic word structures and anatomical, pathological, and  
operative terms used within the integumentary, musculoskeletal, nervous,  
cardiovascular, respiratory systems, blood and lymphatic systems and digestive  
system.  This course may be offered in a distance education format.

OAS 111  ADVANCED MEDICAL TERMINOLOGY – 3 Units  
(formerly HEOC 111, MEDA 152)  
Prerequisite:  A grade of C or higher in OAS 110  
Class Hours:  54 lecture total  (when offered in the Distance Education format,  
hours will total 162)  
This course is a continuation of OAS 110 providing students with an  
understanding of medical terms used within the endocrine, special senses,  
urinary, male and female reproductive systems, and specialty areas such as  
Obstetrics, Pharmacology, Mental health, and Gerontology.  This course may be  
offered in a distance education format.

OAS 112  MEDICAL CODING – 3 Units  
(formerly HEOC 112, MEDA 156, MEDA 156A)  
Prerequisite:  A grade of C or higher in OAS 110  
Corequisite:  Students must be concurrently enrolled in, or have completed OAS  
111 with a grade of C or higher.  
Class Hours:  54 lecture total  (when offered in the Distance Education format,  
hours will total 162)  
This course is basic introduction to coding for medical billing and reimbursement.  
It is designed to provide the learner with fundamentals needed to use the  
system directly and consistently.  The student will learn the structure and  
format of medical coding books (e.g., ICD-9-CM or ICD-10-CM; CPT; HCPCS,  
Level II) and develop skills in assigning accurate codes.  The student will use  
acceptable coding guidelines through practical application.  This course may  
be offered in a distance education format.

OAS 113  ADVANCED MEDICAL CODING – 3 Units  
Prerequisite:  A grade of C or higher in OAS 112  
Corequisite:  Students must be concurrently enrolled in, or have completed OAS  
111 with a grade of C or higher.  
Class Hours:  54 lecture total  (when offered in the Distance Education format,  
hours will total 162)  
This course has been designed to enable the learner to interpret health record  
documentation for code assignment. Students will apply established coding  
guidelines for each coding classification system included in the course (e.g.  
ICD-9-CM/ICD-10-CM; CPT; HCPCS, Level II).  This course may be offered in a  
distance education format.

OAS 114  HEALTHCARE BILLING AND REIMBURSEMENT – 3 Units  
Corequisite:  Students must be concurrently enrolled in, or have completed OAS  
113 and OAS 150 with a grade of C or higher.  
Class Hours:  54 lecture total  (when offered in the Distance Education format,  
hours will total 162)  
This course will provide the linkage between specialized medical office  
administration practices such as computerized medical account management  
and medical coding.  The course will enable students to understand the  
processing of healthcare claims as it relates to various insurance payer  
requirements beginning with abstracting information from medical chart  
documents and following procedural steps based on the nature of the patient  
status and payer.  This course may be offered in a distance education format.

In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.
Chapter 6 – Course Descriptions

OAS 150 COMPUTERIZED MEDICAL ACCOUNT MANAGEMENT – 3 Units
(formerly OAS 150B)

Prerequisite: A grade of C or higher in BUAD 166 and OAS 51
Corequisite: Students must be concurrently enrolled in, or have completed OAS 110 with a grade of C or higher

Note: Internet and classroom students will require access to a computer with the same version of Microsoft Operating System and Office Suite being used in the course. Computer access is provided on campus at the Learning Resource Center and the Tehama campus.

Class Hours: 54 lecture total

This course is designed to prepare students for entry-level positions in medical office billing. Topics covered are computerized systems for appointment scheduling and follow-up: claim forms and coding; patient and insurance billing, and medical practice financial management.

OAS 152 KEYBOARDING FOR SPEED AND ACCURACY – .5 Unit
(formerly OAS 268, OAS 268AD, BUSI 268AD)

Grading: Pass/No Pass Option

Note: Class may require outside time using a computer with Internet access and appropriate software. Computer access is provided on campus at the Learning Resource Center and the Tehama campus. Students taking the Internet format of this course must have access to the same version of Microsoft Operating System and Office Suite being used in the course.

Class Hours: 27 lab total (when offered in the Distance Education format, hours will total 27)

Designed for the beginning to advanced keyboarding student to improve typing speed and accuracy. Specific drills, proper typing technique, and ergonomics will be covered in the course. Development of keyboarding skills are attained through repetitive typing of specific drills designed to improve both accuracy and speed. This course may be offered in a distance education format.

OAS 157 OFFICE PROCEDURES – 3 Units (formerly BUSI 157)

Advisory: A grade of C or higher in OAS 51, and a grade of C or higher in ENGL 280 or English Placement Level 5 or higher

Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)

A capstone course in office technology. Content includes office ethics, greeting office callers, telephone techniques, working with others on the job, mail procedures, filing procedures, reference sources, appointment/calendaring, office reprographics, employment testing, and career planning. This course may be offered in a distance education format.

OAS 158 MEDICAL OFFICE PROCEDURES – 3 Units (formerly BUSI 158)

Advisory: A grade of C or higher in OAS 51; and a grade of C or higher in ENGL 280 or English Placement Level 5 or higher

Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)

This is an essential class for students wishing to work in a medical office. Content includes: understanding the medical practice, the unique issues of working in a medical office, interacting with patients, dealing with insurance and finances, scheduling appointments, and obtaining employment. This course may be offered in a distance education format.

OAS 160 MEDICAL TRANSCRIPTION – 3 Units
(formerly OAS 159/160, BUSI 159B)

Prerequisite: A grade of C or higher in BUAD 166 and OAS 51
Corequisite: Students must be concurrently enrolled in, or have completed OAS 110 with a grade of C or higher

Note: Class may require outside time using a computer with Internet access and appropriate software. Computer access is provided on campus at the Learning Resource Center and the Tehama campus. Students taking the Internet format of this course must have access to the same version of Microsoft Operating System and Office Suite being used in the course.

Class Hours: 36 lecture/54 lab total (when offered in the Distance Education format, hours will total 162)

A course designed to help the student reinforce and expand knowledge of medical vocabulary and to acquire medical transcription skills through the typing of medical notes, reports, and diagnostic case histories. Further experience in transcribing diagnostic imaging, oncology, cardiology, hematology, general surgery, plastic surgery, dentistry, orthopedics, neurology, psychiatry, urology, obstetrics, pediatrics, otorhinolaryngology, ophthalmology, respiratory, gastroenterology, and pathology. This course may be offered in a distance education format.

OAS 166 RECORDS MANAGEMENT – 2 Units (formerly BUSI 163)

Class Hours: 27 lecture/27 lab total (when offered in the Distance Education format, hours will total 108)

A study of the basic principles, rules, and procedures of filing. It includes a study of alphabetic, numeric, subject, and geographic filing. Various types of filing equipment will be analyzed. This course may be offered in a distance education format.

OAS 171 PROOFREADING SKILLS – 2 Units (formerly BUSI 168)

Advisory: Ability to type 25 wpm

Class Hours: 36 lecture total (when offered in the Distance Education format, hours will total 108)

The course covers the application of appropriate methods of proofreading documents common to the work place, and an overview of the essential skills needed to perform text-editing functions in business settings. High level proofreading skills are vital to the efficient operation and productivity of the information-processing office. Proofreading has become a “must” for quality control in the work place. This course may be offered in a distance education format.

OAS 250 KEYBOARDING AND WORD – ADAPTIVE – 3 Units
(formerly OAS 250AD and BUSI 250AD)

Grading: Pass/No Pass Option

Note: Internet and classroom students will require access to a computer with the same version of Microsoft Operating System and Office Suite being used in the course. Computer access is provided on campus at the Learning Resource Center and the Tehama campus.

Class Hours: 36 lecture/54 lab total

A personal-use individualized course in keyboarding designed to meet the needs of students with physical and/or specific learning disabilities. Interested students must be interviewed by the instructor and DSPS and/or Learning Services Office to determine if the course is appropriate for the student’s abilities and interests and to make arrangements for support services. The course includes instruction in correct keyboarding techniques appropriate for the individual student. Instruction covers memos, letters, tables, reports, and business forms. Students will work toward personal growth objectives. This course does not meet the requirement of OAS 51 Introduction to Keyboarding and Word for an Associate in Arts degree or certificate.

PHILOSOPHY (PHIL)

PHIL 6 INTRODUCTION TO PHILOSOPHY – 3 Units

Grading: Pass/No Pass Option

Advisory: A grade of C or higher in ENGL 1A or English Placement Level 7

Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)

A transfer humanities course introducing students to the major issues which philosophers have found important. It will explore what is special about the questions philosophers ask and consider the most famous answers philosophers have tried to give to those questions. Areas covered include philosophy of mind, epistemology, metaphysics, moral philosophy, political philosophy, philosophy of science, aesthetics, and philosophy of religion. The course may be offered in a distance education format.

PHIL 7 ETHICS: UNDERSTANDING RIGHT AND WRONG – 3 Units

Grading: Pass/No Pass Option

Advisory: A grade of C or higher in ENGL 1A or English Placement Level 7

Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)

Introduces students to a range of moral and social problems which are important in those areas, and which philosophers have found especially interesting. Emphasis will be given to exploring many of the positions which can be taken on these issues, and to evaluating the arguments which can be given for those positions. Topics covered include general moral theories, abortion, euthanasia, capital punishment, cloning, warfare, gender and sexuality issues, political and economic issues, and the moral status of the natural world. This course may be offered in a distance education format.

PHIL 8 LOGIC – 3 Units

Grading: Pass/No Pass Option

Advisory: A grade of C or higher in ENGL 1A or English Placement Level 7

Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)

Focus is on the science that evaluates arguments. PHIL 8 provides students with extensive experience in identifying a range of correct and incorrect argument forms. Examples will come from everyday life. Students will also learn to use both the traditional categorical syllogism and modern statement logic. This course may be offered in a distance education format.
### PHYSICAL EDUCATION (PE)

#### HEALTH AND WELLNESS

**PE 4  LIFETIME FITNESS – 3 Units**  
**Grading:** Pass/No Pass Option  
**Class Hours:** 45 lecture/27 lab total  
In keeping with the primary purpose of Wellness, this course is designed to provide insight relative to the values derived by enriching the quality of our lives. Further, it includes the mechanisms for identifying individual needs and providing the means for measurement and improvement of lifestyles to reach a higher level of well being. This course provides a personalized approach to assess and prescribe the necessary programs to improve the components of physical fitness and wellness. In addition to the health related components of physical fitness (cardiovascular, muscular strength and endurance, muscular flexibility, body composition), topics covered include nutrition and weight control, cardiovascular risk reduction, stress management, drug and alcohol abuse, AIDS, and environmental health issues. This course further prepares enrollees in successfully passing certification testing conducted by National Council on Strength and Fitness.

#### PHYSICAL EDUCATION/FITNESS & CONDITIONING

**PE 11  FUNDAMENTAL CONDITIONING – 1 Unit (formerly HPE 1AD)**  
**Grading:** Pass/No Pass Option  
**Class Hours:** 54 lab total  
This course is designed for students who wish to assess and improve physical fitness levels and encourage a healthy attitude toward overall physical conditioning and fitness. Students receive instruction concerning the theories and practical activities involved in obtaining and maintaining an appropriate level of physical fitness, and through this process the students gain the ability to develop strategies and knowledge to make informed decisions for healthy lifestyle habits.

**PE 12A  BEGINNING WEIGHT TRAINING AND FITNESS – 1 Unit  
(formally PE 12, HPE 24AD)**  
**Grading:** Pass/No Pass Option  
**Class Hours:** 54 lab total  
This course is an introduction to weight training and fitness. It will include the safety aspects of successful weight training and techniques associated with a well-rounded beginning weight training program. This class will focus on the introduction of basic core lifts primarily through the use of weight lifting machines and circuit training programs that target the major muscle groups and emphasize the connection between cardiovascular fitness and strength training.

**PE 12B  INTERMEDIATE WEIGHT TRAINING AND FITNESS – 1 Unit  
Grading:** Pass/No Pass Option  
**Prerequisite:** A grade of C or higher in PE 12A  
**Class Hours:** 54 lab total  
This course is for the intermediate level weight training and fitness student that has successfully passed PE 12A, Beginning Weight Training and Fitness. It will teach the intermediate level weight training and fitness student the safety issues and techniques involved in using free weight resistance training exercises. Emphasis will be on developing a workout program that includes the use of free weight (dumbbell and barbell), power lifting techniques, and Olympic lifts for total development of the various muscle groups. Through the use of cardiovascular exercises and resistance exercises the student will be able to develop a high level of whole body fitness.

**PE 12C  ADVANCED WEIGHT TRAINING AND FITNESS – 1 Unit  
Grading:** Pass/No Pass Option  
**Prerequisite:** A grade of C or higher in PE 12B  
**Class Hours:** 54 lab total  
This course is an advanced weight lifting and fitness class where the student sets his/her own goals and develops a program to meet their goals. This class will focus on the student’s ability to generate, assess and apply an individual fitness program to meet individual fitness goals and encourage lifetime fitness.

**PE 15  AEROBIC DANCE – 1 Unit (formerly HPE 53AD)**  
**Grading:** Pass/No Pass Option  
**Class Hours:** 54 lab total  
A complete physical conditioning program designed to increase cardiovascular efficiency through choreographed dances.

**PE 16  AEROBIC EXERCISE – 1 Unit (formerly HPE 63AD)**  
**Grading:** Pass/No Pass Option  
**Class Hours:** 54 total activity  
A complete physical conditioning program designed to increase cardiovascular efficiency through aerobic type exercises.

**PE 17  YOGA – 1 Unit  
Grading:** Pass/No Pass Option  
**Class Hours:** 54 lab total  
This course is designed to help the intermediate swimmer improve cardiovascular endurance through swimming and to teach sound individual conditioning techniques. Instruction will emphasize freestyle and backstroke. Each student will progress toward becoming an endurance swimmer for enhanced fitness.

**PE 30A  BEGINNING SWIMMING – 1 Unit (formerly PE 30, HPE 40AD)**  
**Grading:** Pass/No Pass Option  
**Class Hours:** 54 lab total  
This class provides instruction in aquatic skills necessary for survival, efficiency in swimming, and conditioning in the aquatic environment.

**PE 30B  INTERMEDIATE SWIMMING – 1 Unit  
Grading:** Pass/No Pass Option  
**Prerequisite:** A grade of C or higher in PE 30A  
**Class Hours:** 54 lab total  
This course is designed for students who wish to assess and improve physical fitness levels and encourage a healthy attitude toward overall physical conditioning and fitness. Students receive instruction concerning the theories and practical activities involved in obtaining and maintaining an appropriate level of physical fitness, and through this process the students gain the ability to develop strategies and knowledge to make informed decisions for healthy lifestyle habits.

**PE 31  AQUA AEROBICS – 1 Unit (formerly HPE 79AD)**  
**Grading:** Pass/No Pass Option  
**Class Hours:** 54 lab total  
Aqua aerobics is an activity/fitness class where the student will be exposed to basic aquatic aerobics exercises. Water is the perfect medium for providing natural resistance for toning, firming, and strengthening the whole body. Exercising in water provides the student an opportunity to gain higher levels of fitness while minimizing the harsh impact to the body and joints like land base exercises does. This class includes upright movement skills, and is not a swimming class.

**PE 35  LIFEGUARD TRAINING – 2 Units (formerly HPE 44AB)**  
**Grading:** Pass/No Pass Option  
**Advisory:** Red Cross Level VII swimming skills.  
**Class Hours:** 27 lecture/27 lab total  
A course designed to provide training and prepare student for certification in American Red Cross Lifeguard Training, Professional Rescuers CPR, and First Aid Basics. Students who are legally mandated to repeat this course can contact the Division for details on how to enroll.

**PE 37  SPRINGBOARD DIVING – 1 Unit  
Grading:** Pass/No Pass Option  
**Class Hours:** 54 lab total  
This course is designed to present diving skills and techniques for both the one (1) meter and three (3) meter spring diving board, and criteria used to judge or score a dive.

**PE 51A  BEGINNING TENNIS – 1 Unit (formerly PE 51, HPE 35AD)**  
**Grading:** Pass/No Pass Option  
**Class Hours:** 54 lab total  
This tennis course is designed for the player who has achieved a degree of stroke accuracy and dependability. This course will emphasize power, spin and stroke accuracy and dependability. This course will emphasize power, spin and
controlled depth of shots. Footwork and game plan strategies will be developed along with first serve offensive shots.

**PE 51C  ADVANCED TENNIS – 1 Unit**  
**Grading:** Pass/No Pass Option  
**Prerequisite:** A grade of C or higher in PE 51B  
**Class Hours:** 54 lab total  
This course will help prepare the student for competitive tennis play. The course will take students with an intermediate level skill development in all phases of the game of tennis and work to improve the power and consistency with which these skills are used. In addition to improved use of tennis skills the course will also focus on successful strategies of both singles and doubles play.

**INDIVIDUAL SPORTS AND TEAM SPORTS**

**PE 60  SELF-DEFENSE – 1 Unit (formerly HPE 2AD)**  
**Grading:** Pass/No Pass Option  
**Class Hours:** 54 lab total  
This course is designed to teach students techniques in self-defense. The student will acquire fundamental skills in stances, punches, blocks, kicks, and escape maneuvers.

**PE 62  GOLF – 1 Unit (formerly HPE 32AD)**  
**Grading:** Pass/No Pass Option  
**Class Hours:** 54 lab total  
This course is designed to teach the fundamental skills and knowledge necessary to participate in the game of golf.

**PE 69  FOOTBALL – 1 Unit (formerly HPE 3AD)**  
**Grading:** Pass/No Pass Option  
**Class Hours:** 54 lab total  
This course is designed to teach the fundamental skills and knowledge necessary to participate in the game of football with a strong emphasis on team play.

**PE 70A  BEGINNING VOLLEYBALL – 1 Unit (formerly PE 70, HPE 6AD)**  
**Grading:** Pass/No Pass Option  
**Class Hours:** 54 lab total  
An introduction to the game of volleyball with beginning skills and an understanding and appreciation for the game of volleyball. Demonstration, drills and practice will provide the student with the opportunity to develop basic skills. Rules, basic strategy, and team play will enhance the student’s knowledge to continue this activity at a higher level.

**PE 70B  INTERMEDIATE VOLLEYBALL – 1 Unit**  
**Grading:** Pass/No Pass Option  
**Class Hours:** 54 lab total  
Designed to improve player skills, techniques and knowledge at an intermediate level for the game of volleyball. Demonstration and drills/practice will provide the student with the opportunity for improving skill level. Intermediate skills, such as quick offense/attack will be demonstrated and rehearsed. Students will have the opportunity to evaluate and apply knowledge of “out-of-system” play.

**PE 70C  ADVANCED VOLLEYBALL – 1 Unit**  
**Grading:** Pass/No Pass Option  
**Prerequisite:** A grade of C or higher in PE 70B  
**Class Hours:** 54 lab total  
This course is designed to continue furthering a student’s knowledge of the rules and strategies of volleyball as well as practicing the ability to perform volleyball skills. Higher level skills and strategies corresponding to the course objectives will be taught and practiced during this course. Demonstration, drills, practice, team play, and video analysis will provide the student with opportunities to improve their personal, as well as their team, skills. Advanced skills, such as slide hitting, multiple attack offense, and jump serving, will be demonstrated and rehearsed. Students will learn to evaluate and apply various offensive and defensive systems.

**PE 71  SOFTBALL – 1 Unit (formerly HPE 5AD)**  
**Grading:** Pass/No Pass Option  
**Class Hours:** 54 lab total  
This course is designed to teach the fundamental skills and knowledge necessary to participate in the game of softball with a strong emphasis on team play.

**PE 72  BASEBALL – 1 Unit (formerly HPE 5AD)**  
**Grading:** Pass/No Pass Option  
**Class Hours:** 54 lab total  
This course is designed to teach the fundamental skills and knowledge necessary to participate in the game of baseball with a strong emphasis on team play.

**PE 73  TRACK & FIELD TECHNIQUES – 1 Unit (formerly HPE 12AD)**  
**Grading:** Pass/No Pass Option  
**Class Hours:** 54 lab total  
This course is designed to teach the fundamental skills and knowledge necessary for track and field.

**PE 74  SOCCER – 1 Unit (formerly HPE 41AD)**  
**Grading:** Pass/No Pass Option  
**Class Hours:** 54 lab total  
This course is designed to teach the fundamental skills and knowledge necessary for soccer.

**PE 75  BASKETBALL – 1 Unit (formerly HPE 4AD)**  
**Grading:** Pass/No Pass Option  
**Class Hours:** 54 lab total  
Designed to develop basic skills, understanding and appreciation for the game of basketball. The use of lecture, demonstration and drills will provide the student with the opportunity for skill development. Rules, strategy, and team play will enhance the student’s knowledge of the game of basketball.

**PHYSICAL EDUCATION – ATHLETICS (PEAT)**

**PEAT 5  INTERCOLLEGIATE FOOTBALL – 3 Units (formerly HPE 14AB)**  
**Grading:** Pass/No Pass Option  
**Note:** Tryouts may be required to determine performance capability. This course is designed for the intercollegiate football athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.  
**Class Hours:** 162-175 hours total  
Football instruction, practice and competition at the intercollegiate level. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete’s eligibility for the particular sport.

**PEAT 6  THEORY OF FOOTBALL – 1 Unit (formerly HPE 9AB)**  
**Grading:** Pass/No Pass Option  
**Note:** This course is designed for the intercollegiate football athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.  
**Class Hours:** 9 lecture/27 activity total  
A course designed to teach the rules, theory, and strategies of intercollegiate football. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete’s eligibility for the particular sport.

**PEAT 7  INTERCOLLEGIATE VOLLEYBALL – 3 Units (formerly HPE 61AB)**  
**Grading:** Pass/No Pass Option  
**Note:** Tryouts may be required to determine performance capability. This course is designed for the intercollegiate volleyball athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.  
**Class Hours:** 162-175 hours total  
Volleyball instruction, practice and competition at the intercollegiate level. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete’s eligibility for the particular sport.

**PEAT 8  THEORY OF VOLLEYBALL – 1 Unit (formerly HPE 52AB)**  
**Grading:** Pass/No Pass Option  
**Note:** This course is designed for the intercollegiate volleyball athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.  
**Class Hours:** 9 lecture/27 activity total  
A course designed to teach the rules, theory, and strategies of intercollegiate volleyball. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete’s eligibility for the particular sport.

