



# Santa Rosa Junior College 2001-2002 College Catalog Supplement

Santa Rosa Campus  
1501 Mendocino Avenue  
Santa Rosa, California 95401  
(707) 527-4011 or (800) 564-7752

Petaluma Campus  
680 Sonoma Mountain Parkway  
Petaluma, California 94954  
(707) 778-2415

## Preface

The 2001-2002 Catalog Supplement is intended to serve as an official update of the College's curricula, policies and procedures as of May 2001 to the 2000-2002 College Catalog. Official College policy and information is contained in the biennial catalog.

Every effort has been made to insure the accuracy of this publication. However the provisions in this supplement are not to be regarded as an irrevocable contract between the student and the college. The College reserves the right to revise course requirements and descriptions as it deems appropriate throughout the year, taking precautions that such changes do not cause hardship on students enrolled.

Santa Rosa Junior College directs students to pursue the policies and information in the 2000-2002 biennial catalog and to seek the assistance of a college counselor in regards to specific requirements, regulations and catalog provisions that may apply to their individual circumstances. You may also refer to our website for more information at <http://www.santarosa.edu>.

## Table of Contents

Academic Calendar 2001-2002 .....	2
SRJC Technology Academy/Affirmative Action Statement .....	3
Admissions Requirements .....	4-5
Fee Schedule and Information .....	6
Academic Regulations and Standards .....	7-9
Degree, Transfer and Certificate Programs .....	10-15
California Articulation Number (CAN) System .....	16
General Course Information .....	17
Announcement of Courses .....	18-145
Index .....	146-148

Editor: Barbara Tuscany

Dean of Admissions, Records and Enrollment  
Development: Renee LoPilato

Graphic Design: Mike Garcia

Photography: Renee Robinson

A public Community College of the Sonoma County Junior College  
District Accredited by the Western Association of Schools and Colleges.

## 2001

J	U	N	E		
S	M	T	W	TH	F S
					1 2
3	4	5	6	7	8 9
10	11	12	13	14	15 16
17	18	19	20	21	22 23
24	25	26	27	28	29 30

J	U	L	Y		
S	M	T	W	TH	F S
1	2	3	4	5	6 7
8	9	10	11	12	13 14
15	16	17	18	19	20 21
22	23	24	25	26	27 28
29	30	31			

A	U	G	U	S	T
S	M	T	W	TH	F S
			1	2	3 4
5	6	7	8	9	10 11
12	13	14	15	16	17 18
19	20	21	22	23	24 25
26	27	28	29	30	31

S	E	P	T	E	M	B	E	R
S	M	T	W	TH	F	S		
						1		
2	3	4	5	6	7	8		
9	10	11	12	13	14	15		
16	17	18	19	20	21	22		
23	24	25	26	27	28	29		
30								

O	C	T	O	B	E	R
S	M	T	W	TH	F	S
		1	2	3	4	5 6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

N	O	V	E	M	B	E	R
S	M	T	W	TH	F	S	
					1	2	3
4	5	6	7	8	9	10	
11	12	13	14	15	16	17	
18	19	20	21	22	23	24	
25	26	27	28	29	30		

D	E	C	E	M	B	E	R
S	M	T	W	TH	F	S	
						1	
2	3	4	5	6	7	8	
9	10	11	12	13	14	15	
16	17	18	19	20	21	22	
23	24	25	26	27	28	29	
30	31						

## 2002

J	A	N	U	A	R	Y
S	M	T	W	TH	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

F	E	B	R	U	A	R	Y
S	M	T	W	TH	F	S	
						1	2
3	4	5	6	7	8	9	
10	11	12	13	14	15	16	
17	18	19	20	21	22	23	
24	25	26	27	28			

M	A	R	C	H		
S	M	T	W	TH	F	S
						1 2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

A	P	R	I	L		
S	M	T	W	TH	F	S
		1	2	3	4	5 6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

M	A	Y				
S	M	T	W	TH	F	S
				1	2	3 4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

J	U	N	E			
S	M	T	W	TH	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

J	U	L	Y			
S	M	T	W	TH	F	S
		1	2	3	4	5 6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

A	U	G	U	S	T	
S	M	T	W	TH	F	S
					1	2 3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