**PEAT 9  INTERCOLLEGIATE CROSS COUNTRY – 3 Units (formerly HPE 29AB)**  
**Grading:** Pass/No Pass Option  
**Note:** Tryouts may be required to determine performance capability. This course is designed for the intercollegiate cross-country athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.  
**Class Hours:** 162-175 hours total  
Cross country instruction, practice and competition at the intercollegiate level. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete’s eligibility for the particular sport.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
<th>Grading Options</th>
<th>Note</th>
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<tbody>
<tr>
<td>PEAT 10</td>
<td>THEORY OF CROSS COUNTRY</td>
<td>1</td>
<td>This course is designed for the intercollegiate cross country athlete.</td>
<td>Pass/No Pass</td>
<td>This course is designed for the intercollegiate athlete. It is open to all individuals.</td>
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<td></td>
<td>A course designed to teach the rules, theory, and strategies of cross country.</td>
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<td>This course is repeatable in accordance with Title 5 regulations.</td>
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<td>PEAT 11</td>
<td>INTERCOLLEGIATE BASKETBALL</td>
<td>3</td>
<td>This course is designed for the intercollegiate basketball athlete.</td>
<td>Pass/No Pass</td>
<td>Tryouts may be required to determine performance capability.</td>
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<tr>
<td>PEAT 12</td>
<td>THEORY OF BASKETBALL</td>
<td>1</td>
<td>This course is designed for the intercollegiate basketball athlete.</td>
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<td>PEAT 13</td>
<td>INTERCOLLEGIATE SOFTBALL</td>
<td>3</td>
<td>This course is designed for the intercollegiate softball athlete.</td>
<td>Pass/No Pass</td>
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<td>PEAT 14</td>
<td>THEORY OF SOFTBALL</td>
<td>1</td>
<td>This course is designed for the intercollegiate softball athlete.</td>
<td>Pass/No Pass</td>
<td>Tryouts may be required to determine performance capability.</td>
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<td>PEAT 15</td>
<td>INTERCOLLEGIATE BASEBALL</td>
<td>3</td>
<td>This course is designed for the intercollegiate baseball athlete.</td>
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<tr>
<td>PEAT 16</td>
<td>THEORY OF BASEBALL</td>
<td>1</td>
<td>This course is designed for the intercollegiate baseball athlete.</td>
<td>Pass/No Pass</td>
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<td>PEAT 17</td>
<td>INTERCOLLEGIATE TRACK AND FIELD</td>
<td>3</td>
<td>This course is designed for the intercollegiate track and field athlete.</td>
<td>Pass/No Pass</td>
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<tr>
<td>PEAT 18</td>
<td>THEORY OF TRACK AND FIELD</td>
<td>1</td>
<td>This course is designed for the intercollegiate track and field athlete.</td>
<td>Pass/No Pass</td>
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<tr>
<td>PEAT 19</td>
<td>INTERCOLLEGIATE TENNIS</td>
<td>3</td>
<td>This course is designed for the intercollegiate tennis athlete.</td>
<td>Pass/No Pass</td>
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<td>PEAT 20</td>
<td>THEORY OF TENNIS</td>
<td>1</td>
<td>This course is designed for the intercollegiate tennis athlete.</td>
<td>Pass/No Pass</td>
<td>Tryouts may be required to determine performance capability.</td>
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<td>PEAT 21</td>
<td>INTERCOLLEGIATE SOCCER</td>
<td>3</td>
<td>This course is designed for the intercollegiate soccer athlete.</td>
<td>Pass/No Pass</td>
<td>Tryouts may be required to determine performance capability.</td>
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<td>PEAT 22</td>
<td>THEORY OF SOCCER</td>
<td>1</td>
<td>This course is designed for the intercollegiate soccer athlete.</td>
<td>Pass/No Pass</td>
<td>Tryouts may be required to determine performance capability.</td>
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<td>PEAT 23</td>
<td>INTERCOLLEGIATE SWIMMING AND DIVING</td>
<td>3</td>
<td>This course is designed for the intercollegiate swimming and diving athlete.</td>
<td>Pass/No Pass</td>
<td>Tryouts may be required to determine performance capability.</td>
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In the event of a discrepancy between the online edition of the catalog and the printed version of the catalog, the online version is the official version.
PEAT 26  THEORY OF SWIMMING AND DIVING – 1 Unit  
(TEMPORARILY RECLASSIFIED AS PE 83AB)  
Grading: Pass/No Pass Option  
Note: This course is designed for the intercollegiate swimming and diving athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.  
Class Hours: 9 lecture/27 activity total  
A course designed to teach the rules, theory, and strategies of intercollegiate swimming and diving. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete’s eligibility for the particular sport.

PEAT 29  INTERCOLLEGIATE WRESTLING – 3 Units  
Grading: Pass/No Pass Option  
Note: Tryouts may be required to determine performance capability. This course is designed for the intercollegiate wrestler. Although this class is designed for the intercollegiate athlete, it is open to all individuals.  
Class Hours: 162-175 lab total  
Wrestling instruction, practice and competition at the intercollegiate level. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete’s eligibility for the particular sport.

PEAT 30  THEORY OF WRESTLING – 1 Unit  
Grading: Pass/No Pass Option  
Note: This course is designed for the intercollegiate wrestler. Although this class is designed for the intercollegiate athlete, it is open to all individuals.  
Class Hours: 9 lecture/27 lab total  
A course designed to teach the rules, theory, and strategies of intercollegiate wrestling. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete’s eligibility for the particular sport.

PEAT 41  OFF-SEASON FOOTBALL TRAINING – 1-3 Units  
Grading: Pass/No Pass Option  
Note: This course is designed for the intercollegiate football athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.  
Class Hours: 54-162 lab total  
This is an intercollegiate class designed for the development of the intercollegiate football player during the off-season of competition. Through the use of specialized strength/conditioning programs, football specific drills and techniques the student will be provided the opportunity to increase their strength, endurance and football abilities/skills to prepare them for the intercollegiate football season. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete’s eligibility for the particular sport.

PEAT 42  OFF-SEASON SOCCER TRAINING – 1-3 Units  
Grading: Pass/No Pass Option  
Note: This course is designed for the intercollegiate soccer athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.  
Class Hours: 54-162 lab total  
This is an intercollegiate class designed for the development of the soccer athlete during the off-season of competition. The course will involve strength and conditioning programs as well as specific skills and techniques for the sport of soccer that will help prepare the athlete for the next intercollegiate sport season. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete’s eligibility for the particular sport.

PEAT 43  OFF-SEASON VOLLEYBALL TRAINING – 1-3 Units  
Grading: Pass/No Pass Option  
Note: This course is designed for the intercollegiate volleyball athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.  
Class Hours: 54-162 lab total  
This is an intercollegiate class designed for the development of the volleyball athlete during the off-season of competition. The course will involve strength and conditioning programs as well as specific skills and techniques for the sport of volleyball that will help prepare the athlete for the next intercollegiate sport season. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete’s eligibility for the particular sport.

PEAT 44  OFF-SEASON WRESTLING TRAINING – 1-3 Units  
Grading: Pass/No Pass Option  
Note: This course is designed for the intercollegiate wrestler. Although this class is designed for the intercollegiate athlete, it is open to all individuals.  
Class Hours: 54-162 lab total  
This is an intercollegiate class designed for the development of the wrestler during the off-season of competition. The course will involve strength and conditioning programs as well as specific skills and techniques for the sport of wrestling that will help prepare the athlete for the next intercollegiate sport season. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete’s eligibility for the particular sport.

PEAT 45  OFF-SEASON BASKETBALL TRAINING – 1-3 Units  
Grading: Pass/No Pass Option  
Note: This course is designed for the intercollegiate basketball athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.  
Class Hours: 54-162 lab total  
This is an intercollegiate class designed for the development of the basketball athlete during the off-season of competition. The course will involve strength and conditioning programs as well as specific skills and techniques for the sport of basketball that will help prepare the athlete for the next intercollegiate sport season. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete’s eligibility for the particular sport.

PEAT 46  OFF-SEASON BASEBALL TRAINING – 1-3 Units  
Grading: Pass/No Pass Option  
Note: This course is designed for the intercollegiate baseball athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.  
Class Hours: 54-162 lab total  
This is an intercollegiate class designed for the development of the baseball athlete during the off-season of competition. The course will involve strength and conditioning programs as well as specific skills and techniques for the sport of baseball that will help prepare the athlete for the next intercollegiate sport season. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete’s eligibility for the particular sport.

PEAT 47  OFF-SEASON SOFTBALL TRAINING – 1-3 Units  
Grading: Pass/No Pass Option  
Note: This course is designed for the intercollegiate softball athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.  
Class Hours: 54-162 lab total  
This is an intercollegiate class designed for the development of the softball athlete during the off-season of competition. The course will involve strength and conditioning programs as well as specific skills and techniques for the sport of softball that will help prepare the athlete for the next intercollegiate sport season. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete’s eligibility for the particular sport.

PEAT 48  OFF-SEASON SWIMMING AND DIVING – 1-3 Units  
Grading: Pass/No Pass Option  
Note: This course is designed for the intercollegiate swimmer and diver. Although this class is designed for the intercollegiate athlete, it is open to all individuals.  
Class Hours: 54-162 lab total  
This is an intercollegiate class designed for the development of the swimming and diving athlete during the off-season of competition. The course will involve strength and conditioning programs as well as specific skills and techniques for the sport of swimming and diving that will help prepare the athlete for the next intercollegiate sport season. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete’s eligibility for the particular sport.

PEAT 49  OFF-SEASON TENNIS TRAINING – 1-3 Units  
Grading: Pass/No Pass Option  
Note: This course is designed for the intercollegiate tennis athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.  
Class Hours: 54-162 lab total  
This is an intercollegiate class designed for the development of the tennis athlete during the off-season of competition. The course will involve strength and conditioning programs as well as specific skills and techniques for the sport of tennis that will help prepare the athlete for the next intercollegiate sport season.
This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete’s eligibility for the particular sport.

**PEAT 50 OFF-SEASON TRACK AND FIELD TRAINING – 1-3 Units**
**Grading:** Pass/No Pass Option

*Note:* This course is designed for the intercollegiate track and field athlete. Although this class is designed for the intercollegiate athlete, it is open to all individuals.

**Class Hours:** 54-162 lab total

This course focuses on the principles and techniques of the sport of track and field that will help prepare the student athlete for the next intercollegiate sport season. This course is repeatable in accordance with Title 5 regulations. The California Community College Athletic Association (CCCAA) regulations also allow for repeated enrollment based on a student athlete’s eligibility for the particular sport.

**PHYS 4B PHYSICS (ELECTRICITY AND MAGNETISM) – 4 Units**
**Prerequisite:** A grade of C or higher in MATH 3B or Math Placement Level 7, and a grade of C or higher in PHYS 4A

**Corequisite:** Students must be concurrently enrolled in MATH 4A, or have completed MATH 4A with a grade of C or higher.

**Class Hours:** 54 lecture/54 lab total

The fundamental principles of electricity and magnetism are treated using vector integral calculus. Topics include Coulombs Law, electric fields, potentials, Gauss’ Law, Ohm’s Law, D-C circuits, Magnetism, Biot-Savart Law, Ampere’s Law, Capacitance, inductance, and RC circuits.

**PHYS 4C PHYSICS (WAVES, MODERN PHYSICS & QUANTUM MECHANICS) – 4 Units**
**Prerequisite:** A grade of C or higher in PHYS 4B, and a grade of C or higher in MATH 4A or Math Placement Level 7

**Corequisite:** Students must be concurrently enrolled in, or have completed MATH 4B with a grade of C or higher.

**Class Hours:** 54 lecture/54 lab total

The third in a three-course sequence, this course covers general properties of waves, electromagnetic waves, reflection and refraction, interference and diffraction, the special theory of relativity, the quantum nature of light and the wave nature of matter, and Schrodinger’s equation.

**PHYSIOLOGY (PHY)**

**PHY 1 PHYSIOLOGY – 5 Units (formerly PHY 1/PHY 1L)**
**Grading:** Pass/No Pass Option

**Advisory:** A grade of C or higher in ENGL 1A, or English Placement Level 7

**Class Hours:** 72 lecture/54 lab total

A study of cellular, tissues, and organ function in the human body. A college level course surveying the elements of human physiology in selected organ systems with an emphasis on their control and integration. The course will be presented in a lecture/discussion format with appropriate audio visual aids to emphasize selected concepts. Experiments are performed in the laboratory to illustrate functional characteristics of cells, membranes, and organ systems discussed in lecture and to provide direct experience with lab techniques, recording systems, and methods of data analysis. Some previous knowledge of anatomy and chemistry is helpful, but not required for success in the course. A prerequisite for A.D.N. and Dental Hygiene programs.

**POLITICAL SCIENCE (POLS)**

**POLS 1 INTRODUCTION TO POLITICAL SCIENCE – 3 Units**
**Grading:** Pass/No Pass Option

**Advisory:** A grade of C or higher in ENGL 1A, or English Placement Level 7

**Class Hours:** 54 lecture total (when offered in the Distance Education format, hours will total 162)

The central emphasis of this course is upon the terms and concepts used in the field of political science. Discussion centers upon the nature of political science, the origin and nature of the State, patterns and functions of government, the nature of political ideologies, the nature of the U.S. Constitution and the basic principles of a constitution. It is recommended that students majoring in political science or other social sciences take this course. This course may be offered in a distance education format.

**POLS 2 INTRODUCTION TO AMERICAN GOVERNMENT – 3 Units**
**Advisory:** A grade of C or higher in ENGL 190 or English Placement Level 6 or higher, or a grade of C or higher in ESL 138

**Class Hours:** 54 lecture total (when offered in the Distance Education format, hours will total 162)

This course emphasizes the machinery of government as found in the American system. It examines the Constitutional framework and the functioning of government at national, state and local levels. Political Science majors should take this course as well as POLS 1, preferably in sequence. This course satisfies the CSU requirement in U.S. Constitution and California state and local government (US-2 and US-3). This course may be offered in a distance education format.

**POLS 20 POLITICS OF THE DEVELOPING WORLD – 3 Units**
**Grading:** Pass/No Pass Option

**Advisory:** A grade of C or higher in ENGL 1A, or English Placement Level 7

**Class Hours:** 54 lecture total (when offered in the Distance Education format, hours will total 162)

This course focuses on the political dynamics of selected developing nations. Major emphasis will be on problems of poverty, colonialism, comparative political structures and behavior, imperialism and international relations. Tensions in political culture between traditional and non-traditional values in contemporary developing societies will also be examined. This course may be offered in a distance education format.
PSYC 1A GENERAL PSYCHOLOGY – 3 Units
Advisory: A grade of C or higher in ENGL 190 or English Placement Level 6 or higher.
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course provides an introduction to psychology as a science and as an applied field. The course provides an integration of physiological, cognitive, social-behavioral, psychodynamic, humanistic, cultural, and evolutionary perspectives. Topics include research methods, the nervous system, perception, consciousness, learning, memory, development, motivation, emotion, intelligence, stress, personality, abnormal behavior, social behavior, and psychotherapy. This course may be offered in a distance education format.

PSYC 5 HUMAN SEXUALITY – 3 Units (formerly PHY 5)
Grading: Pass/No Pass Option
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
An informative course in human sexuality, including human development from conception to adulthood. The anatomy and physiology of sex as well as behavioral and social aspects of human sexuality, and myths and laws governing sexual practices will be covered. This course may be offered in a distance education format.

PSYC 14 UNDERSTANDING HUMAN BEHAVIOR – 3 Units
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher.
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This introductory course provides a general survey of psychological concepts, with an emphasis on applied areas of psychology. Topics include learning, development, motivation, emotions, personality, abnormal behavior, psychotherapy, stress and coping, gender and sexuality, relationships, communication, and biological and social bases of behavior. This course may be offered in a distance education format.

PSYC 15 SOCIAL PSYCHOLOGY – 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in PSYC 1A and/or SOC 1; and a grade of C or higher in ENGL 190, or English Placement Level 6 or higher, or a grade of C or higher in ESL 138
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course is a study of human interaction. The focus is on the individual within a social context. Topics such as attitude formation; conformity; obedience to authority; liking and loving; gender, age, and cultural diversity; prejudice, discrimination and stereotyping; pro-social behavior and altruism; aggression; power and leadership; groupthink and deindividuation; conflict resolution and peacemaking are explored. In addition, the research methods and theories used by social psychologists are discussed. This course may be offered in a distance education format.

PSYC 16 HEALTH PSYCHOLOGY – 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in PSYC 1A; and a grade of C or higher in ENGL 190, or English Placement Level 5 or higher, or a grade of C or higher in ESL 138
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course examines the scientific and professional contributions of psychology to the areas of health and wellness including the promotion of and maintenance of health; the prevention and treatment of illness; how psychological, social, and biological factors influence one’s overall state of health; understanding the roles of patients, and health care providers; and the improvement of health care systems and health policy formation. Individual characteristics such as gender, culture, lifestyle, personality, and relationships and their effects on health are explored. Students pursuing psychology, health care, and/or human services as their profession will find this course beneficial. This course may be offered in a distance education format.
REGN 1 THEORETICAL FOUNDATIONS OF NURSING CARE – 6.5 Units (formerly REGN 60)
Limitation on Enrollment: Students must be enrolled in the nursing program
Corequisite: Students must be concurrently enrolled in REGN 2
Class Hours: 117 lecture total
In this first course leading to Registered Nursing licensure, the theoretical foundation is built by the student for application in the clinical area of adult and elderly medical-surgical nursing. The learner is studying the underlying theories and principles of fundamental nursing care and is introduced to concepts of medical-surgical nursing, which are demonstrated in the corequisite clinical course, REGN 12 Clinical Foundations of Nursing Care. The learner expands on prerequisite course work to ensure a safe foundation for clinical practice. The student demonstrates critical thinking through application of the nursing process. Fundamental physical health assessment is emphasized and therapeutic communication is applied in patient and family interactions. Wellness is promoted through the patient education process.

REGN 2 CLINICAL FOUNDATIONS OF NURSING CARE – 5.5 Units (formerly REGN 61)
Limitation on Enrollment: Students must be enrolled in the nursing program
Corequisite: Students must be concurrently enrolled in REGN 1
Note: All students participating in clinical rotations must submit proof of immunizations, TB clearance, and physical examination; pass a drug screening and a background check; and, have current certification in cardiopulmonary resuscitation (CPR) for the health professional according to established program process prior to going into clinical facilities. Students are financially responsible for meeting these requirements.
Class Hours: 89 lecture and 7 clinical lab
* Lab hours may be listed as TBA in course schedule. Specific times and meeting location(s) will be provided in the First Class Handout.

The first clinical course leading to Registered Nursing licensure finds the student building a safe foundation for nursing care with basic nursing skill demonstration in the Clinical Skills Laboratory. Successful completion of basic nursing skills as vital signs, bathing, skin care, mobility, and bowel care are then applied to patient care in the hospital setting. The Clinical Skills Laboratory is utilized continuously throughout the course to build complex fundamental skills such as medication preparation and administration, urinary catheterization, and sterile technique. Application of the theory presented in the co-requisite course, REGN 1 Theoretical Foundations of Nursing Care, finds the student caring for adult and elderly adult medical-surgical patients. The learner organizes nursing care in the hospital setting. The Clinical Skills Laboratory is utilized continuously throughout the course to build complex fundamental skills such as medication preparation and administration, urinary catheterization, and sterile technique. Application of the theory presented in the co-requisite course, REGN 1 Theoretical Foundations of Nursing Care, finds the student caring for adult and elderly adult medical-surgical patients. The learner organizes nursing care in the hospital setting. The learner demonstrates critical thinking through application of the nursing process. Fundamental physical health assessment is emphasized and therapeutic communication is applied in patient and family interactions. Wellness is promoted through the patient education process.

REGN 10 THEORETICAL CONCEPTS OF MEDICAL SURGICAL NURSING – 6.5 Units (formerly REGN 70)
Prerequisite: A grade of C or higher in each of the following courses: REGN 1 and REGN 2
Corequisite: Students must be concurrently enrolled in REGN 11 and REGN 12
Note: If not previously completed, all students participating in clinical rotations must submit proof of drug screening and a background check prior to going into clinical facilities. Students are financially responsible for meeting these requirements according to the established program process.
Class Hours: 117 lecture total
REGN 10 is a required prerequisite for REGN 20 and REGN 21. REGN 10 is a required course for the Associate Degree Nursing program at Shasta College. This course is one of three Corequisite courses that make up the second semester of the Associate Degree Nursing program. Building upon the content of REGN 1 and REGN 2, the students will expand the fundamental clinical nursing skills they mastered. Students will have a variety of patient assignments on the medical floor, surgical floor, neurology floor, orthopedic floor, operating room and emergency room. Students will have assignments in specialty areas as well, such as the pre-anesthesia surgical suite and respiratory therapy. Clinical skills will include receiving report, organizing their patient care, delegation, assessments, education, documentation, medication administration, intravenous therapy, blood administration, TPN/Lipid administration, capillary blood pressure measurement, and analyzing daily lab. A heavy focus is on improving objective and subjective nursing assessment skills. Students will progress from providing care for a single patient to providing care to two increasingly complex patients. Emphasis is placed on the integration of theory and the nursing process into the clinical setting by use of clinical papers, medical record review, and clinical conferences.

REGN 12 ASSESSMENT CONCEPTS OF MEDICAL SURGICAL NURSING – 6 Units (formerly REGN 72)
Prerequisite: A grade of C or higher in each of the following courses: REGN 1 and REGN 2
Corequisite: Students must be concurrently enrolled in REGN 10 and REGN 11
Note: If not previously completed, all students participating in clinical rotations must submit proof of drug screening and a background check prior to going into clinical facilities. Students are financially responsible for meeting these requirements according to the established program process.
Class Hours: 97 clinical lab
* Lab hours may be listed as TBA in course schedule. Specific times and meeting location(s) will be provided in the First Class Handout.

REGN 12 is a required prerequisite for REGN 20 and REGN 21 and is a required course for the Associate Degree Nursing program at Shasta College. This course is one of three co-requisite courses that make up the second semester of the Associate Degree Nursing program. Building upon the content of REGN 1 and REGN 2 the students will expand the basic assessment skills they mastered. Clinical Skills Lab activities focus on detailed assessment skills. These skills include both subjective and objective assessment activities. Subjective assessment skills include taking a complete patient history and use of open-ended, closed-ended, and probing questions to explore key areas in more depth. Objective assessment skills include inspection, auscultation, percussion, palpation, and the use of special equipment and medications. The learner demonstrates critical thinking through application of the nursing process. Fundamental physical health assessment is emphasized and therapeutic communication is applied in patient and family interactions. Wellness is promoted through the patient education process.

REGN 20 THEORETICAL CONCEPTS OF FAMILY/MATERNAL-CHILD NURSING AND MEDICAL SURGICAL NURSING II – 7 Units (formerly REGN 90)
Prerequisite: A grade of C or higher in each of the following courses: REGN 10, REGN 11 and REGN 12
Corequisite: Students must be concurrently enrolled in REGN 21
Class Hours: 126 lecture total
REGN 20 is a required prerequisite for the Associate Degree Nursing program at Shasta College and a required prerequisite for REGN 33 and REGN 34. This course is one of two corequisite courses that make up the third semester of the Associate Degree Nursing program. Building upon the content of REGN 10 and REGN 11, and REGN 12, the student expands on knowledge of medical surgical nursing and examine complications in obstetrical and pediatric nursing. Concepts emphasized include family, communication, health promotion, illness prevention, teaching, cultural sensitivity, growth and development, nursing process, critical thinking, legal-ethical issues and advocacy.