# Academic Year 2001-2002

### FALL SEMESTER 2001

April 9	Web Site Information Available ( <a href="http://www.santarosa.edu">http://www.santarosa.edu</a> )
June 25	Priority Web & Telephone Registration for Continuing Students Begins
July 16	Open Web & Telephone Registration for ALL Student Begins
August 13-24	In-Person Registration
August 15	New Faculty Orientation Day
August 16,17	Professional Development Day, No Classes, Limited Services
August 20	Classes Begin
August 24	Last Day to Register/Add Without Instructor's Signature
August 31	Last Day to Drop Semester Length Class and be Eligible for a Refund
September 3	Labor Day Holiday
September 7	Last Day to Register/Add With Instructor's Signature
September 10	First Census Day
September 14	Last Day to Drop a Class Without "W" Symbol
September 28	Last day to opt for CR/NC
October 16	Second Eight Week Classes Begin
October 26	Midterm Reports Issued to Students
November 12	Veterans' Day Holiday
November 22-25	Thanksgiving Day Holidays
November 26	Last Day to Drop a Class With "W" Symbol
December 7	Last Day to Petition to Graduate, December 2001
December 17-21	Final Exams
December 22 - Jan 13	Semester Break
January 14	Grades available to students on Web Link & TLC Express

### SPRING SEMESTER 2002

October 15	Web Site Information Available ( <a href="http://www.santarosa.edu">http://www.santarosa.edu</a> )
November 19	Priority Web & Telephone Registration for Continuing Students Begins
December 6	Open Web & Telephone Registration for ALL Student Begins
January 7-18	In-Person Registration
January 14	Classes Begin
January 18	Last Day to Register/Add Without Instructor's Signature
January 21	Martin Luther King Holiday
January 28	Last Day to Drop Semester Length Class and be Eligible for a Refund
February 1	Last Day to Register/Add With Instructor's Signature
February 4	First Census Day
February 8	Last Day to Drop a Class Without "W" Symbol
February 15	Lincoln's Day Holiday
February 18	Washington's Day Holiday
February 22	Last day to opt for CR/NC
March 12	Second Eight Week Classes Begin
March 22	Midterm Reports Issued to Students
March 25	Last Day to Petition to Graduate, May 2002
March 28, 29	Professional Development Day, No Classes, Limited Services
March 31-April 6	Spring Break
April 26	Last Day to Drop a Class With "W" Symbol
May 20-24	Final Exams
May 25	Commencement Exercises
June 10	Grades available to students on Web Link & TLC Express

### SUMMER SESSION 2002

February 11	Web Site Information Available ( <a href="http://www.santarosa.edu">http://www.santarosa.edu</a> )
May 6	Priority Web & Telephone Registration for Continuing Students Begins
May 9	Open Web & Telephone Registration for ALL Student Begins
May 27	Memorial Day Holiday
June 10-20	In-Person Registration
June 17	Classes Begin
July 4	Independence Day Holiday
July 29-30	6 Week Final Examinations
August 12-13	8 Week Final Examinations
August 26	Grades available to students on Web Link & TLC Express

Board approved 12/12/00

---

# Santa Rosa Junior College New Site / Affirmative Action Statement

---

## SRJC Technology Academy

Santa Rosa Junior College's Technology Academy, which opened in January 2001, is the result of a unique industry/education partnership to provide training for careers in technology-driven industries. Located in the heart of Sonoma County's Telecom Valley (1372 North McDowell Boulevard, Suite H, in Petaluma), the Tech Academy serves individuals seeking entry-level skills, currently employed adults seeking to advance existing skills, and high school co-enrollment students seeking specific skills and preparation for further study. Courses are offered in a framework outside of the "typical" college semester, allowing a greater flexibility for both student and employer.

Substantial funding for the Technology Academy came from the business community including the business park owner, Basin Street Properties, and such telecom industry giants as Advanced Fibre Communications, Alcatel USA, Calix Networks, Cisco Systems, Nokia, and Pacific Bell/SBC DataComm.

For more information and for an updated list of courses being offered at SRJC's Tech Academy, please check our web page: [www.santarosa.edu/techacad/](http://www.santarosa.edu/techacad/).

---

## Affirmative Action Statement

### Equal Opportunity Statement

Santa Rosa Junior College is committed to providing equal opportunities for all students, employees and applicants regardless of race, color, sex, age, religion, marital status, sexual orientation, disability or national origin. Further, the District is assertively seeking to increase the diversity of its staff to reflect the great diversity of its student population. To this end, Santa Rosa Junior College has implemented an Affirmative Action Plan to decrease the under-representation of ethnic minorities, people with disabilities and women.