REGN 20X SELECT THEORETICAL CONCEPTS OF FAMILY/MATERNAL-CHILD NURSING AND MEDICAL SURGICAL NURSING II (NON-DEGREE) – 4 Units (formerly REGN 90X/REGN 91X)
Corequisite: Students must be concurrently enrolled in REGN 21X
Limitation on Enrollment: Students must be enrolled in the 30-unit option program
Note: This is the course for the non-degree, 30-unit option student. If not previously completed, all students participating in clinical rotations must submit proof of drug screening and a background check prior to going into clinical facilities. Students are financially responsible for meeting these requirements according to the established program process.
Class Hours: 72 lecture total
REGN 20X is designed for the Licensed Vocational Nurse enrolled in the 30-unit non-degree program. It is a required prerequisite course for REGN 33X, and REGN 34X. This course is one of two corequisite courses that make up the 30-unit option program. The students will expand their knowledge of medical surgical nursing and examine complications in obstetrical and pediatric nursing. Concepts emphasized include family, communication, health promotion, illness prevention, teaching, cultural sensitivity, growth and development, nursing process, critical thinking, legal-ethical issues and advocacy.
REGN 21  CLINICAL CONCEPTS OF FAMILY/MATERNAL-CHILD AND MEDICAL SURGICAL NURSING II – 5 Units  (formerly REGN 91)
Prerequisite: A grade of C or higher in each of the following courses: REGN 10, REGN 11 and REGN 12
Corequisite: Students must be concurrently enrolled in REGN 20
Note: If not previously completed, all students participating in clinical rotations must submit proof of drug screening and a background check prior to going into clinical facilities. Students are financially responsible for meeting these requirements according to the established program process.
Class Hours: 270 clinical
*Lab hours may be listed as TBA in course schedule. Specific times and meeting location(s) will be provided in the First Class Handout.
REGN 21 is a required course for the Associate Degree Nursing program at Shasta College and one of two required courses that comprise the fourth semester of the Associate Degree Nursing Program. Building upon the content of REGN 10, REGN 11 and REGN 12, the students will expand the fundamental clinical nursing skills they mastered. Students will have a variety of patient assignments on the obstetric, pediatric, medical, surgical, oncology, and orthopedic floors with special assignments in the OB clinic, Shasta College preschool, home care agencies, the emergency department and pre-anesthesia unit. Clinical skills will include receiving report, organizing their patient care, assessments, documentation, medication administration, intravenous therapy, venapuncture, blood administration, TPN/Lipid administration, accuchecks, and analyzing daily labs. Students will progress from providing care for a single patient to providing care to up to three increasingly complex patients. Emphasis is placed on the integration of theory and the nursing process into the clinical setting through the use of organizational tools, clinical papers, a nursing care plan, chart review, and clinical conferences.

REGN 21X  CLINICAL CONCEPTS OF FAMILY/MATERNAL-CHILD AND MEDICAL SURGICAL NURSING II (NON-DEGREE) – 4 Units  (formerly REGN 90X/REGN 91X)
Corequisite: Students must be concurrently enrolled in REGN 20X
Limit to Enrollment: Students must be enrolled in the 30-unit option program
Note: This is the course for the non-degree, 30-unit option student. If not previously completed, all students participating in clinical rotations must submit proof of drug screening and a background check prior to going into clinical facilities. Students are financially responsible for meeting these requirements according to the established program process.
Class Hours: 216 clinical total
REGN 21X is designed for the Licensed Vocational Nurse enrolled in the 30-unit non-degree program. This course is one of two corequisite courses that make up the first semester of the 30-unit option non-degree program. The students will expand the fundamental clinical nursing skills they mastered. Students will have a variety of patient assignments on the obstetrical, pediatric, medical, surgical, oncology, and orthopedic floors with special assignments in the OB clinic, Shasta College preschool, home care agencies, the emergency department and pre-anesthesia unit. Clinical skills will include receiving report, organizing their patient care, assessments, documentation, medication administration, intravenous therapy, venapuncture, blood administration, TPN/Lipid administration, accuchecks, and analyzing daily labs. Students will progress from providing care for a single patient to providing care up to three increasingly complex patients. Emphasis is placed on the integration of theory and the nursing process into the clinical setting through the use of organizational tools, clinical papers, a nursing care plan, chart review, and clinical conferences.

REGN 33  THEORETICAL CONCEPTS OF MENTAL HEALTH, COMMUNITY-BASED NURSING & MEDICAL SURGICAL NURSING III – 6 Units  (formerly REGN 32/31; 80/81)
Prerequisite: A grade of C or higher in each of the following courses: REGN 20 and REGN 21
Corequisite: Students must be concurrently enrolled in REGN 34
Class Hours: 108 lecture total
REGN 33 is one of the final required courses for the Associate Degree Nursing program at Shasta College and one of two co-requisite courses that comprise the fourth semester of the Associate Degree Nursing Program. The course provides the conceptual basis of nursing care for patients in high acuity medical surgical, mental health and community-based settings. The emphasis of this course is on complex medical surgical conditions, fundamentals of mental health, community health nursing, fundamental concepts of nursing leadership, legal-ethical issues, current trends in practice, preparation for and successful completion of the licensing examination, and professional career development. The nursing process and critical thinking skills are emphasized. Students use the nursing process and critical thinking to plan, implement, and evaluate the acute and rehabilitative care of complex medical surgical and mental health patients. In addition to on-campus meetings, a portion of the course communication and activities will take place via the Internet. Students will need access to a computer with Internet access.

REGN 33X  THEORETICAL CONCEPTS OF MENTAL HEALTH, COMMUNITY-BASED NURSING & MEDICAL SURGICAL NURSING III (NON-DEGREE) – 6 Units  (formerly REGN 30X/31X; 80X/81X)
Prerequisite: A grade of C or higher in each of the following courses: REGN 20X and REGN 21X
Corequisite: Students must be concurrently enrolled in REGN 34X
Limitation on Enrollment: Students must be enrolled in the 30-unit option program
Note: This is the course for the non-degree, 30-unit option student.
Class Hours: 324 clinical total
*Lab hours may be listed as TBA in course schedule. Specific times and meeting location(s) will be provided in the First Class Handout.
REGN 33X is one of the final required courses for the Associate Degree Nursing program at Shasta College and one of two co-requisite courses that comprise the fourth semester of the Associate Degree Nursing Program. The course provides the conceptual basis of nursing care for patients in high acuity medical surgical, mental health and community-based settings. The emphasis of this course is on complex medical surgical conditions, fundamentals of mental health, community health nursing, fundamental concepts of nursing leadership, legal-ethical issues, current trends in practice, preparation for and successful completion of the licensing examination, and professional career development. The nursing process and critical thinking skills are emphasized. Students use the nursing process and critical thinking to plan, implement, and evaluate the acute and rehabilitative care of complex medical surgical and mental health patients. In addition to on-campus meetings, a portion of the course communication and activities will take place via the Internet. Students will need access to a computer with Internet access.

REGN 34  CLINICAL CONCEPTS OF MENTAL HEALTH, COMMUNITY-BASED NURSING & MEDICAL SURGICAL NURSING III – 6 Units  (formerly REGN 32, REGN 82)
Prerequisite: A grade of C or higher in each of the following courses: REGN 20 and REGN 21
Corequisite: Students must be concurrently enrolled in REGN 33
Limitation on Enrollment: Students must be enrolled in the 30-unit option program
Note: If not previously completed, all students participating in clinical rotations must submit proof of immunizations, current CPR certification, TB screening, physical examination, drug screening and a background check prior to going into clinical facilities. Students are financially responsible for meeting these requirements according to the established program process.
Class Hours: 324 clinical total
REGN 34 is a required course for the Associate Degree Nursing program at Shasta College and one of two co-requisite courses that comprise the fourth semester of the Associate Degree Nursing Program. Building upon the content of REGN 20 and 21 students expand previously learned nursing leadership, legal-ethical issues, current trends in practice, preparation for and successful completion of the licensing examination, and professional career development. Students use the nursing process and critical thinking to plan, implement, and evaluate the acute and rehabilitative care of complex medical surgical and mental health patients. In addition to on-campus meetings, a portion of the course communication and activities will take place via the Internet. Students will need access to a computer with Internet access.

REGN 34X  CLINICAL CONCEPTS OF MENTAL HEALTH, COMMUNITY-BASED NURSING & MEDICAL SURGICAL NURSING III (NON-DEGREE) – 6 Units  (formerly REGN 32X, REGN 82X)
Prerequisite: A grade of C or higher in each of the following courses: REGN 20X and REGN 21X
Corequisite: Students must be concurrently enrolled in REGN 33X
Limitation on Enrollment: Students must be enrolled in the 30-unit option program
Note: This is the course for the non-degree, 30-unit option student. If not previously completed, all students participating in clinical rotations must submit proof of immunizations, current CPR certification, TB screening, physical examination, drug screening and a background check prior to going into clinical facilities. Students are financially responsible for meeting these requirements according to the established program process.
Class Hours: 324 clinical total
REGN 34X is a required course for the Associate Degree Nursing program at Shasta College and one of two co-requisite courses that comprise the fourth semester of the Associate Degree Nursing Program. Building upon the content of REGN 20 and 21 students expand previously learned clinical nursing skills to become increasingly independent. Students have assigned patients in a variety of clinical settings. For example, clinical rotations may include acute care, critical care, rehabilitation, mental health, and community health. Each student will spend 120 hours in a preceptorship during the semester. The preceptorship is the capstone clinical project of the semester. Emphasis is placed on the integration of theory and the nursing process in the clinical setting through the use of clinical papers, clinical conferences, group projects, and nursing care plans. In addition to on-campus meetings and clinical rotations, a portion of the course communication and activities will take place via the Internet. Students will need access to a computer with Internet access.
RUSSIAN (RUSS)

Two years of high school foreign language with grades of “C” or better is equivalent to one semester of foreign language at Shasta College.

RUSS 1 ELEMENTARY RUSSIAN – 5 Units
Class Hours: 90 lecture total
This course is designed to give the student training in pronunciation, essentials of grammar, reading, writing and speaking in Russian. The student is also introduced to the customs and culture of the Russian people.

RUSS 2 ELEMENTARY RUSSIAN – 5 Units
Prerequisite: A grade of C or higher in RUSS 1, or Foreign Language Placement Level 2 or higher
Class Hours: 90 lecture total
This course is a continuation of RUSS 1. There is continued emphasis on listening to and reading Russian (the receptive skills) and on speaking and writing Russian. Students expand their language skills and vocabulary. Also students improve the ability to ask and answer questions and to discuss daily life, current events, travel, and leisure time activities. In the process of learning the language, the student is introduced to the culture and people of Russia, its history, literature, art, architecture, music and ballet.

RUSS 3 INTERMEDIATE RUSSIAN – 5 Units
Prerequisite: A grade of C or higher in RUSS 2 or Foreign Language Placement Level 3 or higher
Class Hours: 90 lecture total
Designed for those who have had previous training in the Russian language. Review of grammar and sentence patterns with increased emphasis on speaking and useful patterns of the language. Students will read excerpts from works of Russian authors, study the culture of Russian speaking people, produce translations of various selections and develop their own writing skills.

RUSS 4 INTERMEDIATE RUSSIAN – 5 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in RUSS 3 or Foreign Language Placement Level 4
Class Hours: 90 lecture total
The fourth semester of Russian language study emphasizes conversation, literature, and composition. Review of grammar, syntax, and morphology is grounded in communicative contexts and in the study of literature, culture, and historical events significant to Russian speakers. Reading selections include Russian fiction, poetry, theatre, and journalism.

SIGN LANGUAGE (SL)
Refer to American Sign Language - ASL

SKILLS DEVELOPMENT (SDEV)

SDEV 301 PRE-GED TEST PREPARATION – 0 Units
Advisory: English Placement Level 2 or higher
Class Hours: 54-108 lab total
This is a course to prepare the student at the 6th to 8th grade reading level for GED (General Educational Development Test) level work and to enable students to apply the knowledge gained to real-life situations. Course content includes skill building and test-taking practice in the areas of reading, writing, social studies, science and mathematics. The purpose of this class is to provide the necessary preparation for the student to successfully pass GED-level work. This course may be offered in a distance education format.

SDEV 302 GED TEST PREPARATION – 0 Units
Advisory: A grade of C or higher ENGL 260 or English Placement Level 3 or higher
Class Hours: 54-108 lab total
This is a course to prepare the student to pass the General Educational Development (GED) Test and to enable students to apply the knowledge gained to real-life situations. Course content includes skill building and test-taking practice in the areas of reading, writing, social studies, science and mathematics. The purpose of this class is for the student to successfully pass all five parts of the GED 2002 examination. This course may be offered in a distance education format.

SOCIOLOGY (SOC)

SOC 1 INTRO TO SOCIOLOGY – 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher, or a grade of C or higher in ESL 138
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course examines the basics of sociology—the study of society. Sociology examines the interactions among social institutions, cultures, groups, and individuals. This course will focus on how unequal power relations organize the social world and shape individual lives, and how individuals negotiate their lives in different social and economic contexts. The course will examine a broad array of topics using a variety of theoretical perspectives and sociological research methods. The primary goal of this course is to recognize how people’s experiences are shaped by social forces and reshaped through human action. This course may be offered in a distance education format.

SOC 2 SOCIAL PROBLEMS – 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher, or a grade of C or higher in ESL 138
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course examines several social problems from a sociological perspective. This approach makes two major assumptions. First, individuals are products of their social environment. Questions such as who we are, what we believe, what we strive for, and how we feel about ourselves, etc. have to be addressed by analyzing the society in which we live. This requires the use of the "Sociological Imagination" or looking at human attitudes, behaviors and feelings in the context of the collective world of social forces and institutional arrangements that shape them. Second, because sociology considers social structures responsible for social problems, we need to adapt a critical stance towards all social forms. This approach will help foster a more critical sociological approach to social problems. This course may be offered in a distance education format.

SOC 15 SOCIOLOGY OF MASS MEDIA – 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher, or a grade of C or higher in ESL 138
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course examines the central role media plays in daily life. Starting from a microsociological standpoint, students will examine how knowledge and experiences are increasingly mediated by the mass media in its various forms. The course also explores the effect of media, including television, radio, newspapers, and the Internet, on social institutions which in turn permeate and shape public policy, the economy, education, and even the family. The course will examine ways in which mass media contributes to social/cultural power and stratification and will use the "process of mutual determination" to examine the relationship between media, individuals, and society. This course may be offered in a distance education format.

SOC 22 SOCIOLOGY OF AGING – 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 260, or English Placement Level 5 or higher, or a grade of C or higher in ESL 138
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
The consequences of demographic, economic, and social trends associated with population aging are challenging policy makers around the globe. This course will examine these processes as they affect individuals, families, and societies. Course content will examine themes surrounding aging and social policy in order to better understand the social context that contributes to enhancing or diminishing the quality of life in old age. Areas of analysis include health care rationing, family versus government responsibility, Social Security, retirement, changing norms and values, the elderly and the life course. This course may be offered in a distance education format.

SOC 25 SOCIOLOGY OF MINORITIES – 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher, or a grade of C or higher in ESL 138
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
The purpose of this course is to introduce students to the sociological study of race and ethnicity in the United States. This course will explore the relations between racial and ethnic minorities and the larger society. The histories of employment, educational options, civil and legal rights and social experiences will be viewed as they reflect race, ethnic and gender biases in our institutions. We will also focus on how different groups resisted oppression and actively shaped a more democratic America. This course may be offered in a distance education format.
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SOC 30  SOCIOLOGY OF GENDER – 3 Units
Advisory: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher, or a grade of C or higher in ESL 138
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
This course is an introduction to the sociological study of gender. The central themes of the course will be changes and continuities in gender roles within the U.S. and abroad, the social processes that influence our lives and gender identities, and the connections between gender, power, and inequality. As we explore these themes, we will study how culture, the economy, and the family have been pivotal sites for the maintenance, reproduction, and change in gender roles in both the U.S. and abroad. We will pay special attention to the ways in which race, class and sexual orientation intersect processes of gender relations and social change. This course may be offered in a distance education format.

SOC 70  SOCIAL WELFARE – 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher, or a grade of C or higher in ESL 138
Class Hours: 54 lecture total (when offered in the Distance Education format, hours will total 162)
The basic purpose of this course is to provide students with an introduction to social services and the social work profession, including social work fields of practice, social service agencies, and levels of social work practice. The course will focus on the critical examination of social welfare issues, including a historical perspective, contemporary issues, structures of the current system, and alternative concepts. Discussions will examine direct service (micro level practice) and administration/planning (macro level practice). An overview of social service work will include discussion of the following areas: health care, children and family services, substance abuse, schools, mental health, the arts, and community relations. This course may be offered in a distance education format.

SPANISH (SPAN)
Two years of high school foreign language with grades of C or better is equivalent to one semester of foreign language at Shasta College.

SPAN 1  ELEMENTARY SPANISH – 5 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 90 lecture total
This introductory course is designed to give the student thorough and intense practice in speaking and listening to Spanish, and reading and writing in Spanish, with special emphasis on grammar and pronunciation. The course will focus on communicative competence in situations relating to daily routines, home life, college life, and everyday activities such as meeting and describing people; finding clothes, housing, and facilities; expressing opinions, discussing weather, eating, and holidays. Students are introduced to the culture of Spanish-speaking people in general and to specific customs and cultural characteristics of various Spanish-speaking countries.

SPAN 2  ELEMENTARY SPANISH – 5 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in SPAN 1, or Foreign Language Placement Level 2 or higher
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 90 lecture total
This course is a continuation of SPAN 1. There is continued emphasis on listening to and reading Spanish (receptive skills) and on speaking and writing Spanish. Students expand their language skills and vocabulary. Students also improve their ability to ask and answer questions and to discuss current events, health, food, travel, leisure time and activities, and shopping. The course will focus on communicative competence in situations relating to the aforementioned areas and also to art, music, commerce, family, and the future. Students learn to express themselves in Spanish regarding these topics as they relate to the culture of Spanish-speaking people in general and to specific Spanish-speaking countries.

SPAN 3  INTERMEDIATE SPANISH – 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in SPAN 2, or Foreign Language Placement Level 3 or higher
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 54 lecture total
This course is a continuation of SPAN 2. SPAN 3 includes a compact, detailed review of first-year material as well as new vocabulary and expansion of first-year principles, development of more advanced communication and composition skills, and verb tenses and structures. This course offers extensive conversational exercises with stress on correct pronunciation. The course also includes an introduction to Spanish and Latin American literature and further discussion of the arts in general, particularly as they relate to the culture of the Spanish-speaking countries.

SPAN 4  INTERMEDIATE SPANISH – 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in SPAN 3, or Foreign Language Placement Level 4
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 54 lecture total
This course is a continuation of SPAN 3. SPAN 4 (along with SPAN 3) compiles a compact, detailed review of first-year material as well as new vocabulary and expansion of first-year principles, development of more advanced communication and composition skills, and a more comprehensive overview of verb tenses and structures. This course offers extensive conversational exercise with stress on correct pronunciation. The course also includes further discussion of Spanish and Latin American literature and of the arts in general, particularly as they relate to the culture of Spanish-speaking countries.

SPAN 19  SPANISH CONVERSATION AND CULTURE – 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in SPAN 2, or Foreign Language Placement Level 3
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 54 lecture total
Intense practice in the spoken language with the objective of increasing vocabulary and improving speech patterns as well as pronunciation by giving oral presentations, conversing, and analyzing Spanish phonology.

SPAN 20  SPANISH CONVERSATION AND CULTURE II – 3 Units
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in SPAN 3, or Foreign Language Placement Level 4
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 54 lecture total
Continued intense practice in Spanish with the objective of facilitating development of better conversation and communication skills, increasing vocabulary, and improving speech patterns and pronunciation by giving oral presentations, conversing, and analyzing Spanish-speaking culture.

SPAN 151  SPANISH VOCABULARY (formerly SPAN 151AB) – 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 54 lecture total
This course will help those students who want to learn Spanish vocabulary and grammar in order to facilitate very basic communication in everyday workplace and social situations. Students are introduced to pronunciation and minimum essentials of Spanish grammar. This course is a survey of basic vocabulary, numbers (1-1000), some vocabulary useful in the workplace, practice of simple phrases, intense practice in comprehending simple phrases and practice in responses to simple phrases given within the context of a professional or vocational situation.

SPAN 155  SPANISH FOR MEDICAL PROFESSIONALS – 3 Units
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
This course is designed to help health care workers in the United States assess, treat, reassure and educate their Spanish-speaking clients/patients. This course facilitates better communication between health care providers and the growing Spanish-speaking population in the United States and in Northern California. Course topics include the building of the patient-practitioner relationship, understanding the patient's chief complaint, taking medical history and current symptoms, and learning about cultural factors affecting the health care provided to Spanish speakers and the workers that care for them.

SPAN 197  SPECIAL TOPICS IN SPANISH – 3 Units
Grading: Pass/No Pass Option
Advisory: A grade of C or higher in ENGL 280, or English Placement Level 5 or higher
Class Hours: 9-54 lecture total
This course is designed to meet the needs of professionals who work with Spanish speakers. Essentials of Spanish pronunciation and grammar are introduced, along with commands, the present indicative, and the two past tenses. Communicative skills will be developed through role-plays of realistic situations, practiced dialogues, and study of specialized vocabulary.
STU 1 COLLEGE SUCCESS – 3 Units (formerly GS 1)
Class Hours: 54 lecture total (when offered in the Distance Education format hours will total 54)
This course is designed to assist students in obtaining the skills and knowledge necessary to reach their educational objectives. Topics covered include: motivation and discipline, memory development, time and stress management, career and transfer planning, and a wide variety of study skills and techniques for success. This course may be offered in a distance education format.

STU 50 GETTING CONNECTED: AN ORIENTATION TO COLLEGE – .5 Unit (formerly GS 50)
Class Hours: 9-18 lecture total
This course includes an orientation to the educational opportunities, programs and services available at Shasta College as well as the procedures for accessing them. In the one unit version of the course, students will deepen their sense of educational purpose and commitment through developing effective “Education Plans” and building “Connections for Success.” This course is appropriate for all students. It fulfills the orientation requirement for priority registration.

STU 70 COLLEGE STUDY AND LEARNING SKILLS – 1 Unit (formerly ENGL 171)
Grading: Pass/No Pass Option
Class Hours: 18 lecture total
Designed to help non-traditional and traditional students to develop learning skills and to achieve the greatest amount of competency in their college class work. The class will help the student to take notes effectively, read and study course materials, prepare for exams, and complete written assignments.

STU 90 CAREER CHOICE – 1 Unit (formerly GS 90)
Grading: Pass/No Pass Option
Class Hours: 18 lecture total
A course designed for students who are undecided about their educational and/or career goals. Through a series of group exercises, and career development testing, students learn to identify personal values, interests, skills, aversions, and personality patterns and understand how they relate to choices in the world of work. Students learn to access occupational information, develop decision-making skills and set career goals.

STU 92 WORKSITE READINESS (formerly GS 92) – 1 Unit
Grading: Pass/No Pass Option
Class Hours: 18 lecture total (when offered in the Distance Education format, hours will total 54)
Designed to prepare students to be successful on the job. Students will gain insight into employer expectations, effective workplace attitudes, developing job-related communication skills, conflict resolution, and managing stress. Emphasis will be placed on maximizing learning opportunities in the workplace, the development of effective networking skills, personal skills-acquisition plan, and building a job search campaign. This course may be offered in a distance education format.

STU 310 GENERAL TUTORING LAB/SUPERVISED TUTORING – 0 Units
Class Hours: TBA
This course provides tutoring assistance to increase the probability of a student's successful completion of their or her educational objectives. Upon faculty/counselor referral, student will receive tutoring in designated subject areas in various tutoring labs on campus. Cumulative progress and attendance records will be maintained for this non-credit, open entry course. Hours will vary depending upon individual student’s needs.

THEATRE ARTS (THTR)

THTR 1 INTRODUCTION TO THEATRE ARTS – 3 Units
Class Hours: 54 lecture total
This course is a survey of Theatre Arts, theatre history, playwrights, practitioners, genres, production methods, dramatic structure, performance style, plays, terminology, history, criticism, and stagecraft. Students will develop an appreciation for the theatre arts through lectures, play reading, viewing, critiquing, and participating in college productions. This course fulfills the Arts requirement for General Ed Transfer.

THTR 5 20TH CENTURY THEATRE – 3 Units
Advisor: A grade of C or higher in ENGL 190, or English Placement Level 6 or higher
Class Hours: 54 lecture total
This is a survey course in trends and developments of 20th Century theatre. Major playwrights (Ibsen, Chekhov, Miller), personalities (Craig, Artaud), and theatre innovators (Brecht) of this century will be examined. Mainstream and radical influences as well as the impact of technology on plays and performances will be discussed. This course fulfills the Humanities requirement for General Education transfer and is required for Theatre majors.

THTR 8 THEATRE HISTORY I – 3 Units
Class Hours: 54 lecture total
In this course students will investigate the history of Theatre from its origins through the 17th Century. Students will analyze plays in terms of the historical cultural, political, and social context of each play. Topics include historical relevance and context, text analysis, acting style, theme, language, diction, set, audience, gender issues, special effects, cultural significance and production stylization.

THTR 9 THEATRE HISTORY II – 3 Units
Class Hours: 54 lecture total
In this course students will read and investigate a selection of plays from the Jacobean to the Contemporary eras. They will analyze the historical context of each play and how to interpret and transform scripts for production. Topics include: historical development and context, text analysis, acting style, theme, language, diction, set, audience, gender issues, special effects, and cultural significance.

THTR 12 ACTING I – 2 Units
Prerequisite: A grade of C or higher in THTR 12
Class Hours: 18 lecture/54 lab total
This course prepares a student to apply basic acting theory to performance and develops the skills of interpretation of drama through acting. Special attention is paid to skills for performance: memorization, stage movement, vocal production, and interpretation of text.

THTR 13 ACTING II – 2 Units
Prerequisite: A grade of C or higher in THTR 12
Class Hours: 54 lab total
This laboratory course follows Acting I and Acting II and continues the exploration of theories and techniques used in preparation for the interpretation of drama through acting. The emphasis will be placed on deepening the understanding of the acting process through character analysis, monologues, and scenes.

THTR 16 ACTING LAB – 1 Unit
Prerequisite: A grade of C or higher in THTR 12
Class Hours: 54 lab total
This course is designed to introduce the student to the background, function and education transfer and is required for Theatre majors.

THTR 23 MAINSTAGE PRODUCTION I – 1-4 Units (formerly THTR 23AD)
Class Hours: 54-216 lab total
This course focuses on the rehearsal and performance of a major play or musical. Activities may include acting, stage management, backstage operations, costume, stagecraft and front of house operations. The course is required for theatre majors, non-majors are welcome. Students may enroll more than once for this course until reaching the maximum number of 4 total units.

THTR 26 MAINSTAGE PRODUCTION II – 1-6 Units (formerly THTR 26AD)
Class Hours: 54-324 lab total
A course that focuses on the rehearsal and performance of a major play or musical. Activities may include acting, stage management, backstage operations, costume, stagecraft and front of house operations. Play selections vary each time this course is taught. Students may enroll more than once for this course until reaching the maximum number of 6 total units.

THTR 29 DIRECTING – 2 Units (formerly THTR 22EH)
Grading: Pass/No Pass Option
Class Hours: 18 lecture/54 lab total
This course is designed to introduce the student to the background, function and techniques of the stage director. Included in the course will be an investigation of the principles involved in script selection and interpretation, the fundamentals of casting, rehearsal techniques, blocking, stagecraft, and the preparation of a director's prompt book. Students should have previous experience in theatre performance and production.

THTR 30 STAGECRAFT – 3 Units
Grading: Pass/No Pass Option
Class Hours: 45 lecture/27 lab total
This course focuses on the technical principles of theatrical productions. Subjects covered include the use of basic power tools, the design, construction and painting of scenery, hanging and operating lighting instruments, basic stage management and understanding backstage operations. Students will learn how to interpret theatrical construction diagrams, floor plans for stage sets, and light plots.

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THTR 31 INTRODUCTION TO THEATRICAL DESIGN – 3 Units
(formerly THTR 35)
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
This course focuses on the theories of stage design, stage management and implementation of the visual elements of a theatrical production, including scenic design, costumes, makeup, lighting and stage properties. Students will survey theatrical equipment and analyze construction techniques.

THTR 34 MAKEUP – 2 Units
Grading: Pass/No Pass Option
Class Hours: 27 lecture/27 lab total
This course is designed to introduce the student to the principles and practical application of stage makeup. Emphasis will be given to facial structure, character analysis, makeup selection, application, facial modeling, three-dimensional techniques, false hair, character and corrective makeup. The student will demonstrate his/her understanding through actual application in the classroom and as a member of a makeup crew for a specific play production, special exercise, or project.

THTR 38 MAKEUP LAB – 1 Unit
Grading: Pass/No Pass Option
Prerequisite: A grade of C or higher in THTR 34
Class Hours: 54 lab total
This lab course is designed to develop the student’s skills introduced in Theatre 34, Makeup. Emphasis will be given to corrective character analysis, makeup selection and application techniques. The student will demonstrate his/her understanding through actual application in the classroom and as a member of a makeup crew for a specific play production, special exercise, or project.

THTR 41 THEATRE LABORATORY – 1-4 Units (formerly THTR 41AD)
Grading: Pass/No Pass Option
Class Hours: 54-216 lab hours total
A laboratory course in which the student will receive supervised practical experience and technical training in theatrical productions. Students may work progressively in one or more of the following areas: scenery construction, fabrication and rigging; console operations; stage management; lighting; sound; costumes; wardrobe; properties; make-up; publicity; house management; concessions; and running crews. Upon approval of the instructor, students may direct and participate in the preparation, rehearsal, and performance of student-directed productions. Play selections vary each time this course is taught. Students may enroll more than once for this course until reaching the maximum number of 4 total units.

THTR 42 TECHNICAL STAGE PRODUCTION – 1-4 Units
(formerly THTR 42AD)
Grading: Pass/No Pass Option
Class Hours: 54-216 lab total
A laboratory course in which the student will participate in one or more of the following technical production areas: scenery construction, set decorations, lighting, sound, costumes, properties, makeup, stage management and publicity. The course will focus on the technical requirements for creating public performances and entertainments. Entertainment selections vary each time this course is taught. Students may enroll more than once for this course until reaching the maximum number of 4 total units.

THTR 50 STAGE PRODUCTION – 1-3 Units (formerly THTR 50AD)
Grading: Pass/No Pass Option
Class Hours: 54-162 lab total
A production course designed to provide experience in creating and producing public performances and entertainments, including but not limited to dance, music, theatre and concerts. Entertainment selections vary each time this course is taught. Students may enroll more than once for this course until reaching the maximum number of 3 total units.

THTR 51 STAGE PRODUCTION-CHEOREOGRAPHY – 1-3 Units
(formerly THTR 51AD)
Grading: Pass/No Pass Option
Class Hours: 54-162 lab total
A course that teaches basic stage movement and dance for a stage production, including but not limited to dance, music and concerts. Class projects will include participation in choreography in class or in stage productions. Play selections vary each time this course is taught. Students may enroll more than once for this course until reaching the maximum number of 3 total units.

THTR 52 STAGE PRODUCTION – MUSIC – 1-3 Units (formerly THTR 52AD)
Grading: Pass/No Pass Option
Class Hours: 54-162 lab total
A course that teaches the use of vocal and instrumental music for a stage production, including but not limited to dance, music, theatre and concerts. Class projects will include participation in classroom activities and/or productions. Play selections vary each time this course is taught. Students may enroll more than once for this course until reaching the maximum number of 3 total units.

THTR 60 SPECIAL PROJECTS-PRODUCTION – 1-2 Units
(formerly THTR 60AD)
Class Hours: 54-108 lab total
A course that provides specialized training in specific areas of a current production. The focus of instruction will be in training students to perform disciplined tasks within the context of a scheduled theatrical event, e.g., special vocal skills, acting methods, stage lighting, sceneography, script writing, choreography, makeup, puppetry, stagecraft, and/or other techniques needed to satisfy and complement a specific theatrical performance. Students may enroll more than once for this course until reaching the maximum number of 2 total units.

THTR 70 REPERTORY THEATRE I – 1, 2, 3, 4, 6, 8, 10 Units
Class Hours: 54-540 lab total (54 hours per unit)
In this course students will rehearse and perform one or more works in a repertory theatre format. Students will participate in a theatrical company/repertory ensemble. They will share in the preparation, rehearsal, promotion, and public performance of a series of plays, musicals, or theatrical productions. Class projects and rehearsal activities may include choreography and music elements. Students may enroll more than once for this course until reaching the maximum number of 10 total units.

THTR 74 REPERTORY THEATRE - TECHNICAL – 1, 2, 3, 4, 6, or 8 Units
Class Hours: 54-432 lab total (54 hours per unit)
A laboratory course in which students will develop work experience and training in technical Repertory Theatre methods. Students may work progressively in one or more of the following areas: scenery construction, fabrication and rigging; console operations; stage management; lighting; sound; costumes; wardrobe; properties; make-up; publicity; house management; concessions, and running crews. Play selections vary each time this course is taught. Students may enroll more than once for this course until reaching the maximum number of 8 total units.

THTR 81 PLAYWRITING AND SCRIPT ANALYSIS – 3 Units
Grading: Pass/No Pass Option
Class Hours: 36 lecture/54 lab total
An in-depth examination of the elements of the dramatic script. The course consists of four main areas of investigation: critiquing the script; playwrights; plotting and theatre conventions; creating and analyzing motivated characters. This course will guide the student toward creating scripts and analyzing their problems and help them distinguish drama from the performed theatre - i.e., scenarios for action.

THTR 97 SPECIAL STUDIO TOPICS: THEATRE – 1-3 Units
Grading: Pass/No Pass Option
Class Hours: 54-162 lab total
This course is designed to give students studio-based instruction and experience in the process of theatre production and techniques not regularly covered in other theatre courses. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for Theatre majors; open to anyone with an interest in the topic.

THTR 98 SPECIAL TOPICS: THEATRE – 1-3 Units
Grading: Pass/No Pass Option
Class Hours: 18-54 lecture total
This course is designed to give students an opportunity to explore a variety of topics dealing with changing knowledge and contemporary issues in the field of theatre. A different topic will be addressed each time the class is taught and will be listed in the schedule of classes. Recommended for Theatre majors; open to anyone with an interest in the topic.

THTR 153 COMMUNITY DRAMA – 1-4 Units
Grading: Pass/No Pass Option
Class Hours: 54-216 lab total
Designed specifically for small community groups in off-campus facilities, providing experience in the acting and technical production of scene, one-act and small cast plays. Students will be involved in the staging and rehearsal of scenes and plays to be performed during class in the following areas: acting, makeup, lighting, sound, scenery development, costuming, stage management, and publicity. Students will observe rehearsals and performances and discuss plays as they progress. Students may enroll more than once for this course until reaching the maximum number of 4 total units. The learning experience varies each time the course is offered due to the selected performance.
The Vocational Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site. This is acquired by the student and related to the student's major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on the job performance. A student may earn up to 16 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in a single semester.

WTT 177 INTRODUCTION TO WASTEWATER TREATMENT – 3 Units
(formerly NR 177)
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
This course is designed to provide the student with a general background in the design, operation, and maintenance of wastewater treatment plants and to prepare the experienced operator for certification examinations. This course is directed to primarily towards entry-level operators, industrial waste inspection, lab technicians, maintenance personnel, and related occupations. Explains how and why treatment of wastewater protects the environment.

WTT 180 INTRODUCTION TO WATER TREATMENT TECHNOLOGY – 3 Units
(formerly NR 180)
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
This course is designed to provide the student with a general background in the design, operation, and maintenance of water treatment plants and prepares the experienced operator for the State Water Treatment Plant Operator Certification examination.

WTT 181 INTERMEDIATE WATER TREATMENT TECHNOLOGY – 3 Units
(formerly NR 181)
Advisory: A grade of C or higher in WTT 180
Class Hours: 54 lecture total
This course covers water supply and treatment, historical development of water quality control practices, water sources, public health aspects of water supply, chemical treatment, and evaluation of the various treatment processes. This course will prepare the experienced operator for certification examinations.

WTT 183 INTERMEDIATE WASTEWATER TREATMENT – 3 Units
(formerly NR 183)
Grading: Pass/No Pass Option
Class Hours: 54 lecture total
This course covers wastewater treatment processes and prepare the operator for advanced certification examinations.

WTT 184 SMALL WATER SYSTEMS AND DISTRIBUTION – 3 Units
(formerly NR 184)
Advisory: A grade of C or higher in WTT 180
Class Hours: 54 lecture total
This course covers small water supply and treatment, historical development of water quality control practices, water sources, public health aspects of water supply, chemical treatment, and evaluation of the various treatment processes. This course will prepare the experienced operator for certification examinations.

WTT 186 ADVANCED WASTEWATER TREATMENT – 3 Units
(formerly NR 186 and NR 182)
Advisory: A grade of C or higher in WTT 177 or a grade of C or higher in WTT 183
Class Hours: 54 lecture total
This course is designed to provide the student with a more in-depth background in the design, operation, and maintenance of wastewater treatment plants and to prepare the experienced operator for higher-level certification examinations.

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WELDING TECHNOLOGY (WELD)

WELD 56 WELDING – 2 Units (formerly IART 56)
Note: Students must provide safety glasses and welding gloves, and those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.
Class Hours: 18 lecture/84 lab total
A course in general welding includes both oxyacetylene and arc welding in the four positions on ferrous and non-ferrous metals and their alloys. Repair welding, welding symbols, trade terminology, care and use of various types of welding equipment and safety procedures.

WELD 70 BEGINNING WELDING – 3 Units
Note: Students must provide safety glasses and welding gloves, and those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.
Class Hours: 27 lecture/81 lab total
A beginning course designed for the student interested in acquiring basic welding skills to be used in a trade or service occupation. Emphasis is placed on oxyacetylene and arc welding in all positions.

WELD 73 STRUCTURAL STEEL METAL FABRICATION – 3 Units
(formerly WELD 173)
Advisory: A grade of C or higher in WELD 70 or WELD 170 or AGMA 44 or equal trade welding experience
Note: Students must provide safety glasses and welding gloves, and those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.
Class Hours: 27 lecture/81 lab total
A beginning course in metal fabrication, blueprint reading and sketching, coupled with layout and production welding, and the use of metal fabrication equipment. The class simulates on-the-job welding situations.

WELD 94 WORKSITE LEARNING FOR WELDING TECHNOLOGY – 1-8 Units
Limitation on Enrollment: Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Works site Learning Classes.
Class Hours: 75 hours paid or 60 hours non-paid per unit
The Vocational Welding Site Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acquired by the student and related to the student's major. A faculty member supervises all WSL courses to ensure that the work experience is of educational value. The course stresses good work habits and meeting of competencies through actual on the job performance. A student may earn up to 16 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 8 units may be earned in a single semester.

WELD 170 INTRODUCTION TO ARC WELDING – 3 Units
Note: Students must provide safety glasses and welding gloves, and those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.
Class Hours: 27 lecture/81 lab total
A course to advance beginning arc welding skills with an emphasis on SMAW. Power sources, electrode identification, weldability of metals, joint design, air arc, and oxyacetylene cutting, and introduction to GTAW and GMAW are covered in this course. Course activities include learning to weld strainger and weave beads, butt and fillet welds in flat, horizontal, vertical, and overhead positions.

WELD 171 INTERMEDIATE ARC WELDING – 3 Units
(formerly WELD 171AB)
Advisory: A grade of C or higher in WELD 170 or equal trade welding experience
Note: Students must provide safety glasses and welding gloves, and those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.
Class Hours: 27 lecture/81 lab total
A course to advance arc welding skills with emphasis on vertical and overhead welding. Course activities prepare the student for weld certification and advanced arc welding classes. Weld symbols, aluminum arc and cast iron welding are covered in this course.

WELD 174 STRUCTURAL STEEL MIG WELDING – 3 Units
Note: Students must provide safety glasses and welding gloves, and those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting. Welding is a skill that requires a great deal of hand and eye coordination. Hours of practice are needed to master skills to advance to the next level or become skilled enough for employment.
Class Hours: 27 lecture/81 lab total
GMAW (gas metal arc welding structural steel) stresses certification code welding on plate and structural steel in all positions. Course instruction and related information will include gas metal and flux core arc welding equipment and welding variables, shielding gases, troubleshooting equipment and weld defects, welder certification and welding codes, weld symbols, structural steel identification and welding procedures, and metallurgy.

WELD 175 TIG WELDING – 3 Units
Note: Students must provide safety glasses and welding gloves, and those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting. Welding is a skill that requires a great deal of hand and eye coordination. Hours of practice are needed to master skills to advance to the next level or become skilled enough for employment.
Class Hours: 27 lecture/81 lab total
TIG (Tungsten Inert Gas) is an inert gas welding course also known as Heliorac which covers aluminum, mild steel, stainless steel, magnesium and copper welding. The course consists of welding on flat and pipe stock in all positions. Course content will include metals identification and weld symbols. Welding exercises are stressed to develop welding skills.

WELD 176 GMAW MIG WELDING (LIGHT GAUGE AND NONFERROUS METAL) – 3 Units
Grading: Pass/No Pass Option
Note: Students must provide safety glasses and welding gloves, and those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.
Class Hours: 27 lecture/81 lab total
This course emphasizes developing MIG welding skills on light gauge steel, stainless, and aluminum. Related instruction will include ferrous and non-ferrous metal identification and their welding characteristics, MIG welding applications and variables, inert shielding gases and mixtures, troubleshooting MIG equipment and welds, and spot welding.

WELD 178 PIPE WELDING FUNDAMENTALS – 3 Units
Note: Students must provide safety glasses and welding gloves, and those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting. Welding is a skill that requires a great deal of hand and eye coordination. Hours of practice are needed to master skills to advance to the next level or become skilled enough for employment.
Class Hours: 27 lecture/81 lab total
A fundamental course in pipe welding with emphasis on open groove pipe joints using oxyacetylene, arc and inert gas welding processes in all positions.

WELD 182 ADVANCED ARC WELDING – 1.5 Unit
Corequisite: Student must be concurrently enrolled in or have completed WELD 170 with a grade of C or higher or have equal trade welding experience
Note: Students must provide safety glasses and welding gloves, and those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting.
Class Hours: 81 lab total
An advanced course designed to prepare students to pass structural steel certification in vertical and overhead positions. SMAW (stick) and FCAW (MIG) processes will be used. The goal of this class is to pass the AWS D1.1 welding certificate test. Strict adherence to the testing procedures will be followed. Completion of the class does not guarantee AWS certification unless welding procedure qualification tests are passed.

WELD 183 ADVANCED ARC WELDING SPECIALTY LAB – 1.5 Unit
Prerequisite: A grade of C or higher in WELD 182, 184, 186, 188, or equal trade welding experience
Note: Students must provide safety glasses and welding gloves, and those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting. Welding is a skill that requires a great deal of hand and eye coordination. Hours of practice are needed to master skills to advance to the next level or become skilled enough for employment.
Class Hours: 81 lab total
An advanced course designed to prepare students to pass structural steel certification in vertical and overhead positions. Students can obtain certifications in both the SMAW (Shielded Metal Arc Welding), FCAW (Flux Cored Arc Welding) GTAW (Gas Tungsten Arc Welding) and Pipe Welding. The goal of this class is to pass the AWS D1.1, ASME or API Welding Qualification tests. Strict adherence to the testing procedures will be followed. Completion of the class does not guarantee certification unless welding procedure qualification tests are passed.
ZOOL 63 FIELD ORNITHOLOGY OF NORTHERN CALIFORNIA – 1 Unit
(formerly ZOOL 163)
Grading: Pass/No Pass Option
Class Hours: 9 lecture/27 lab
Designed for birdwatchers and open to students to fulfill part of the general education requirements in science. Lectures will feature films, slides, records, maps, and other media to present concepts in anatomy, physiology, behavior and distribution. Students will use various field techniques for studying bird populations.

ZOOL 1 GENERAL ZOOLOGY – 4 Units
Prerequisite: A grade of C or higher in MATH 102 or Math Placement Level 4 or higher
Class Hours: 36 lecture/108 lab total
The study of the major divisions of the animal kingdom with emphasis on the origin, adaptations, functions, and development.

ZOOL 15 FIELD HERPETOLOGY OF NORTHERN CALIFORNIA – 1 Unit
(formerly ZOOL 105)
Grading: Pass/No Pass Option
Note: Field trips are an integral part of the course and are therefore mandatory.
Class Hours: 9 lecture/27 lab total
Designed for individuals interested in natural history and field biology by providing the student with a basic awareness of the diversity of amphibians and reptiles that inhabit the local area. Lectures will feature slides, diagrams, maps and other media to present concepts in anatomy, physiology, behavior, systematics and distribution. The students will use various capture techniques and learn to record data and observations in a notebook format while in the field. Moderately rigorous hiking may be involved.

WELD 184 ADVANCED GTAW (TIG) WELDING – 1.5 Unit
Corequisite: Student must be concurrently enrolled in or have completed WELD 175 with a grade of C or higher or have equal trade welding experience.
Note: Students must provide safety glasses and welding gloves, and those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting. Welding is a skill that requires a great deal of hand and eye coordination. Hours of practice are needed to master skills to advance to the next level or become skilled enough for employment.
Class Hours: 81 lab total
An advanced welding laboratory class with emphasis on vertical and overhead welding. This class is designed for the student interested in improving his/her beginning skills in order to prepare for entry into the job force as TIG welder.