The District Compliance Officer is responsible for Santa Rosa Junior College's affirmative action efforts, and reports directly to the Superintendent/President on these matters. Complaints regarding accommodation for student, staff and the public, as well as gender equity complaints, should also be brought to the District Compliance Officer.

The lack of English language skills will not be a barrier to admission and participation in the college's vocational education programs.

### Sexual Harassment

Santa Rosa Junior College is committed to an environment in which all employees and students are treated with respect and dignity. Sexual harassment is a form of unlawful discrimination on the basis of sex and is a violation of Federal and State laws as well as Santa Rosa Junior College policy. Complaints of sexual harassment should be referred to the District Compliance Officer.

### Gender Equity

Santa Rosa Junior College is committed to providing equal access for students of both sexes in Vocational Education programs, eliminating sex bias and stereotyping barriers that make it difficult for the student to succeed.

### Igualdad de Oportunidad

Santa Rosa Junior College está comprometido a proveer oportunidades iguales a todos sus estudiantes, empleados, y candidatos sin tomar en cuenta raza, color, sexo, edad, religión, estado civil, orientación sexual, incapacidades o origen nacional. Además, el Distrito se empeña en aumentar la diversidad cultural entre su personal para reflejar la gran diversidad que existe en el cuerpo estudiantil. Con este fin, Santa Rosa Junior College ha implementado un Plan de Acción Afirmativa para disminuir la baja representación de diferentes grupos minorías étnicos o gente con incapacidades y mujeres.

El oficial encargado de mantener este Plan de Acción Afirmativa es responsable de los esfuerzos de Santa Rosa Junior College para cumplir con la acción afirmativa, y está él directamente bajo el mando del Superintendente/Presidente en estos asuntos. Asuntos de desacuerdo estudiantil, personal, y público, incluso asuntos de igualdad entre géneros, deben ser dirigidos a la atención del oficial encargado del cumplimiento, el cual dirigirá el asunto al apropiado representante del Distrito.

La falta de destreza con el idioma de inglés, no será razón de negarle matriculación y participación en los programas de educación vocacional de nuestra institución.

### Hostigamiento Sexual

Santa Rosa Junior College está comprometida a mantener un ambiente en el cual todo el personal y estudiantes son tratados con respeto y dignidad. Hostigamiento sexual es una forma de discriminación ilegal y es violación de ley Estatal y Federal al igual que el reglamento oficial del colegio.

### Igualdad de Generos

Santa Rosa Junior College se compromete a proveer acceso igual a estudiantes de los dos sexos, en sus programas de educación vocacional, eliminando prejuicios de sexos y obstaculos stereotipicos que dificultan el progreso del estudiante. Quejas de hostigamiento sexual deben ser dirigidas al Oficial de Sumision de Distrito en el departamento de Personal.

# Admissions Requirements

---

## Open Classes

It is the policy of this District that, unless specifically exempted by Statute, every course, course section or class reported for State aid wherever offered by the District shall be fully open to enrollment by any person admitted to the College and who meets such prerequisites as may be established.

*Title 5 §51006, Board Policy 8.1.3 revised May 1996.*

---

## Application for Admission

Regular student matriculation requires the filing of:

1. Application for Admission can be obtained from the Admissions, Records & Enrollment Development Office. Furnish required information and evidence of residence so that legal residence can be determined. Furnish social security number for identification purposes. Students who do not have this number should obtain one several weeks in advance of submitting the application or may request a Personal Identification Number (PIN).

### Social Security Number

Prospective students are asked to furnish the College with their social security number on the Application for Admission and other forms concerning the applicant's educational transactions.

The social security number is used as a means of identifying records pertaining to the student, as well as identifying the student for purposes of financial aid, disbursements and any debts payable to the College.

Students who do not wish to use their social security number will be assigned another 9-digit number by an Admissions, Records & Enrollment Development Office located in the district.

### Personal Identification Number (PIN)

For added security, students may request a Personal Identification Number (PIN) in-person at the Admissions, Records & Enrollment Development Office on the Santa Rosa or Petaluma Campus.