WELD 186 ADVANCED PIPE WELDING – 2 Units
Corequisite: Students must be concurrently enrolled in or have completed WELD 178 with a grade of C or higher or have equal trade welding experience.
Note: Students must provide safety glasses and welding gloves, and those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting. Welding is a skill that requires a great deal of hand and eye coordination. Hours of practice are needed to master skills to advance to the next level or become skilled enough for employment.
Class Hours: 108 lab total
An advanced pipe welding class with emphasis on ASME, AWS, or API certification. Course instruction includes welding codes, pipe classification and identification. Completion of the class does not guarantee certification unless welding procedure qualification tests are passed.

WELD 188 ADVANCED GMAW (MIG) WELDING – 1.5 Unit
Corequisite: Student must be concurrently enrolled in or have completed WELD 174 or WELD 176 with a grade of C or higher or have equal trade welding experience.
Note: Student must provide safety glasses and welding gloves, and those materials which are of continuing value outside of the classroom setting. This cost will be explained at the first class meeting. Welding is a skill that requires a great deal of hand and eye coordination. Practice is needed to master skills to advance to the next level of employment.
Class Hours: 81 lab total
An advanced welding laboratory class with emphasis on vertical and overhead welding. This class is designed for the student interested in improving his/her beginning skills in order to prepare for entry into the job force as a GMAW (MIG) welder.

WORKSITE LEARNING (WSL)

WSL 94 GENERAL WORKSITE LEARNING – 1-6 Units
Limitation on Enrollment: Financial aid students must maintain concurrent enrollment in seven (7) units which include worksite learning units. Students not receiving financial aid do not need to enroll in other courses in order to participate in Worksite Learning Classes.
Class Hours: 75 hours paid or 60 hours non-paid per unit
The General Worksite Learning course allows the student to gain on-the-job experience through employment/volunteerism at an approved job site that is acquired by the student. A faculty member supervises the WSL course to ensure that the work experience is of educational value. The course stresses good work habits and meeting of SCANS competencies through actual on the job performance. A student may earn up to 6 units through repeating this course since course content varies and skills are enhanced by supervised repetition and practice. A maximum of 6 units may be earned in a single semester.

ZOOG 1 GENERAL ZOOLOGY – 4 Units
Prerequisite: A grade of C or higher in MATH 102 or Math Placement Level 4 or higher
Class Hours: 36 lecture/108 lab total
The study of the major divisions of the animal kingdom with emphasis on the origin, adaptations, functions, and development.

ZOOL 15 FIELD HERPETOLOGY OF NORTHERN CALIFORNIA – 1 Unit
(formerly ZOOL 105)
Grading: Pass/No Pass Option
Note: Field trips are an integral part of the course and are therefore mandatory.
Class Hours: 9 lecture/27 lab total
Designed for individuals interested in natural history and field biology by providing the student with a basic awareness of the diversity of amphibians and reptiles that inhabit the local area. Lectures will feature slides, diagrams, maps and other media to present concepts in anatomy, physiology, behavior, systematics and distribution. The students will use various capture techniques and learn to record data and observations in a notebook format while in the field. Moderately rigorous hiking may be involved.
Chapter 7 – Student Rights and Responsibilities

Academic Freedom: Board Policy 4030

Controversial issues and divergent viewpoints have existed among men throughout the history of civilization. Only in a constitutional republic such as ours has a high degree of freedom of expression been permitted. There must be freedom of the student and teacher to present their viewpoints in and out of the classroom. American democracy is strong enough to stand on its own merits and to survive criticism and comparison with any system so long as its advantages and virtues are not deliberately slighted in such comparisons. However, an atmosphere of responsibility to the students, the College, the community and the nation must accompany these freedoms. To carry out their mutual responsibilities to each other and to ensure these principles of academic freedom, the Board of Trustees, the administration and faculty agree to support certain guiding principles and procedures as set forth below.

1. The faculty member shall:
   (a) Be entitled to freedom of expression in teaching his/her subjects in the classroom. He/she shall encourage students, by word and example, to form their own opinions based upon critical judgment and documented facts. In his/her presentation of subject matter to his/her students, he/she shall distinguish between objective facts and his/her personal evaluation of facts.
   (b) Be supported in his/her right to participate in legal political activities of the community, state and nation during off-duty hours. No disciplinary action may be brought to coerce him/her for political purposes. (Education Code 13004, 13754). He/she shall permit no outside political activities to interfere with his/her academic duties. He/she should always make clear to audiences that the opinions expressed regarding outside political activities are his/her own and not to be taken as necessarily representing the policies of the College. He/she should refrain from making irresponsible statements to any group.
   (c) Be ever cognizant that it is illegal to advocate the overthrow of the Government by force (Education Code 9455). He/she should make a clear distinction between the description of such philosophies as might fall in that category and the advocacy of such philosophies.
   (d) Emphasize the need for maintaining a level of individual integrity and responsibility consistent with good community relations of the College, when associated with student activities that reach beyond the classroom.
   (e) Provide a fair platform for the presentation of facts when outside speakers are invited to the classroom on the campus. Such speakers should be free to speak on topics which are relevant to questions being discussed in the classroom or campus situation. It may, at times, be desirable for the faculty members and administration to provide information and viewpoints to rebut opinions expressed by such speakers in order to encourage critical analysis of the questions discussed.

2. Classroom policy regarding the discussion of controversial issues shall be:
   (a) That free classroom expression by the instructor and the students be encouraged so long as topics are pertinent to the course being taught. The instructor is careful to be accurate, responsible and aware of the immaturity of some of the students in presenting and discussing controversial topics.
   (b) That the instructor avoids prejudicial indoctrination. He/she points out to students that there may be other recognized views, and he/she carefully distinguishes between personal opinion and documented fact. He/she avoids imposing his/her opinion regarding controversial topics through the pressure of his/her authority in the classroom.
   (c) That discussion of religious concepts is free from restraint so long as it is an integral part of the subject being taught and does not become sectarian indoctrination.
   (d) That the teacher respects the student's right to differ in opinion in any discussion of controversial issues, without penalty, attack, or reflection in grading.

Academic Honesty

Academic dishonesty is the fraud and deception for the purpose of improving a grade or obtaining course credit, and includes all student behavior intended to gain or provide unearned academic advantage by fraudulent and/or deceptive means. The student has the full responsibility for the content and integrity of all academic work submitted. Ignorance of a rule does not constitute a basis for waiving the rule or the consequences of that rule. Students unclear about a specific situation should ask their instructors, who will explain what is and is not acceptable in their classes.

Violation of this policy will result in appropriate disciplinary action. Specific examples of academic dishonesty include but are not limited to:

Taking Information
   a. Copying graded homework assignments from another student.
   b. Working together on a take-home test or homework when not specifically permitted by the instructor.
   c. Looking at another student's paper during an examination.
   d. Looking at text or notes during an examination when not specifically permitted by the instructor.
   e. Accessing another student's computer and using his/her data as one's own.

Providing Information
   a. Giving one's work to another to be copied or used in an oral presentation.
   b. Giving answers to another student during an examination.
   c. After taking an examination, informing a student enrolled in a later course section of questions that appear on the examination.
   d. Providing a term paper to another student.
   e. Taking an examination, writing a paper, or creating computer data or artistic work for another.

Plagiarism
   a. Failing to give credit for ideas, statement of facts, or conclusions derived by another author. Failure to use quotation marks when quoting directly from another, whether it be a paragraph, a sentence, or a part thereof.
   b. Submitting a paper acquired from a "research" or term paper service.
   c. Copying another person's assignment and handing it in as one's own.
   d. Giving a speech or oral presentation written by another and claiming it as one's own work.
   e. Claiming credit for artistic work done by someone else, such as a music composition, photos, a painting, drawing, sculpture, or design.
   f. Presenting another's computer data as one's own.

Other Academic Dishonesty
   a. Planning with one or more fellow students to commit any form of academic dishonesty together.
   b. Having another student take one's examination or do one's computer data or lab experiment.
   c. Lying to an instructor to increase a grade.
   d. Submitting papers or speeches that are substantially the same for credit in two different courses without prior approval of the instructors involved.
   e. Altering a graded work after it has been returned, then submitting the work for re-grading unless specifically allowed by the instructor.
   f. Removing tests from the classroom without the approval of the instructor, or stealing tests.
   g. Copying computer software from a floppy disk or a hard drive unless specifically allowed by the instructor.

Academic Renewal: Board Policy 4240

A student may petition the Scholastic Standards Committee to have up to 30 units of "D" or "F" grades removed from the computation of his/her grade point average for students who need a means of tempering their previous academic record so they may successfully accomplish an academic goal. (Title 5, Section 55044). Contact the Admissions and Records Office for petition forms. Updated 1/16/08
3. Maintains the policy that unless specifically exempted by statute, every
2. Reviews its policies and procedures to preclude the possibility of
4. The sale of tobacco products on all college-owned and/or leased property

Students are expected to attend all classes. A student who fails to attend the first class meeting of a course without notifying the instructor may be dropped from the class. In addition, an instructor may drop a student for excessive absences/fail to participate. IT IS ALWAYS THE STUDENT'S RESPONSIBILITY TO OFFICIALLY DROP OR WITHDRAW FROM THE CLASS. Students who fail to file the necessary withdrawal forms, even though they stop attending class, or fail to pay registration fees, will be assigned a course grade.

Equal Opportunity
Shasta College employs policies and procedures to strengthen and guarantee the premise of equal opportunity for all. Specifically, the College:

1. Practices nondiscrimination in academic programs, employment, promotion, transfer and assignment on the basis of color, ethnic group identification, race, religion, national origin, gender, sexual orientation, age, physical and mental disability, veteran and/or marital status.
2. Reviews its policies and procedures to preclude the possibility of unintentional discrimination against women, minorities, individuals with disabilities and others.
3. Maintains the policy that unless specifically exempted by statute, every course, course section or class, the average daily attendance of which is to be reported for state aid, whenever offered shall be fully open to enrollment and participation by any person who has been admitted to the college and who meets such prerequisites as may be established pursuant to Chapter II, Div. 2, Part IV, Title 5, of the California Code of Regulations, commencing with Section 51620.

Extenuating Circumstances (Withdrawal)
Students who must withdraw from college after the fourteenth week of class (75% of the term for classes less than a full term) because of extenuating circumstances, verifiable cases of accidents/illnesses, or other circumstances beyond the control of the student, may petition for authorized withdrawals from their classes. Petitions are available in the Admissions and Records Office.

Smoking and Tobacco Use Restrictions:
Board Policy 3555

1. No use of tobacco products is permitted within any college owned and/or leased facility.
2. No use of tobacco products is permitted on the grounds of any college-operated athletic field or facility.
3. No use of tobacco products is permitted in college-owned vehicles.
4. The sale of tobacco products on all college-owned and/or leased property is prohibited.
5. Use of tobacco products on college-owned or leased property is permitted only in special designated areas which are set aside for smoking purposes and are removed from all buildings and major pathways.

Standards of Conduct: Board Policy 5500
Students and visitors to a Shasta College campus are expected to obey all California State laws and all Federal laws that pertain to behavior on a college campus. The following regulations represent reasonable standards of conduct for students and visitors, and shall be followed at all times on a Shasta College campus. Generally, Shasta College’s jurisdiction and discipline shall be limited to conduct that occurs on Shasta College premises or that is related to school activities.

Rules and Regulations: Any student found to have committed the following misconduct is subject to the disciplinary sanctions outlined in Board Policy, Section 3550 and 5520.
1. Acts of dishonesty, including but not limited to the following:
   a. Cheating, plagiarism, or other forms of academic dishonesty. Academic dishonesty is the willful and intentional fraud and deception for the purpose of improving a grade or obtaining course credit, and includes all student behavior by fraudulent and/or deceptive means. The student has the full responsibility for the content and integrity of all academic work submitted.
   b. Furnishing false information to any Shasta College official, faculty member or office.

   c. Forgery, alteration or misuse of any Shasta College document, record or instrument of identification.
   d. Tampering with the election of any Shasta College-recognized student organization.
   2. Disruption or obstruction of teaching, research, administration, disciplinary proceedings, other Shasta College activities including its public-service functions on or off campus, or other authorized non-Shasta College activities when the act occurs on Shasta College premises.
   3. Physical abuse, verbal abuse, threats, intimidation, harassment, coercion and/or conduct which threatens or endangers the health and safety of any person.
   4. Sexual harassment as defined by law or by regulation of the college or District.
   5. Attempted or actual theft of and/or damage to property of Shasta College or property of a member of the Shasta College community or other personal or public property, or knowingly receiving stolen district property or private property on campus.
   6. Engaging in harassing or discriminatory behavior based on disability, gender, gender identity, gender expression, nationality, race or ethnicity, religion, sexual orientation, or any other status protected by law.
   7. Hazing, defined as an act that endangers the mental or physical health or safety of a student, or which destroys or removes public or private property for the purpose of initiation, admission into, affiliation with or as a condition for continued membership in a group or organization.
   8. Failure to comply with direction of Shasta College officials or law enforcement officers acting in the performance of their duties, and/or failure to identify oneself to one of these persons when requested to do so.
   9. Unauthorized possession, duplication or use of keys to any Shasta College premises or unauthorized entry to or use of Shasta College premises.
   10. Violation of published Shasta College policies, rules or regulations.
   11. Violation of federal, state or local law on Shasta College premises or at Shasta College sponsored or supervised activities.
   12. Use, possession or distribution of narcotic or other controlled substances except as expressly permitted by law.
   13. Public intoxication or use, possession or distribution of alcoholic beverages except as expressly permitted by law and Shasta College regulations.
   14. Illegal or unauthorized possession of firearms, explosives, other weapons, or dangerous chemicals including but not limited to any facsimile firearm, knife, explosive or weapon on Shasta College premises.
   15. Participation in a campus demonstration that disrupts the normal operations of Shasta College and infringes on the rights of other members of the Shasta College community; leading or inciting others to disrupt scheduled and/or normal activities within any campus building or area; intentional obstruction that unreasonably interferes with freedom of movement, either pedestrian or vehicular, on campus.
   16. Obstruction of the free flow of pedestrian or vehicular traffic on Shasta College premises or at Shasta College sponsored or supervised functions. The use of bicycles, roller blades and skateboards is not permitted in heavy traffic areas or in buildings.
   17. Conduct that is disorderly, lewd or indecent; habitual profanity or vulgarity; breach of peace; or aiding, abetting or procuring another person to breach the peace on Shasta College premises or at functions sponsored by or participated in by Shasta College.
   18. Theft or other abuse of computer time and network resources, including but not limited to:
      a. Unauthorized entry into a file to use, read or change the contents, or for any other purpose.
      b. Unauthorized transfer of a file.
      c. Unauthorized use of another individual's identification and password.
      d. Unauthorized use of phone and electronic devices such as radios, etc.
      e. Use of computing facilities to interfere with the work of another student, faculty member or Shasta College official.
      f. Use of computing facilities to send obscene or abusive messages.
      g. Use of computing facilities to interfere with normal operations of Shasta College computing systems.

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Chapter 7 – Student Rights and Responsibilities

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Student Standards of Conduct (continued):

19. Abuse of the judicial system, including but not limited to:
   a. Failure to obey the summons of a Shasta College official.
   b. Falsification, distortion or misrepresentation of information before a
      hearing officer.
   c. Disruption or interference with the orderly conduct of a judicial
      proceeding.
   d. Institution of a judicial proceeding knowingly without cause.
   e. Attempting to discourage an individual’s proper participation in, or use
      of, the judicial system.
   f. Attempting to influence the impartiality of a member of a judicial body
      prior to and/or during the course of the judicial proceeding.
   g. Failure to comply with the sanction(s) imposed under the Student
      Code.
   h. Influencing or attempting to influence another person to commit an
      abuse of the judicial system.

20. Willful or persistent smoking in any area where smoking is prohibited by
    lawful authority.

21. Littering of any kind.

22. Misrepresentation of oneself or of an organization to be an agent of
    Shasta College.

23. Unauthorized preparation, giving, selling, transfer, distribution, or
    publication, for any commercial purpose, of any contemporaneous
    recording of an academic presentation in a classroom or equivalent site of
    instruction, including but not limited to handwritten or typewritten class
    notes, except as permitted by any district policy or administrative
    procedure.

24. Persistent, serious misconduct where other means of correction have
    failed to bring about proper conduct.

Students who engage in any of the above are subject to the procedures
outlined in Administrative Procedures 5520.

Student Computer Technology Access

This is to communicate what other users, instructors, and the District expect
of students when using college computer technology and facilities. Failure
conform to these stipulations may result in disciplinary action. Violations of
regulations in the use of computer technology will be addressed in accordance
with Shasta College Standards of Conduct (BP 5500) and Sanctions (AP
5520), available for reference in the College Catalog or by requesting a copy
from Student Services.

Access to computing resources is a privilege. Use of any Shasta College
computer system constitutes agreement to comply with Shasta College
Administrative Procedures for Responsible Computing. Computer technology
and facilities are provided for the purpose of completing academic
requirements. The District may access, review, copy and disclose information
entered or retained in computer technology and communications resources.

A. Students may use the technology and facilities to:
   1. Complete course assignments;
   2. Conduct academic research;
   3. Communicate with faculty and students.

B. User Responsibilities. User responsibilities include, but are not limited to:
   1. Using only their own designated ID, passwords/PIN, and accounts,
      and keeping IDs, passwords/PIN, and account information
      confidential. It is recommended that users change their
      passwords/PIN periodically;
   2. Using software and electronic materials, including shareware, in
      accordance with copyright, trademark, and licensing agreements and
      restrictions;
   3. Accurately identifying and representing themselves in electronic
      messages, files, and transactions;
   4. Saving all work on a flash drive or other removable storage media and
      not on the hard drive unless instructed to do so by their instructor;
   5. Allowing lab technicians to scan removable media before it is inserted
      into or otherwise connected to the computer as a precaution to insure
      the safety of the computers;
   6. Asking appropriate Shasta College personnel for assistance if
      unfamiliar with the system software.

C. Prohibitions. Prohibitions include, but are not limited to:
   1. Circumventing or attempting to circumvent local, network, or remote
      security measures;
   2. Unauthorized use of accounts, access codes, passwords, or
      identification numbers;
   3. Violating copyrights, trademarks, and/or license agreements;
   4. Copying software that has not been placed in the public domain and
      distributed as freeware; inspecting, changing, altering, copying, or
      distributing proprietary data programs, files, disks, or software without
      authorization;
   5. Accessing, using or copying another user's account, ID number,
      password, electronic files, data, or e-mail without prior authorization;
      or allowing such use by others;
   6. Falsely identifying and/or representing oneself in the use of computer
      technology and communications resources;
   7. Altering or attempting to alter system software;
   8. Altering or attempting to alter system hardware without Technology
      Support approval;
   9. Damaging equipment, data, software, software protection, encryption
      or restriction on applications and files, including introducing invasive
      or destructive programs (such as viruses, worms, and Trojan horses);
   10. Modifying or attempting to crash or hack into computer technology
       or communications resources;
   11. Accessing or attempting to access restricted portions of any operating
       system or security software;
   12. Installing or removing software;
   13. Using computer technology and/or communications resources for
       private commercial purposes;
   14. Using District computer technology and communications resources in
       any unlawful manner including fraudulent, threatening, libelous,
       obscene, or harassing communications; procuring, or distributing
       obscene or pornographic material.

Student Designated Free Speech Area:

Board Policy 3900

Students, employees, and members of the public shall be free to exercise their
rights of free expression, subject to the requirements of this policy.

District property is a non-public forum, except for those areas that are
designated public forums available for the exercise of expression by students,
employees, and members of the public. The Superintendent/President shall
enact such administrative procedures as are necessary to reasonably regulate
the time, place, and manner of the exercise of free expression in the
designated public forums.

The administrative procedures established by the Superintendent/President
shall not prohibit the right of students to exercise free expression including,
but not limited to, the use of bulletin boards or the distribution of printed materials
or petitions in those parts of the college designated areas generally available
to students and the community, and the wearing of buttons, badges, or other
insignia.

Speech shall be prohibited that is defamatory, obscene according to current
legal standards or which so incites others as to create a clear and present
danger of the commission of unlawful acts on District property or the violation
of District policies or procedures, or the substantial disruption of the orderly
operation of the District.

Nothing in this policy shall prohibit the regulation of hate violence directed at
students in a manner that denies their full participation in the educational
process (Education Code Section 66301(e)), so long as the regulation
conforms to the requirements of the First Amendment to the United States
Constitution, and of Section 2 of Article 1 of the California Constitution.
Students may be disciplined for harassment, threats, or intimidation unless
such speech is constitutionally protected.
Student Discipline: Board Policy/Administrative Procedure 5520

BOARD POLICY 5520: (Board approved 4/13/11)
The Superintendent/President shall establish procedures for the imposition of student discipline in accordance with the requirements of due process as provided by applicable federal and state laws and regulations. The Dean of Students will serve as the Discipline Officer unless a different official is so designated by the Superintendent/President.

The disciplinary procedures shall identify potential disciplinary actions, including but not limited to the removal, suspension or expulsion of a student. The Board of Trustees shall consider any recommendation from the Superintendent/President for expulsion and revoking or withholding a degree or certification. The Board of Trustees shall hear the matter in closed session unless the student requests the matter be heard in open session. Final action by the Board on any expulsion shall be taken in open session.

The disciplinary procedures shall be made available to students through the college catalog, the District website and other similar means.

ADMINISTRATIVE PROCEDURE 5520: (Board approved 4/13/11)
The purpose of these administrative procedures is to provide a means to address violations of the Standards of Conduct set forth in Board Policy 5500 (BP 5500).

These administrative procedures are not intended to substitute for criminal or civil proceedings that may be initiated by other agencies and will be used in a fair and equitable manner, and not for purposes of retaliation. These procedures are not considered a legal proceeding. Therefore, students do not have a right to counsel during a student disciplinary hearing.

I. DEFINITIONS:

Discipline Officer: The Dean of Students or such other official so designated by the Superintendent/President.

District: The Shasta-Tehama-Trinity Joint Community College District.

School Day: Any day during which the District is in session and regular classes are held, excluding Saturdays and Sundays.

Student: Any person enrolled in any program at the District, either full-time or part-time. Persons who withdraw after allegedly violating the Standards of Conduct are considered “students” for the purposes of these procedures. The Standards of Conduct apply to all locations and activities of the District, including online courses and District-sponsored events.

Instructor: Any academic employee of the District in whose class a student subject to discipline is enrolled, or counselor who is providing or has provided services to the student, or other academic employee who has responsibility for the student's educational program.

Educational Administrator: Any administrator who provides leadership and direction for the operations of the District whose responsibilities include supervision of managers, staff or instructors and the management of the institutional relations among students, faculty and staff.

Expulsion: Permanent separation of the student by the Board of Trustees from all courses and activities offered by the District.

Good Cause: Any offense defined by Education Code section 76033 and such other causes as set forth in the Standards of Conduct.

Hearing Authority: The Vice President of Student Services or such other official so designated by the Superintendent/President and with responsibility for the first appeal level.

Removal from Class: Exclusion of the student by an instructor for the day of the removal and the next class meeting.

Reprimand (Written or Verbal): An admonition to the student to cease and desist from conduct determined to violate the Standards of Conduct.

Immediate Interim Suspension (Education Code Section 66017): The immediate suspension of a student when the Discipline Officer or any educational administrator concludes that immediate suspension is required to protect students or others from injury, to protect property, or to ensure the maintenance of order at the District provided that a reasonable opportunity for a hearing be afforded the suspended student within ten (10) days.

Short-Term Suspension: Exclusion of the student for good cause from one or more classes, school activities, and/or all District facilities for a period of up to five (5) school days.

Long-Term Suspension: Exclusion of the student for good cause from one or more classes, school activities and/or all District facilities for more than five (5) school days.

II. EXPECTED STUDENT CONDUCT

The Standards of Conduct are set forth in BP 5500 and apply to conduct that relates to District activity or District attendance, including conduct that occurs while at District campuses or facilities, or at District sponsored activities, including before classes begin, after classes end, during the academic year, and during periods between terms of actual enrollment. The Standards of Conduct shall apply even if the student withdraws from school while a disciplinary matter is pending.

III. SANCTIONS

One or more of the following sanctions may be imposed upon any student found to be in violation of the Standards of Conduct:

1. Warning: Verbal notice to the student by the Discipline Officer that the student is being warned of and registered the District's Standards of Conduct and that a continuation of the specified conduct by the student may lead to further disciplinary action. The warning will be documented by the Discipline Officer and may become part of the student's record for a period of up to one year.

2. Reprimand: A written or verbal admonition to the student by the Discipline Officer to cease and desist from conduct determined to violate the Standards of Conduct. A record that a reprimand has been given shall be documented and may become part of a student's record for a period up to one year.

3. Disciplinary Probation: A written reprimand by the Discipline Officer for violation of a specific provision of the Standards of Conduct that invokes probation for a designated period of time, which includes the possibility of more severe disciplinary sanctions should the student violate any of the Standards of Conduct during the probationary period.

4. Restitution: Reimbursement by the student for damage(s), injury or misappropriation of District property or to instructional materials/equipment...caused by the students misconduct. Restitution/reimbursement may be one or more of the following: appropriate service, monetary or material replacement. Pursuant to Title 5 of the California Code of Regulations, Section 59410, students who fail to provide the required restitution will have their grades, transcripts withheld专人 replacement. Pursuant to Title 5 of the California Code of Regulations, Section 59410, students who fail to provide the required restitution will have their grades, transcripts withheld until the financial obligation to the District is satisfied. The Discipline Officer shall provide the student with an opportunity to be heard prior to the imposition of a restitution order.

5. Removal from Class or Instruction-Related Activity: Any instructor may order a student removed from his or her class or instructional activity for the day of the removal and the next class or activity meeting. The instructor shall immediately report the removal to the Discipline Officer. The Discipline Officer will arrange for a meeting with the student regarding the removal. The student shall not be allowed to return to the class or instructional activity during the period of the removal without the concurrence of the instructor. Nothing herein will prevent the Discipline Officer from further disciplinary sanctions in accordance with these procedures, and based on the facts which led to the removal. If the student removed is a minor, the Discipline Officer shall ask the parent or guardian of the student to attend a parent conference regarding the removal as soon as possible. If the instructor or the parent/guardian so requests, the Discipline Officer shall attend the conference.

6. Loss of Privileges: Denial of privileges that do not involve restrictions on class attendance for a designated period of time.

7. Residence Halls Suspension: Separation of the student from the Residence Halls for a definite period of time for violation of the Student Residential Housing Agreement or Standards of Conduct after which the student is eligible to return. Conditions for readmission to the Residence Halls may be specified.

8. Residence Halls Contract Revocation: Permanent separation of the student from the Residence Halls for continued or serious violations of the Student Residential Housing Agreement or Standards of Conduct without possibility of readmission, which may also include revoking the privilege to be in or near the Residence Halls for any reason.

Student Discipline continued on next page...
Chapter 7 – Student Rights and Responsibilities

Student Discipline – Sanctions (continued):

9. District Suspension: Subject to notice and appeal hearing requirements, separation of the student for good cause from all classes, school activities and/or all District campuses for a definite period of time after which the student may be eligible to return.

10. District Expulsion: Permanent separation of the student by the Board of Trustees from all courses and activities offered by the District.

11. Revocation of Degree or Certificate: A degree or certificate awarded by the District may be revoked for fraud, misrepresentation, or other violation of District standards in obtaining the degree or certificate. Such a revocation shall be by action of the Board of Trustees.

12. Withholding of Degree or Certificate: The District may withhold awarding a degree or certificate otherwise earned until the completion of the process set forth in these procedures, including the completion of all sanctions imposed, if accusations of misconduct affect the student’s entitlement to the degree or certificate.

13. Withdrawal of Consent to Remain on Campus: The Discipline Officer may notify any person for whom there is a reasonable belief that the person has willfully disrupted the orderly operation of the campus that consent to remain on campus has been withdrawn. If the person is on campus at the time, he or she must promptly leave or be escorted off campus. If consent is withdrawn by the Discipline Officer, the officer will immediately notify the Vice President of Student Services and the Superintendent/President. The person from whose consent has been withdrawn may submit a written appeal in accordance with Sections VI and VII of these procedures.

Any person as to whom consent to remain on campus has been withdrawn who knowingly reenters the campus during the period in which consent has been withdrawn, except to attend a hearing, is subject to arrest (Penal Code section 626.4).

14. Discretionary Sanctions: Work assignments, essays, service to the District, or other related discretionary assignments that are determined to be appropriate by the Discipline Officer to remedy a violation of the Standards of Conduct or that serve as an educational lesson in response to such a violation.

IV. DISCIPLINE INVOLVING STUDENT GROUPS

Sanctions upon student groups or organizations may be imposed as follows:

1. Those relevant sanctions listed in Section III of these procedures.

2. Loss of selected rights and privileges for a specified period of time.

3. Deactivation: Loss of all privileges, including District recognition, for a specified period of time.

Accusations that a student group or organization has collectively violated the Standards of Conduct, terms that govern the group or organization, or any conditions of District operations, shall be initially reviewed by the Discipline Officer who shall have authority to impose sanctions on the group or organization.

No sanctions shall be imposed until the Discipline Officer has provided the group or organization with a written statement of the accusations and given the group or organization an opportunity to respond.

V. RECORDS OF DISCIPLINARY ACTION

In accordance with Education Code section 76220, the District shall establish, maintain and destroy student records according to regulations adopted by the Board of Governors of the California Community Colleges. The Discipline Officer will create a record of disciplinary actions, along with relevant supporting documents and evidence. This record shall be maintained as a confidential student disciplinary record and may not be released without the permission of the student, except as permitted by law. The student shall have the right to inspect the record and to challenge the contents. Disciplinary records shall be retained in a manner consistent with state law.

In accordance with Education Code section 76234, whenever there is included in any student record, information concerning any disciplinary action taken by the District in connection with any alleged sexual assault or physical abuse or any conduct that threatens the health and safety of the alleged victim, the alleged victim of the sexual assault or physical abuse shall be informed within three (3) days of the results of any disciplinary action by the District and the results of any appeal.

VI. SUSPENSION/EXPULSION PROCEDURES

The following procedures shall be followed before any suspension or recommendation of expulsion except in the event that an emergency/interim suspension is imposed as set forth herein.

A. Administration. The Discipline Officer shall administer these procedures and take appropriate action, subject to the approval of the District Superintendent/President and the Governing Board if required herein or otherwise by law.

B. Reporting of Conduct. Alleged student misconduct shall be reported to the Discipline Officer.

C. Investigation. Upon receiving a report of alleged student misconduct, the Discipline Officer shall initiate an investigation.

D. Notice. Before imposing this discipline, the Discipline Officer shall make reasonable efforts to give the student written notice of the reason for the proposed disciplinary action. If the student is a minor, the Discipline Officer shall also notify the parent or guardian of the investigation and charges.

E. Opportunity to be Heard. Within a reasonable period of time following the delivery to the student of the notice referred to above, the Discipline Officer shall offer the student an opportunity to attend a meeting at which time the student may present a rebuttal to the accusation or otherwise offer relevant comment on the proposed suspension or recommendation of expulsion. If the student fails to arrange such a meeting (or fails to appear for a meeting the student arranged), the decision of the Discipline Officer shall be made without input from the student.

F. Determination after Meeting. The Discipline Officer shall decide whether or not to proceed with the proposed suspension or recommendation of expulsion after hearing the student's explanation and considering all of the information. The Discipline Officer shall send the student a written notice of the decision via personal delivery or certified mail to the student’s last known address, as set forth in subsection (H) below.

G. Notice to the District’s Hearing Authority. The Discipline Officer shall report any disciplinary action imposed to the District’s Hearing Authority (the Vice President of Student Services or such other official so designated by the Superintendent/President.)

H. Short-Term Suspension Notification. The Discipline Officer shall send the student a written notice of determination within three (3) school days after the meeting described in subsection (E). The notice shall inform the student of the decision and the length of the suspension, if any. The notice shall also inform the student that the decision is final. The notice shall be hand delivered or sent via certified mail to the student’s last known address.

I. Long-Term Suspension and/or Recommendation for Expulsion Notification. The Discipline Officer shall send the student a written notice of determination within five (5) school days after the meeting described in subsection (E). The notice shall be hand delivered or sent via certified mail to the student’s last known address. The notification shall include:

1. A statement of the charges, the reason for the suspension or recommended expulsion, and a description of facts related to the misconduct, including the evidence against the student, the date of the incident(s), time of the incident(s), and location of the offense(s);

2. A copy of the Standards of Conduct;

3. An explanation that the student who has been suspended is entitled to appeal the decision and has a right to an appeal hearing ("appeal hearing"). The notification shall also state that a request for an appeal hearing shall be filed within five (5) school days of the receipt of the notification. Mailed notice is presumed received three calendar days after mailing. The written request for an appeal hearing must be submitted to the Hearing Authority, and must cite the specific ground(s) for the appeal (from those listed below), and provide information which substantiates the ground(s) on which the appeal is being made. The failure to request a hearing in a timely manner shall constitute a waiver of the right to a hearing.

Continued on next page…
Student Discipline – Suspension/Expulsion Procedures (continued):

4. Grounds for appeal: A student may appeal the decision of the Discipline Officer on the grounds that:
   i. Fair consideration was not provided to the student (i.e., there is evidence that some aspect of the meeting described in subsection (E) was prejudicial, arbitrary, or capricious); or
   ii. New and significant information, not reasonably available at the time of the initial meeting, becomes available; or
   iii. The sanction or remedy imposed is not in due proportion to the nature and seriousness of the offense. Any evidence supporting these grounds must be included in the request for an appeal hearing.

5. A statement that the student has the right to be accompanied at an appeal hearing by an on-campus advisor of his or her choice. If the student decides to be accompanied by an advisor, the name and address of that advisor shall be submitted to the Hearing Authority at the time the appeal is filed;

J. Schedule of Hearing. The Hearing Authority shall schedule an appeal hearing no later than ten (10) school days after a timely written request for a hearing is received by the District.

VII. HEARING AUTHORITY’S APPEAL PROCEDURES

A. Sanctions recommended by the Discipline Officer may be appealed, by the student charged, to the Hearing Authority (the Vice President of Student Services or such other official so designated by the Superintendent/President). The appeal must be in writing and received by the Hearing Authority within five (5) school days of receipt of notification of right to appeal.

B. Upon receipt from the student of a request to appeal within the time stated above, the Hearing Authority will review the facts of the Discipline Officer’s findings and recommended sanctions. Sanctions recommended by the Discipline Officer may or may not be suspended until such time as the appeal hearing is held.

C. If after the review, the Hearing Authority determines that an appeal is warranted then the appeal hearing will be conducted with the student within ten (10) school days of receipt of the request to appeal.

D. Additional parties and/or witnesses to the violation may be requested to meet with the Hearing Authority to verify information obtained from the hearing held with the Discipline Officer.

E. The Hearing Authority may uphold, modify or reject any or all disciplinary sanctions recommended by the Discipline Officer. If the Hearing Authority modifies or rejects any or all sanctions recommended, the Hearing Authority shall prepare a new written decision which contains specific factual findings and conclusions. The Hearing Authority’s decision shall be sent via certified or registered mail to the student’s last known address. The Superintendent/President shall report all suspensions, whether short- or long-term, of any student to the Board of Trustees at its next regular meeting after the suspension has been imposed.

F. If the student fails to attend the appeal hearing without prior notice of cancellation, or without rescheduling another hearing, the Hearing Authority may uphold, modify, or reject the disciplinary sanctions recommended by the Discipline Officer without input from the student. Sanctions imposed could result in suspension, expulsion, or revoking or withholding a degree or certificate.

G. In cases not resulting in long-term suspension, expulsion, or revoking or withholding of a degree or certificate, the decision of the Hearing Authority shall be final.

H. In cases where a recommendation of long-term suspension, expulsion, or the revoking or withholding of a degree or certificate has been rendered, notice shall be forwarded immediately to the Superintendent/President.

VIII. EMERGENCY INTERIM SUSPENSION

A. The Discipline Officer may impose an emergency/summary suspension if deemed warranted. It is an extraordinary measure and shall be utilized only when necessary to protect individuals from injury or death, or damage to property, or to ensure the maintenance of order pending an opportunity for the student to be heard.

B. A meeting shall be provided to the student within five (5) school days of an emergency/summary suspension (Education Code section 66017). The procedures set forth in sections VI and VII shall apply to the meeting and any appeal hearing.

C. An emergency/summary suspension shall be reported to the Board of Trustees at its next regular meeting after such suspension has been imposed.

IX. SUPERINTENDENT/PRESIDENT

In cases where long-term suspension, expulsion, or revoking or withholding a degree or certificate is recommended, the following shall apply:

A. Long-Term Suspension: Within ten (10) school days following receipt of the recommended decision, the Superintendent/President shall render a final written decision. The Superintendent/President may uphold, modify or reject the disciplinary sanctions recommended by the Hearing Authority. If the Superintendent/President modifies or rejects the recommendation, the Superintendent/President shall review the record of the hearings, and prepare a new written decision which contains specific factual findings and conclusions. The decision of the Superintendent/President shall be final except as to expulsions or revoking or withholding of a degree or certificate. The final decision shall be sent via certified or registered mail to the student at the student’s last known address. The Superintendent/President shall report all suspensions, whether short- or long-term, of any student to the Board of Trustees in closed session at its next regular meeting after the suspension has been imposed.

B. Expulsion or Revoking or Withholding a Degree or Certificate: Within ten (10) school days following receipt of the recommended decision, the Superintendent/President shall render a written recommendation to the Board of Trustees. The Superintendent/President may uphold, modify or reject the disciplinary sanctions recommended by the Hearing Authority. If the Superintendent/President modifies or rejects the recommendation, the Superintendent/President shall render a final written decision which contains specific factual findings and conclusions. The Superintendent/President shall report all suspensions, whether short- or long-term, of any student to the Board of Trustees in closed session at its next regular meeting after the suspension has been imposed.

X. BOARD OF TRUSTEES

In cases where expulsion or revoking or withholding a degree or certificate is recommended, the following shall apply:

A. The Board of Trustees shall consider any recommendation from the Superintendent/President for expulsion and/or revoking or withholding a degree or certificate at its next regularly scheduled meeting or as soon thereafter as is practicable. The Board of Trustees shall consider an expulsion recommendation in closed session, unless the student requests the matter be heard in open session in accordance with these procedures and Education Code section 72122. The Board may expel a student for good cause when other means of correction fail to bring about proper conduct or when the presence of the student causes a continuing danger to the physical safety of the student or others (Educ. Code section 76030).

B. The student shall be notified in writing, by registered or certified mail or by personal service, at least five (5) school days prior to the meeting, of the date, time, and place of the meeting of the Board of Trustees. The student may, within forty-eight (48) hours after receipt of the notice, request that the hearing be held in open session. Even if a student has requested that the Board of Trustees hear an expulsion recommendation in open session, the Board of Trustees may deliberate in closed session in accordance with Education Code section 72122.

C. A closed hearing will be closed to everyone except the following:
   1. The student charged;
   2. An advisor/advocate for the student charged, if so desired. If the student chooses to be accompanied by an attorney, the student must notify the District in writing of his/her intent to bring an attorney at least two (2) school days prior to the hearing. Failure to notify the District will result in a postponement of the hearing;
   3. The District Superintendent/President and/or President’s designee;

Continued on next page...
Chapter 7 – Student Rights and Responsibilities

Student Discipline – Board of Trustees (continued):

4. The Board of Trustees;
5. Counsel for the District;
6. The student's parent(s) or guardian, if the student is a minor;
7. Campus Security or such other law enforcement personnel deemed necessary for the safety of meeting participants.

D. The hearing shall be conducted in accordance with the following procedures:

1. The President of the Board of Trustees will serve as chair of the hearing, and will rule on all questions of procedure and admission of evidence.
2. Hearings need not be conducted in accordance with strict rules of evidence or the formality of a court hearing.
3. Before commencement of the hearing, the Board of Trustees shall review a description of the charges, notices, evidence, findings, and a copy of the proposed decision from the college-level disciplinary appeal hearing. The Board of Trustees shall consider no evidence other than that evidence received in the hearing process.
4. The District Superintendent/President or designee shall make a brief statement to the Board of Trustees, referring to relevant evidence regarding the alleged misconduct.
5. The accused student may then make a brief statement to the Board of Trustees and present any relevant evidence.
6. The statements shall be limited to five (5) minutes each.
7. Upon completion of these statements, the Board of Trustees will have an opportunity to ask questions of both the student and the District Superintendent/President or designee.
8. The Board of Trustees will conclude the hearing, dismiss the parties, and privately deliberate as to a decision.
9. The Board of Trustees shall issue a statement of decision including findings of fact and a determination that the accused student did or did not commit the act(s) charged, a finding that the student's act(s) did or did not constitute a violation of the Standards of Conduct, and a decision as to whether the expulsion proposed by the District Superintendent/President will be upheld or modified. The Board of Trustees may also recommend further investigation. Pursuant to Education Code section 72122, regardless of whether the matter is heard in open or closed session, the final action of the Board of Trustees shall be taken in open session, and the result of the action shall be a public record. The name of the student, however, shall not be released.
10. The hearing (but not the deliberations of the Board of Trustees) shall be recorded either in written format or electronically. The record shall be the property of the District. The student may read the record or listen to the tape at a mutually agreeable location at the District. An accused student may, upon request, be provided a copy of the written record or electronic recording at his or her own expense.
11. A written statement of the Board of Trustees' decision shall be sent via certified or registered mail to the student's last known address within three (3) school days after the conclusion of the hearing.
12. If the Board of Trustees' decision is unfavorable to the student, the student shall have the right to submit a written statement of his/her objections to the decision. This statement shall become a part of the student's records.
13. The decision of the Board of Trustees is final and not subject to further appeal.

XI. NOTIFICATION

The District Superintendent/President or designee shall, upon suspension or expulsion of any student, notify the appropriate law enforcement authorities of the county or city in which the District is situated of any acts of the student that may be in violation of section 245 of the Penal Code (Education Code section 76035).

XII. EXTENSIONS OF TIME

Calendar restraints may be extended with the agreement of both parties.

Student Equity Policy: Board Policy 5300

Shasta College attempts to ensure equal opportunity to all students and shall provide prompt review of any complaints of discrimination based on race, color, religion, sex, handicap, age, or economic conditions.

Student Grievance Policy: Board Policy 5530

Definition of Student Grievance

For the purpose of this policy, a student grievance is defined as a claim by a student that his/her student legal rights have been adversely affected by a college decision or action. This policy is available for students who desire to pursue grievance procedures against an employee of the District.

Students may initiate a grievance action in accordance with Administrative Procedures 5425.

The student shall be entitled to representation of his/her choice, other than legal counsel, at all informal complaint meetings.

Note: The District is committed to resolving student complaints and/or grievances in a fair and equitable manner. Students should work through the District's process first before escalating issues to other agencies. Issues that are not resolved at the District level may be presented to the California Community Colleges Chancellor's Office (CCCCO) at www.cacommunitycolleges.cccco.edu/ComplaintsForm.aspx.

Note: This Policy and the related Administrative Procedure is not available for use by any student or applicant for admission who believes that he/she has been subjected to unlawful discrimination. The basis for filing a complaint of unlawful discrimination and the procedures to be used to file such a complaint are set forth in the District's Unlawful Discrimination Policy and Procedures 3430, which can be obtained in the Human Resources Office in the Shasta College Administration Building 100 Room 121, 11555 Old Oregon Trail Redding, CA 96003 or on the District's web site at shastacollegeboardpolicies.edu

Student Grievance Procedure

The purpose of this procedure is to provide a prompt and equitable means of resolving student grievances. These procedures shall be available to any student who reasonably believes a college decision or action has adversely affected his or her status, rights or privileges as a student.

This procedure does not apply to grade changes or to student disciplinary actions, both of which are covered under separate Board Policies and Administrative Procedures. (BP/AP 4230-Grade Changes and BP/AP 5520-Student Discipline).

Definitions:

School Day: Any day during which the District is in session and regular classes are held excluding Saturdays and Sundays.

Student: Any person currently enrolled as a student in any class or program offered by the District.

LEVELS FOR RESOLVING A STUDENT GRIEVANCE:

FIRST LEVEL – Informal Grievance

Any student with a grievance should first attempt to resolve the matter by means of an informal meeting with the person(s) against whom the student has the grievance. This discussion must take place within ten (10) school days of the alleged incident.

SECOND LEVEL – Informal Grievance

If the grievance cannot be resolved as specified at the first level within ten (10) school days, the grievant should contact the immediate supervisor or Dean of the appropriate department or program. This discussion must take place within ten (10) school days after contact at the second level. The Supervisor or Dean has ten (10) school days to respond to the student’s grievance.

THIRD LEVEL – Informal Grievance

If the grievance cannot be resolved at the second level within ten (10) school days, the grievant should contact the appropriate Vice President. The Vice President will review the grievance with the supervisor or administrator and attempt to resolve the grievance informally. This discussion must take place within ten (10) school days after contact at the third level. The appropriate Vice President has ten (10) school days to respond to the student’s grievance.

FOURTH LEVEL – Formal Grievance

If the grievance cannot be resolved informally at the third level, the grievant will be asked to state the grievance in writing within ten (10) school days. Then a formal hearing will be scheduled within ten (10) school days of receipt of the written complaint. The employee being grieved shall have the opportunity to respond in writing. A Vice President, as appointed by the Superintendent/President, will conduct the hearing.

Continued on next page…
Levels for Resolving a Student Grievance (continued):

The hearing will include the grievant(s) and the person(s) grieved against. Each shall be entitled to:

1) Representation of his/her choice, including legal counsel when mutually agreed;
2) The right to present witnesses and evidence; and
3) The right to question opposing witnesses.

Official minutes of the hearing will be recorded, and, upon request, available to any person in attendance at the hearing. The Vice President as appointed by the Superintendent/President shall have ten (10) school days after the date of the hearing to render a written decision.

FIFTH LEVEL – Formal Grievance
If the grievance cannot be resolved at the fourth level within ten (10) school days, the grievant may seek a review with the District Superintendent/President. A copy of the stated grievance and minutes of the hearing, if any, will be submitted to the Superintendent/President for review. The Superintendent/President shall have ten (10) school days to render a written decision.

SIXTH LEVEL – Formal Grievance
If the grievance cannot be resolved at the fifth level within ten (10) school days, the grievant may seek a review before the District Board of Trustees at its next regularly scheduled meeting.

Record of Grievance
A record of the grievance against an employee of the District may only be entered into an employee’s personnel file in compliance with an employee’s contract and the disciplinary process.

Note: The District is committed to resolving student complaints and/or grievances in a fair and equitable manner. Students should work through the District’s process first before escalating issues to other agencies. Issues that are not resolved at the District level may be presented to the California Community Colleges Chancellor’s Office (CCCCO) at: CCCComplaintsForm.edu.

Note: This Policy and the related Administrative Procedure is not available for use by any student or applicant for admission who believes that he/she has been subjected to unlawful discrimination. The basis for filing a complaint of unlawful discrimination and the procedures to be used to file such a complaint are set forth in the District’s Unlawful Discrimination Policy and Procedures 3430, which can be obtained in the Human Resources Office in the Shasta College Administration Building, Room 121, 11555 Old Oregon Trail, Redding, CA 96003 or on the District’s web site at: shastacollegeboardpolicies.edu

Student Learning Assessment
To ensure that students at Shasta College are attaining knowledge and skills, the faculty have developed ongoing processes to assess student learning. Students should expect to participate in a wide range of assessments designed to provide useful information about programs and student services. Additionally, upon graduating or transferring from Shasta College, former students may be asked to provide feedback on their experiences at Shasta College to guide continuous program quality.

Student Records, Directory Information and Privacy Rights
Reference: Education Code Sections 76200, et. Seq.; Title 5, Sections 54600, et seq.; Board Policy 5040

The Superintendent/President shall assure that student records are maintained in compliance with applicable federal and state laws relating to the privacy of student records.

Access to Records: Educational records shall be available for inspection and review, during normal working hours, by presently and formerly enrolled students. Where the record(s) may contain information concerning more than the inquiring student, only that part pertaining to the inquiring student may be revealed.

Any currently enrolled or former student of the District has a right of access to any and all student records relating to him or her maintained by the district.

No District representative shall release the contents of a student record to any member of the public without the prior written consent of the student, other than directory information as defined in this policy and information sought pursuant to a court order or lawfully issued subpoena, or as otherwise authorized by applicable federal and state laws.

Students shall be notified of their rights with respect to student records, including the definition of directory information contained here, and that they may limit the information.

Directory information shall include:

- Student participation in officially recognized activities and sports including weight, height and high school of graduation of athletic team members.
- Degrees and awards received by students, including honors, scholarship awards, athletic awards and Dean’s list recognition.
Chapter 8 - Services for Students, Special Programs and Student Life

Shasta College provides a broad spectrum of student services and activities to support the instructional program and to ensure maximum opportunity for success in the student's chosen major.

Services for Students

Bookstore
The College Bookstore provides essential products and services that complement the academic environment and facilitate the education process for students, faculty, staff, and alumni as well as to visitors to Shasta College. The Bookstore offers self-service and selection in specialized book departments. Several non-book departments, such as school supplies, food products, emblematic wear, sundries, and gifts are also offered.

The Bookstore is open to the public throughout the school year. The team members of the Bookstore look forward to meeting many of you personally and helping you become better acquainted with the products and services offered. It is our purpose to make your visits to the Bookstore a pleasant and beneficial experience.

During the beginning of each semester the Bookstore has extended hours. Refer to the class schedule, our web page, or please call (530) 242-7574 for more information.

Textbooks can be ordered online at shastacollegebookstore.

Career Center
The Career Center provides resources to use in making career decisions and acquiring the occupational information necessary for planning your future. Students are invited to make use of computerized career exploration resources to learn more about their interests, skills, and work values. Resources are also available to research and compare educational requirements, pay, and future outlook for various occupations. Stop by Room 126 to learn how to create your personal career profile!

Student Area Outcomes
1. Students will explore and utilize personalized support in our office and through open-access technology tools for job and career exploration.

Child Care Services
The Early Childhood Education Early Headstart Headstart-CalWorks Preschool
Shasta College Children's Campus offers several options to help meet the childcare and educational needs of families. Go to shastacollegechildcare.

The Early Childhood Education Center (530) 242-7600 is a demonstration child development laboratory site providing an enrichment experience for 3, 4, and 5-year old children. A daily fee approved by the Board of Trustees is charged for the program.

Shasta County Head Start and Early Head Start (530) 241-7961 provides an inclusive enriching program with extended day childcare from 7:30 a.m. to 2:30 p.m. Head Start/Early Head Start serves families of infant, toddlers and preschoolers aged eight weeks to five years. Enrollment priority is given to children of College CalWORKS students and low-income eligible families at no fee.

Financial Aid – Scholarships – See Chapter 3 – Finance

Student Health and Wellness Office
The office is located in Room 2020 in the Campus Center. Confidential services are available to Shasta College students who have paid the semester health fee (handled at registration) and are registered at the time of service in credit-bearing courses for the current semester. You must present a government issued photo ID and your student ID number as eligibility will be verified with each visit. The office is open Monday thru Friday during the Spring and Fall semesters from 8:00 a.m. – 12:00 noon and from 1:00 p.m. – 4:00 p.m. Summer semester office hours, days, and services will vary. Services offered: first aid for on-campus accidents or injuries, TB testing, registered nurse consultation, health education, blood pressure checks, vision and hearing screening, cholesterol screening (nominal fee-call for details), smoking cessation, student accident reports, and brief clinical (psychological) counseling. We also provide resources for reproductive health care. Physician consultations are available for the initial diagnosis and treatment of short-term illness and academic program / uncomplicated employment physicals. Physician services are not available during the summer semester. PLEASE NOTE: The Student Health & Wellness Office is not a physician's office. Medical (physician) services are contracted and limited. Hours and / or days of service are subject to change. There may also be times when the College Nurse and / or Psychological Counselor are out of the office, or off campus, during regular office hours. Please call (530) 242-7580 for appointment availability. For more information, please visit our website at shastacollegewellness.

Remember, Shasta College is a Smoking Restricted campus. Smoking is only allowed in designated areas. Please visit our website, shastacollegewellness, for locations of designated areas. Spitting of chew tobacco in classrooms (into cups, trashcans, etc.) is also prohibited. Willful non-compliance is a violation of college policy and the Student Code of Conduct.

Library
The Shasta College Library is one of your key resources for course support and lifelong learning. We're a hub of collaborative learning on campus with study spaces and a host of resources on our open shelves. We also maintain a dynamic collection, accessible 24/7, and online reference assistance. Explore this vast spectrum of knowledge, including:

- Millions of magazine and journal articles from thousands of international publications.
- A growing collection of over 100,000 books, audiobooks, DVDs, government documents, and streaming media.
- Nearly 100 computer, video, microform, and other workstations, many with Internet connections.
- Wireless Internet access.
- Group study rooms with media support.
- Self-service printing, photocopying, and faxing.
- Special resources for the physically challenged.
- Service-oriented staff who regard each encounter as an opportunity to share our extraordinary resources.

To learn more about the Library, including current Library hours, please visit us online at shastacollegelibrary.

Student Employment Services
The Student Employment Center is a resource for Shasta College students seeking work while attending classes, after graduation, and at the completion of their training programs. Bulletin boards are maintained in major campus buildings listing current job opening and internships opportunities both on and off campus. Job listings are also posted on the Student Employment website: studentemploymentjobboard. Computers, printers, fax, and phone are provided for job search purposes. Resume, cover letter, interviewing, and general job search assistance is available. For more information on student employment services, please stop by Room 126 or call (530) 242-7728.

Student Area Outcomes
1. Shasta College will partner with faculty, students, and community members including local employers to promote career and employment opportunities and preparation.

Transfer Center
As part of the counseling function, Shasta College operates a Transfer Center. Located adjacent to the counseling offices in the Administration Building, the Center is a resource for students to use in acquiring information on other colleges and universities. The Center houses a library of college and university catalogs, sponsors visits to four-year institutions each semester, and hosts admissions advisors from four year colleges and universities who meet with students here at Shasta College. The Transfer Center also offers workshops to guide students through the UC and CSU transfer application process. Students are invited to make use of the variety of materials and services available. For additional information call (530) 242-7570 or drop by Room 126.

Student Area Outcomes
1. Students will report an increased awareness of the transfer requirements and process.
2. The Transfer Center promotes the completion of AS-T/AA-T degrees for students transferring to California State Universities.

Special Programs

Adult Basic Education
Shasta College has a range of adult education courses. There are courses in reading, math, GED-prep, citizenship and English as a Second Language. Many of these courses are free and have open enrollment. Some courses have small group instruction and others are taught using one-on-one mentoring. These courses can be used to prepare for college entry. For more information contact the Learning Center Coordinator, Basic Skills/ESL, at (530) 242-7711.
California Work Opportunity and Responsibility for Kids – CalWORKs

CalWORKs is a federally mandated program for parents who receive Temporary Assistance to Needy Families (TANF), formerly AFDC. The goal is to assist these parents in gaining employment by providing vocational training and/or remedial education. Supportive services may include academic counseling, child care assistance, and a work-study program that enables CalWORKs students to meet work activity requirements, gain work experience and earn money that will not impact their grant. Shasta College serves Shasta, Tehama, Trinity, and Butte County students. Shasta College CalWORKs Counselors are available for counseling in locations in each of the three counties. Call (530) 225-3949 for additional information or come by the Shasta College CalWORKS office at the Downtown Mall, 1435 Butte Street, Redding. We’re located just across the street from the Shasta County Department of Social Services (DSS) CalWORKs office at 1400 California Street.

Cooperative Agencies Resources for Education – CARE

The CARE Program is designed as a support service for the EOPS student who is at least 18 years of age, a single head of household, a current recipient of TANF/CalWORKs, has a child under 14 years of age, and is enrolled full-time upon admission into the program. Support services for CARE students may include assistance with childcare or transportation expenses, supplies, textbooks, workshops and referrals. The purpose of the program is to assist the CARE student in pursuing educational goals and in obtaining skills leading to meaningful employment. For additional information, call (530) 242-7540 or visit the EOPS/CARE Office in the Student Center, Room 2005.

Student Area Outcomes

1. Students will demonstrate knowledge of the CARE resources available.
2. Students will demonstrate the value of CARE support services by increased retention, graduation, and transfer rates.

Disabled Students Programs and Services – DSPS

Shasta College offers services to students with disabilities numerous services including counseling and academic advisement, testing for learning disabilities, readers, note providers, e-texts, audio format texts, in class interpreting for students who are deaf or hearing impaired, designated parking areas, special equipment (assistive technology, test facilitation, etc). These services, accessed by referral from the DSPS Counselor or Learning Disabilities Specialist, are available to students attending either the main Shasta College campus or the extended education locations throughout the District. The DSPS Counselor and Learning Disabilities Disability Specialist work with students to evaluate their educational needs and to plan and prescribe suitable programs and services. A specially equipped assistive technology computer lab, located in Room 2004, is available for qualifying students with disabilities. Special classes are provided through Adaptive Education curriculum (ADAP). For more information on the various programs and services available through DSPS, please call (530) 242-7790 or stop by our office located in the Student Center, Room 2005.

Student Area Outcomes

1. Students will identify individual educational limitations and successfully access appropriate disability accommodations.
2. Students will utilize appropriate disability management strategies.
3. Students will develop an Education Contract specifying academic and vocational goals, steps to completing those goals, and relevant services appropriate to their strengths and limitations.

Extended Opportunity Program and Services – EOPS

EOPS (Extended Opportunity Program and Services) is state-funded and is established at Shasta College to assist students who are low income and educationally disadvantaged with financial and comprehensive support services. Academic, career and personal counseling are a key component of this program, and students are required to contact an EOPS Counselor three times each semester to plan and monitor their progress. Additional services may include book grants, emergency loans, tutoring, transfer assistance, workshops, cultural events and referrals to both on and off-campus resources. Eligibility for services is determined by Title 5 regulations. Students must complete a BOGG (Board of Governors Grant) and EOPS application. For additional information, call (530) 242-7540 or come to the EOPS/CARE Office in the Student Center, Room 2005.

Student Area Outcomes

1. Students will be able to identify, locate and utilize the resources and services needed to overcome educational and/or economic disadvantages to reach their academic goals.
2. Students will demonstrate that utilization of EOPS programs and services is a valuable aid for their college success.

Gateway to College

The Shasta College Gateway to College program is a dual enrollment program for high school students who are significantly behind in credits and unlikely to graduate. Students who are chosen for participation in the Gateway program have an opportunity to simultaneously earn credit toward their high school diploma and a college degree or certificate through classes taken on the college campus. For more information, please contact the Program Director at (530) 242-7628.

TRiO Programs

Educational Talent Search (ETS) Student Support Services (SSS) Upward Bound (UB)

The Shasta College TRiO Talent Search Program identifies and assists 8th through 12th grade students from educationally disadvantaged backgrounds who have the potential to succeed in higher education. The program provides academic, career, and financial counseling to its participants and encourages them to Graduate from high school and continue their education at a postsecondary institution of their choice. The program serves 500 students in Shasta and Trinity counties. For more information, please contact the Project Director at (530) 242-7691.

Student Area Outcomes

1. Students will persist from one grade level to the next and graduate from high school.
2. Students will enroll in post-secondary education by the fall term immediately following high school graduation.
3. Students will complete their Free Application for Federal Student Aid (FAFSA).

Students will have access to field trips that will allow for a greater understanding of and exposure to post-secondary education. Student Support Services is a federally funded TRiO program for eligible full-time. Full-time students who are preparing to transfer to four-year universities to earn a bachelor’s degree. TRIO-SSS provides support services (tutoring, counseling, lending library, calculator loans, orientation, and workshops), cultural and social activities, university tours, and transfer assistance. For additional information on SSS, please visit room 2005 in the Student Center or call (530) 242-7690.

Student Area Outcomes

1. First-year students will state an educational goal and identify potential transfer institutions.
2. Students will have access to counseling and support services leading to graduation and/or transfer.
3. Students will persist through the program and meet their educational goals.
4. Students will complete their Free Application for Federal Student Aid (FAFSA), online college application and scholarship application(s).

The TRiO Upward Bound Program provides comprehensive support to eligible low-income, first-generation high school students in their preparation for college entrance. The goal of Upward Bound is to increase the rate at which participants complete secondary education and enroll in and graduate from institutions of postsecondary learning. Upward Bound serves students at Foothill, Enterprise and Central Valley High Schools. For more information, please contact the Project Director at (530) 339-3622.

Student Area Outcomes

1. Students will understand their options for post-secondary education and requirements.
2. Students will have access to field trips and workshops that will allow for a greater understanding of and exposure to post-secondary education.
3. Students will understand the financial aid process and funding opportunities.
4. Senior students will complete a college admissions application, Free Application for Federal Student Aid (FAFSA) and attend a college orientation before graduation.

High School Diploma (Formerly GED)

Residents of the District may work toward a high school diploma by taking college courses. Information is available from the high school from which you plan to receive the diploma. You must request that credit is transferred.

A student who transfers Shasta College course credit to a high school for diploma credit may also use that credit at Shasta College. The completed course will fulfill the subject requirement if it is part of an Associate degree program.

Questions regarding GED testing should be referred to the Shasta Adult School at (530) 245-2626.

Puente

The Puente Project, a national award-winning program for more than 25 years, has improved the college-going rate of tens of thousands of California’s educationally disadvantaged students. Its mission is to increase the number of educationally disadvantaged students who enroll in four-year colleges and universities, earn college degrees, and return to the community as mentors and leaders to future generations. Puente is interdisciplinary in approach with writing, counseling and mentoring components. The Puente
Project is an inter-segmental program that is co-sponsored by the University of California Office of the President and the California Community College Chancellor’s Office. Information about the Puente Project is available in Room 126, by phone at 242-7724 or shastacollegepuente. For information on Puente at the Tehama Campus, call (530) 529-6980.

**Tutorial Services**
The Shasta College Writing Center, located in the Learning Resource Center (LRC), is a resource for all writers. Students from all courses are encouraged to make an appointment with a tutor in a one-on-one tutoring session. The Writing Center also provides computers for word processing and research purposes, and offers workshops and resources for writers. The Math and Business Learning Center can also be found in the LRC. Drop in tutoring for students enrolled in math and business classes is available in this center. The Science Learning Lab has tutoring for science classes and is located in the 1600 building.

**Veterans Educational Benefits**
The VA Certifying Official in the Financial Aid Office serves as your liaison between the school and the Department of Veterans Affairs to help you apply for and maintain your VA educational benefits. We provide support to help you with your education and information on the latest programs and regulations, extension of delimiting dates, vocational rehabilitation, etc. Be sure to apply for your benefits early, as it takes the Department of Veterans Affairs approximately 120 days to process your application. All new veterans to Shasta College should call for information at (530) 242-7701 or visit the Veterans Certifying Official located in the Financial Aid Office in Room 108. For more information about veterans services please visit our website at shastacollegeveterans.

The Veterans Counselor will assist you in your educational planning and development of the required Educational Plan. To schedule an appointment with the Veterans Counselor, call the Counseling Center, located in Building 100, at (530) 242-7724.

**Student Life**

**Art**
The Art Department sponsors monthly exhibitions in the College Gallery showing pieces from visiting artists, faculty, and a juried student show in May. The realm of art is a viable medium at Shasta College, and one that fulfills the aspirations of many students. Shasta College features several art galleries where students can display their work, including the Art Library Gallery, the Art Department Gallery, and the Art Center Gallery. The department offers a variety of courses in painting, drawing, sculpture, and photography, as well as exhibitions and performances by visiting artists and faculty. Students have the opportunity to work with experienced artists and gain hands-on experience in the field of art.

**Athletics**
Shasta College participates in all sports offered by the California Community College Athletics Association (CCCAA) and the Western States Athletic Conference (WSAC). The basketball, volleyball, soccer, and cross-country teams compete in the Bay Valley Conference, while the football team competes in the Pacific Northwest Athletic Conference, also known as the PNAC. The college offers a wide range of athletic opportunities for men and women, including basketball, volleyball, soccer, cross-country, track and field, and tennis. Shasta College men and women participate in club sports, such as ultimate frisbee, softball, and cross-country. Students can join one of the college’s club sports teams or create their own club to pursue their athletic interests. Shasta College also offers intramural sports, including soccer, basketball, volleyball, and ultimate frisbee.

**Music**
Shasta College established the Beta Mu Mu chapter of the Phi Theta Kappa International Honor Society on March 19, 2004. The Phi Theta Kappa's mission is two-fold: (1) to recognize and encourage the academic achievement of two-year college students; and (2) to provide opportunities for individual growth and development through participation in honors, leadership, service and fellowship programming. Honor society members are invited to join by letter and must have a cumulative GPA of 3.5 and have completed 12 or more units in the Shasta College catalog. Invitations to join are generally mailed out within the first six weeks of each semester, announcing orientation dates where eligible students can gain more information about the society. Membership is granted once the eligibility requirements have been met and the appropriate dues are collected. For more information, contact the Students Services Office, Room 2308 on the main campus for brochures and a membership application, or visit the chapter web site at shastacollegeptk.

**Housing**
Shasta College maintains two dormitories, one for 63 women and one for 63 men. A Commons building providing recreational space and equipment for both indoor and outdoor activities is part of the facility. A “residents only” kitchen equipped with microwaves, two stoves/ovens, a gas BBQ grill, and an ice/water dispenser is located in the Commons along with a computer lab for TV lounge. Several social and recreational activities are programmed monthly for the enjoyment of the residents.

Students must carry at least 12 units and maintain a 2.0 GPA to remain in the dormitories.

To reserve a space in the Residence Halls – or to be placed on the waiting list – go to the Shasta College homepage, click on Resources and then click on the Housing (dorms) web page. Fill out the reservation form (fillable form), print it out and mail the completed reservation form, along with a $200.00 refundable security deposit (check or money order), to the address listed on the reservation form. Due to the limited number of spaces available each semester, students are encouraged to reserve a space at least four (4) months prior to the start of the semester. For more information you may call (530) 242-7740.

Off Campus: The College is interested in its students having suitable housing. For students who cannot be accommodated in the dormitories or who prefer to live off-campus, the Housing Office maintains information on rooms and apartments which are offered for rental to college students.

**Student Activity Cards**
When you register at Shasta College, you will be offered the opportunity to buy your Student Activity Card from the Shasta College Student Senate. Funds from the card help Student Senate in financing concerts, Spring Activities Week, and Huck Finn Day. The card allows reduced admission to various Student Senate sponsored activities, as well as discounts from popular vendors and restaurants around town. Lastly, funds from the purchase of this card go toward many campus enhancement projects. An activity card may be purchased each semester. Information will be available during registration or at the Student Senate offices located in the Student Annex, Bldg. 2300, Room 2318. This card is your passport that will help to involve you in college activities.

**Student Senate/Student Government**
Since virtually all major decisions that are made on the Shasta College campus affect students in some way, student input is welcomed. The organized “student voice” to the campus community is facilitated through the Student Senate. Student views are represented on councils and committees of the college. The Student Body President is a member of the Board of Trustees. Student concerns are channeled through the Student Senate, which meets weekly. Contact the Dean of Students Office for dates and times at (530) 242-7622.

For the most part the Student Senate focuses its attention in three main areas of concern: student needs and concerns, campus activities, and student services.

Shasta College students may participate in the Student Senate. Students are elected and/or appointed to positions in the various levels of the Student Senate. The development of leadership qualities through participation is considered to be of prime importance in student self-government at the College.

**Theatre Arts**
The Theatre Arts Department offers a variety of theory, production and technical theatre classes. The department features two main stage productions each academic year. Auditions are held at the beginning of each term and are open to members of the community. Rehearsals are scheduled during the evenings and on weekends. Technical theatre activities occur daily. Community members are encouraged to enroll. For additional information, call (530) 242-7730.
Chapter 9 – Academic Staff

ABTS, MARVIN L. (1986) Anatomy; B.S., Lewis and Clark College; M.S., Ph.D., Portland State University.

ANDERSON, CATHERINE E. (1988) Mathematics; B.A., Humboldt State University; M.A., University of California, Santa Cruz.


BAILEY, TERRY (1977) Home Economics; B.S., California State University, Chico; M.S., Oregon State University.

BAKER, LENA (2001) English/Writing Center; B.A., Drake University, Des Moines, Iowa; M.A., Texas A&M, Kingville, Texas.

BANGHART, S. BRAD (1996) Business; A.A., Shasta College; A.A., Santa Rosa Junior College; B.A., California State University, Chico; M.S., Capella University, Minneapolis, MN.

BEAM, MARC (2011) Director of Research & Planning; B.A., Chapman University; M.A., Prescott College.

BERISSO, CRISTINA (1999) Math; Licenciado en Fisica, Universidad Nacional de Buenos Aires; Ph.D., University of Oxford, United Kingdom.

BERKOW, PETER F. (1990) Journalism/English; B.A., Northeastern Illinois University; M.A., California State University, Chico.

BISH, LAURIE (2013) Nursing; B.S.N., Sonoma State University; M.S.N., California State University, Fresno.

BITTLE, ROBERT (1991) Mathematics; A.S., Linn-Benton Community College; B.S., Univ. of Wisconsin-LaCrosse; M.S., University of Wisconsin-Milwaukee.


BOGNER, REBECCA (2003) Psychological Counselor; M.A., California State University, Sacramento; B.A., California State University, Chico.

BORG, CAROLYN (1990) Counselor; B.A., Biola College; M.S., California State University, Long Beach; Ed.D., Oregon State University, Corvallis.

BOSWORTH, JOAN (1976) Family Studies; B.S., M.A., California State University, Chico.

BRAZIL, KELLY (2002) Head Coach – Women’s Volleyball/Physical Education; B.A., California State University, Humboldt.

BROOKSHAW, KEITH (1988) Counselor; A.A., Foothill College; B.A., University of California, Davis; M.S., Calif. State University, Hayward; Ed.D., University of Southern California.

BRYANT, THOMAS (2013) Automotive; A.A. Shasta College.


CARMEN, CRAIG (2012) Director of Campus Safety, Administration of Justice; B.S., San Jose State University.

CICERO, JOHN (1990) Business; B.A., University of Rochester; M.B.A., Ph.D., Syracuse University.

CINGRANI, DONALD (2005) Accounting; B.S., San Fernando Valley State College.

COOPER, WILLIAM D. (1999) Spanish; B.A., University of California, Berkeley; M.A., University of Massachusetts, Amherst.


CROES, SCOTT (2007) Biology; B.S., M.S., California State University, Chico; Ph.D., University of Nevada, Reno.


CRUSE, CHERYL (2012) Librarian; B.A., University of Redlands; M.L.S., San Jose State University.

CURRY, PEGGY (2013) Nursing; B.S.N., Boston College; M.S.N., California State University, Chico.

CYPHERS BENSON, LAURA (2012) Associate Vice President of Human Resources; B.S., Humboldt University; M.A., Fielding Graduate University; M.A., University of Phoenix.


DAVIS, MICHAEL A. (2012) Athletic Trainer; B.A., California State University, Chico; M.S., University of Arizona, Tucson.

DOHERTY, CHARLES (1994) Nursing; B.S., Antioch College; B.S., Calif. State University, Sacramento; M.S., University of California, Davis; M.S.N., Calif. State University, Chico.

DOYLE, TERESA (2009) Student Success/Student Development, B.A., M.A., California State University, Chico.


EVANS, MATTHEW (2005) Chemistry; B.S., California Polytechnic State University; Ph.D., University of California, Santa Cruz.

FARD, DIVAN (2000) Chemistry; B.S., Pahlavi University; Ph.D., University of Pennsylvania.


FITZHUGH, KELE (2002) Head Coach – Men’s Basketball/Physical Education Instructor; B.A., California State University, Chico.

FONG, LEO (2001) English; B.A., U.C. Davis; M.A., Univ. of California at Riverside.

FOOTE, BARBARA LYNN (1990) Nurse Aide/Home Health Aide; B.S.N., Calif. State University, Chico.


FRIGO, LENORE (2002) Psychology; B.A., Marquette University, Milwaukee; M.A., Ph.D., Louisiana State University.

FULTON, SUSANNAH (2009) Biology/Botany; B.S., Brigham Young University; M.S., New Mexico State University; Ph.D., Miami University.

GEE, JILLIE (2005) Vocational Nursing; B.S., Montana State University.


GILBERT-AHRENS, ROSIE (2001) Counselor; A.A, Shasta College; B.A., California State University, Chico; M.S., University of La Verne.

GLASS, THOMAS (2006) Math; B.S., California State University, Bakersfield; M.S., Boise State University.

GOODMAN, DEBORAH (1997) Nurse; B.S.N., California State University, Chico; School Health Credential, M.S.N., California State University, Sacramento.

GOOGINS, ROBERT P. (1981) Business Education; A.A., College of the Siskiyous; B.S., Sacramento State University; M.S., Southern Oregon.


GOTTLEIB, CLIFFORD (1984) Chemistry; B.S. University of Wisconsin; M.S., University of California, Davis.


GRIFFIN, DEBRA (2013) Mathematics; B.A., California State University, Sacramento.


HAMAR, DIANA (2000) DSPS Counselor; A.A., Shasta College; B.A. Simpson College; M.A., University of San Francisco.

HAMILTON SLANE, SANDRA (2000) Director, DSPS/EOPS; B.A., Wheaton College, MSW, University of Illinois.

HANNAFORD, MORGAN (1998) Biology; B.A., Sonoma State University; Ph.D., University of California, Berkeley.

HANSEN, STEVEN D. (1974) Agriculture/Physiology; B.S., Fresno State University; M.S., University of California, Davis.

HENDERSON, KAREN (2000) Dental Hygiene; A.S., Sacramento City College; B.A., Simpson College.

HOLLINGSWORTH, LAUREN (2006) English; B.A., University of California, Irvine; M.A., University of California, Riverside; Ph.D., California State University, Riverside.

HOM, KERI (1997) Counselor; B.A., University of California, Irvine; Ph.D., Washington State University.

HORTON, JAMES (1973) Philosophy; B.A., Seattle Pacific College; B.D., Southern Methodist University; Rel.D., School of Theology at Claremont.

Houser, Gary (1999) Dean of Safety, Physical Education and Consumer Sciences; B.S., M.S. Ed., Oregon State University, Corvallis, Oregon.


Keller, Susan (2013) English/Puente; B.A., University of California, Los Angeles; M.A., Univ. of New Mexico; Ph.D., Univ. of California, Santa Barbara.
MACMILLAN, TEAL  (1993) Francisco State University, Chico
MARTIN, THOMAS  (1990) California State University, Sacramento

MEACHAM, SUSAN  (1999) Minot State University, North Dakota. Cal Polytechnic State University, Chico;
MACMILLAN, TEAL  (1999) History; B.A., M.A., California State University, Chico
MARLEY, RONALD K.  (1995) Fire Technology; A.S., Solano College; B.A., California State University, Sacramento
MARTIN, THOMAS  (2002) MIS/Business; B.S., M.S., Utah State University; Ph.D., University of La Verne
MASULIS, THOMAS C.  (1991) Physics/Mathematics; B.S., University of Illinois; M.A., University of California, Berkeley
MAXWELL, ANITA  (1987) Mathematics; A.A., Shasta College; B.A., M.A., California State University, Chico
McCROOME, LYNDIA  (1998) Nurse Aide/Home Health Aide; A.A., Shasta College; B.A., CSU Chico
McCANDLESS, JENNIFER  (1997) Math; B.A., CSU, Sacramento; M.S., Oregon State University
McCARRY, SARA  (2007) English; Ph.D., University of Oregon; M.A. Texas State University; B.S. Minot State University, North Dakota
McQUEEN, MEGAN  (2000) Counselor; B.A., CSU, Sacramento; M.S., San Francisco State University
MEAGHAN, SUSAN  (1998) Microbiology; A.S., Grossmont College; B.A., Point Loma College; M.S., Moma Linda University
MELONE, DOUG  (2001) Associate Vice President, Information Services & Technology; A.A. Shasta College; B.S., U.C. Berkeley; M.B.A., San Francisco State University
MIHELE, CARMELIA  (2013) Mathematics; B.A., University of California, Santa Barbara; M.A., California State University, Fullerton
MOREHOUSE, THOMAS  (2001) Counseling; B.S., M.A., California State University, Fresno
MOUNTAIN, CAREL  (1998) Associate Degree Nursing; B.S., Pacific Union College; M.S., Sonoma State University
MUNROE, DEAN  (1977) Drama; B.A., M.A., Humboldt State University
NICHOLAS, RAYMOND  (2005) Diesel Technology; A.S. Oregon Institute of Technology
NIGRO, FRANK G.  (1997) Dean of Science, Language Arts, and Math; B.A., California State Univ, Chico; M.A., Ph.D. Vanderbilt University, Nashville, TN
NOLTE, KENNETH  (2002) Natural Resources; B.S., University of Wisconsin; M.S., Texas A&M University
O’RORKE, KEVIN  (2006) Vice President of Student Services; B.S., Idaho State University; M.Ed., Northern Arizona University; Ph.D., Arizona State University
ORR II, THOMAS  (2005) Dean of Extended Education; B.A., M.A., California State University, Bakersfield
PATTERSON-TUTSCHKA, ANDREW  (2013) Art; B.A., University of Michigan, M.A., Pennsylvania Academy of the Fine Arts
PERRIN, RALPH  (2007) Dean of Arts, Communication and Social Sciences; B.A., Walla Walla College; M.A., Ph.D., Loma Linda University
PETERS, BRAD  (2006) Culinary Arts; A.S. San Diego Mesa College; B.V.E., San Diego State University
PRESCOTT, SHELBY  (2005) Speech; B.A., M.A., California State Univ., Chico
RANDALL, MERIDITH  (2012) Vice President of Academic Affairs; B.A., Amherst College, M.A., Cornell University; J.D., New York University School of Law
REDD, ROXANNE  (2000) Associate Degree Nursing; B.S.N., City College of New York; M.S.N. University of Phoenix
REED, RANDAL  (1999) Geology; B.S., University of Nevada, M.S., Northern Arizona University
REYNOLDS, LISA  (2013) Nursing; A.D.N., Shasta College; B.S.N., Simpson University; Ph.D., State College
RIOQUE, KATHERINE  (2008) Dean of Health Sciences; B.S.N., Biola University; M.S.N., University of California, Los Angeles
ROUAN, SYLVIA  (2009) Program Director – TRIO/ESSU Upward Bound; B.A., Simpson University; M.S., University of La Verne
RUPTE, CAROL  (1993) Family Studies; B.S., University of California, Davis; M.S., Oregon State University
RUPERT, BRADLEY  (2005) Head Baseball Coach/Physical Education; B.A., California State University, Chico; M.A., Simpson College
SALUS-SINGH, CAROLYN  (2007) Reference and Instruction Librarian; B.A. Barnard College, Columbia University, M.L.S. University of Maryland
SANFORD, TRICIA  (2012) Mathematics; B.A., University of California, Davis; M.A., San Francisco State University
SCHAEFSCHMITZ, BETHANY  (2007) Family Studies; B.A., University of Rhode Island; M.A., California State University, Chico
SCHIMEK, SUSAN  (1990) Art; B.F.A., University of Wisconsin; M.F.A., Ohio State University
SCHURIG, CASEY  (2008) OAS; B.S., M.A., California State University, Chico
SCOLLON, DANIEL  (1996) Natural Resources/Environmental Technology; B.S., California Polytechnic Univ., San Luis Obispo; M.A., San Francisco State Univ.
SITTING, ANN  (2005) Spanish; B.S., University of Nebraska; M.A., San Francisco State University; Ph.D, Universidad Autonoma de Madrid, Spain
SIVADAS, IRAJA  (2007) Mathematics; B.A., M.A., University of California, Santa Cruz
SMITH, EILEEN L.  (1985) English; B.S., Georgetown University; M.A., Ph.D., University of California, Davis
SMITH, MARK  (1992) Welding; A.A., Cerroitos College; B.A., M.A., California State University, Fullerton
SNOW, TERRIE  (1981) Associate Degree Nursing; A.D.N. Lansing (MI) Community College; B.S.N., M.S.N., Indiana University, Indianapolis
SPILLANE, BRIAN  (2000) Counseling; B.A., M.A., Ph.D., University of Dallas
SPOTO, PAMELA L.  (1991) English; B.A., M.A., California State Univ., Univ, Chico; M.S., California State University, Northridge
STUPEK, RAYMOND  (1986) Physical Education; B.A., Humboldt State University; M.A., California State University, Chico; M.S., California State University, Northridge
SUGIMOTO, RACHELLE  (2012) Mathematics; B.A., Fresno Pacific College; M.A., California State University of Fresno
TATE, JAMES  (2007) Archaeology/Anthropology; B.A. Old Dominion University, M.A. Northern Arizona University, Ph.D. University of California, Santa Barbara
TELO, JUAN RAMON  (2001) Philosophy; B.S., M.A., Ph.D., University of California at Santa Barbara
THOMAS, LINDA  (2006) Associate Degree Nursing; A.A., Ventura College; B.S.N., Univ. of California. Dominguez Hills; M.S.N., Sonoma State University
THOMPSON, CRAIG  (1996) Head Football Coach/Physical Education, Interim Athletic Director; B.A., M.A., Humboldt State University, Arcata, California
TIBBALS, KATHLEEN  (2010) Early Childhood Education Center Director; B.A., Chapman University; M.S., Nova Southeastern University
TURNER, THERESA  (1996) Speech; A.A., Brevard Community College, Cocoa, FL; B.A., M.A., University of South Florida, Tampa
VALDIVIA, DANIEL  (2008) Counselor; B.A., University of California, Chico; M.S., University of La Verne
WAITE, LEIMONE  (1998) Horticulture; B.S., UC, Davis; M.S., California Polytechnic State University, San Luis Obispo
WATERBURY, ELIZABETH  (1999) Choral-Vocal Music; B.A., San Jose State Univ.; M.M., San Francisco Conservatory of Music; Ph.D., UC, Santa Barbara
WESTLER, SUSAN  (1993) Nursing; B.S.N., Calif. State University, Sacramento; M.S.N., CSU, Chico
WHITMER, JOHN  (2005) History; B.A., University of California, Santa Barbara; M.A., San Diego State University; Ph.D., The University of Idaho
WIGGINS, SHERI  (2009) Program Director, Foster and Kinship Care Education; B.A., M.S.W., California State University, Chico
WYLIE, HEATHER  (2006) Sociology; B.A., University of California, Santa Barbara; M.A., University of California, Davis
WYSE, JOE.  (2007) Superintendent/President; B.A., Kenyon College, Ohio; M.A., Trinity International University
YATES, SCOTT  (2013) English; B.A., Christian Heritage College; M.A., San Francisco State University
## Shasta College Emeritus Association

For more information on the Emeritus Association, please visit our website at: [www.shastacollege.edu/emeritus/](http://www.shastacollege.edu/emeritus/)

### Emeritus Faculty

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<th>Name</th>
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<tr>
<td>Joan Adams</td>
<td>Jack Finch</td>
<td>Warren Lytle</td>
<td>Douglas Russell</td>
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<td>Richard Alden</td>
<td>William Fitzgerald</td>
<td>James Mack</td>
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<td>Eve-Marie Arce</td>
<td>James Gilbertie</td>
<td>Steve Mahoney</td>
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<td>Dorothy Axel</td>
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<td>John Mandes</td>
<td>Holly Scrivner</td>
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<td>Dan Axman</td>
<td>Allan Hansen</td>
<td>Marcia McKenzie</td>
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<td>John Bertrand</td>
<td>Kathleen Hansen</td>
<td>Joe Mellon</td>
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<td>Donald Bertucci</td>
<td>John Harper</td>
<td>Jim Middleton</td>
<td>Michel Small</td>
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<td>Anita Berwind</td>
<td>Sue Hess</td>
<td>Doug Milhous</td>
<td>Douglas Soccio</td>
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<td>Joan Bestor</td>
<td>Dean Hinshaw</td>
<td>David Mitchell</td>
<td>Robert Softinn</td>
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<td>Norma Bross</td>
<td>Merrill Hugo</td>
<td>James Myatt</td>
<td>Clifton Sowder</td>
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<td>Bill Burrows</td>
<td>Sandra Johnson</td>
<td>Garrath Perrine</td>
<td>Vern Stainbrook</td>
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<td>Dave Bush</td>
<td>Zena Juhasz</td>
<td>Peter Petersen</td>
<td>Maureen Stephens</td>
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<td>Candace Byrne</td>
<td>John Jurwich</td>
<td>Michael Piccinnino</td>
<td>Olando Tognozzi</td>
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<td>J. Scott Carter</td>
<td>Arline Kel</td>
<td>Joe Polen</td>
<td>Eldridge Trott</td>
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<td>Leo Chiantelli</td>
<td>Judy Kelsey</td>
<td>Parker Pollock</td>
<td>Kim Tyler</td>
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<td>Ed Clewett</td>
<td>Sharon Kennedy</td>
<td>Donald Prince</td>
<td>Salvador Valdiva</td>
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<td>Stephen Concklin</td>
<td>Ken Kilborn</td>
<td>Judy Quine</td>
<td>Joseph Vargas</td>
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6/6/13
Chapter 10 – Glossary of College Terms

AA, Associate in Arts Degree: Liberal arts degree, designed for students who plan to transfer to a four-year college or university.

AS, Associate in Science Degree: Degree awarded for technical and occupational programs, and transfer science programs.

AA-T and AS-T Degrees: Transfer degrees designed for students transferring to the CSU system.

Academic Renewal: A means whereby a student may petition to have previous college work (grades and credits) excluded from current grade point average, if that work is more than two years old and is not reflective of the student's present level of ability or performance.

Academic Year: The regular terms of instruction not including summer session. Fall and Spring Semesters.

Advisory on recommended preparation: A condition of enrollment that a student is advised, but not required, to meet before or in conjunction with enrollment in a course or educational program.

Baccalaureate: Refers to the baccalaureate or bachelor's degree usually achieved after four years of undergraduate college study. Shasta College offers the first two years of baccalaureate work in many fields of study.

Certificate of Achievement: Indicates completion of a specific occupational program of study and training.

Class Load: The number of class units a student takes in any given term. A full time class load is twelve or more units. A standard class load is fifteen units.

Clear Standing: Indicates that a student's grade point average in the previous semester and cumulative grade point average are C (2.0) or better.

Continuing Student: A student who was enrolled at Shasta College during the most recent previous semester.

Coop Ed: Cooperative Education - a program of college credit for work experience combined with college study.

Corequisite: A condition of enrollment consisting of a course that a student is required to simultaneously take in order to enroll in another course.

Credit: A completed and passed unit of study recorded on the student's official college record.

CSU: California State University System. Of the twenty-three state colleges and universities, the two closest to Shasta College are CSU Chico and CSU Humboldt.

Curriculum: (plural, curricula) Often called "discipline." All the courses of study offered by Shasta College. May also refer to a particular course of study (major) and the courses in that area.

Dismissal: A status caused by low academic or progress performance. The dismissed student may not continue at Shasta College without approval for readmission. See catalog section on Academic Regulations.

District: The area served by Shasta College is the Shasta- Tehama-Trinity Joint Community College District. The District is the governing entity of the College.

Drop/Add: Revision of program of courses when a student wants to drop, change, or add a course.

DSPS: Disabled Students Programs and Services – Program providing both physical and educational accommodations to eligible students with disabilities.

Elective: Any course not required for a major field or General Education requirements.

Enrollment: Official recorded placement of a student in a class.

EOPS: Extended Opportunity Programs and Services - Special support services, financial assistance, and educational programs that assist students who have experienced economic and educational disadvantages.

Full-time Student: A student taking twelve or more class units in a regular semester.

G.P.A.: Grade Point Average. The G.P.A. is compounded based on points for each grade received. Per unit an "A" grade is worth 4 points, a "B" worth 3, a "C" worth 2, a "D" worth 1, and an "F" worth 0. The total number of points accumulated is divided by the number of course units taken for a letter grade. Credit (CR), No Credit (NC), or Incomplete (I) grades are not computed in the grade-point average. Current G.P.A. is for the most recent semester. Cumulative G.P.A. is for all College work to date.

General Education Certification: Transfer courses certified by Shasta College for meeting General Education requirements at the California State Universities.

IGETC: Intersegmental General Education Transfer Curriculum. A pattern of general education courses which is transferable to both the UC and CSU systems.

Independent Study: Independent study provides a forum for advanced work in a given field of study.

Institutional Student Learning Outcomes (ISLOS): Outcomes identified by Shasta College to support student success.

Major: Area or field of concentration for occupational certificate or associate degree.

Matriculation: Matriculation is a process which brings Shasta College into an agreement with a student for the purpose of realizing that student’s educational objectives. The process includes Application, Records, Assessment Testing, Counseling, and Orientation.

Nonresident: A person who has not lived continuously in California for one full year prior to enrollment.

Part-time Student: Any student enrolled in less than 12 units of course work in a regular semester.

PELL Grant: A federal financial aid grant available to qualified students who are enrolled in six or more units.

Petition: A request, usually written on a standard form, to adjust a study list or curriculum to fit an individual situation and/or request exception to a policy or regulation.

Prerequisite: A condition for enrollment in a course or a major. Prerequisites for courses usually consist of a previous course or courses in a related subject and/or the instructor's permission. Prerequisites are described in the Catalog course descriptions and indicated in the schedule of classes with an asterisk *** following the course number.

Probation: An indication that performance is below standard because of academic or progress deficiencies; a trial period in which a student is permitted to redeem failing grades or deficient units.

Registration: The process of providing required information and enrolling in classes each semester.

Resident: A person who has resided in California for one full year prior to enrollment and who meets other residency requirements.

Returning Student: A student who has previously attended Shasta College but did not enroll during the most recent previous term.

Semester: A subdivision of the academic year into two semesters, usually Fall and Spring, each lasting approximately eighteen weeks. To convert semester units to quarter units, multiply by 3/2. To convert quarter units to semester units multiply by 2/3.

Student Educational Plan: A process that helps the student select a specific educational goal, describes the responsibilities of the student in reaching that goal, and states in written form the courses, programs and services required to achieve that goal. Required for financial aid and veteran students.

Student Learning Assessment: Ongoing processes developed by faculty to assess student learning to ensure that students are attaining knowledge and skills.

Student Senate (SCSS): All Shasta College students are members of the Student Senate and are represented by an elected and appointed student government called the Student Senate.

TBA: To Be Announced or Arranged is noted in the Schedule of Classes when the instructor, room, or time of a course was not known at the time of schedule printing. If the class has no specified hours, the student should contact the instructor to arrange the hours.

Transcript: Official copy of a student's academic record (courses and grades).

UC: University of California. The nearest UC to Shasta College is UC Davis.

University Center: A partnership between Shasta College and several regional universities to bring four-year Bachelor’s degree programs to our District.

Work Study: Usually refers to "College Work Study," a program of federal aid that provides funds for student jobs on campus.
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