Once a PIN has been established, students will need to provide their PIN when using Web Link, TLC Express or in-person enrollment services.

For security reasons, if students forget their PIN, they will need to contact the Admissions, Records & Enrollment Development Office in-person on the Santa Rosa or Petaluma Campus. Please be prepared to show photo identification.

The PIN is an optional service for students wanting added security!

2. Official transcripts of all previous schooling should be sent directly to the Admissions, Records & Enrollment Development Office for counseling purposes. In person submittals must be currently issued in the last year and received in a sealed envelope from the issuing college. Transcripts will be evaluated upon request. Transcripts may be required for graduation. All transcripts become part of the student's permanent record and will not be released to other institutions.

3. Copy of separation papers or documented Basic Training for military reserve members, if evaluation of credit is desired. Contact the Admissions, Records & Enrollment Development Office for additional information.

4. Test scores - Santa Rosa Junior College English Placement Test (APS) is required for placement in an English class. Not required of transfer students who have completed an equivalent English composition course. The Math, College Skills and English as a Second Language Departments also have required placement tests. The results of tests are used in placing students in appropriate courses. Application forms to take tests and other details may be obtained from the high schools or the Assessment Services Office. It is the student's responsibility to have scores sent to Santa Rosa Junior College if such tests are required for particular areas or courses of study.

## High School Concurrent Enrollment Students

High school students (those enrolled in a local high school at the ninth, tenth, eleventh or twelfth grade level) and wishing to enroll in classes at the Junior College are required to submit the Application for Admission for each semester the high school student enrolls. Also required is the High School Concurrent Enrollment Form signed by the high school counselor, approving the student's enrollment at the Junior College.

Students wishing to enroll for summer courses must have completed the eighth grade. Parental consent is required on the High School Concurrent Enrollment Form.

The College reserves the right to restrict enrollment in specified courses or departments.

## Associate Degree Nursing Program

National League for Nursing Pre-Nursing Test is required of all applicants for the Associate Degree Nursing Program in addition to the required placement test for entrance to Santa Rosa Junior College.

Refer to individual program information for test requirements for other Health Science programs.

---

## Residency Requirements

Any person enrolling in Santa Rosa Junior College is subject to the residency requirements determined by the Education Code of the State of California.

### Residence is classified as follows:

#### Resident Student

A resident student is one who has a legal residency in California for more than one year immediately preceding the beginning of the semester and who demonstrates the intent to remain.

#### Nonresident Student

A nonresident student is one who does not have legal residence in California for more than one year immediately preceding the beginning of the semester. Such students are required to pay a tuition fee.

All new students will be required to file an application and statement of residence.

## Admissions Requirements (continued)

### Determination of In-State Residency

A resident is a student who has residence in California for more than one year immediately preceding the opening day of instruction and has demonstrated an intent to remain. Demonstration of intent may be attained by filing California State Income Tax forms or registration to vote in state and local elections or other reasonable evidence of permanent stay in California, such as vehicle registration, work documentation, etc.

1. Persons who are 18 years of age or older may establish residence in accordance with the above statement. Year of residency must begin after the eighteenth birthday.
2. Persons who are under 18 years of age may establish residency in accordance with the above "Resident" definition and the following:
  - a. Married minors may establish their own residence.
  - b. The residence of the supporting parent is the student's residence. In the event of death of both parents, the minor may determine his/her own residence.
  - c. The residence of an unmarried minor who has a parent living cannot be changed by his/her own act, by appointment of a legal guardian or by relinquishment of a parent's right of control (EC S68000).
3. A student who has "permanent residence status" may establish residency in accordance with the preceding "resident" definition.
4. Refugees, asylees and other applicants for legal immigration status may establish residency in accordance with the preceding "resident" definition.

The residency determination date is the day prior to the first day of instruction of each semester. The current Schedule of Classes gives dates for the current semester.

All students classified as nonresident are required to pay a nonresident tuition fee per unit per semester at the time of registration. (This fee is subject to annual change). Nonresident fees are automatically refunded during the first four weeks of a semester on a prorated basis if the student withdraws from a course or the College. (Refer to the section

entitled "Expenses" for information on nonresident and foreign student tuition fees). The date on which the withdrawal is received in the Admissions, Records & Enrollment Development Office will determine the refund date. A nonresident student enrolled in error without payment of the nonresident fee will be excluded from classes upon notification pending payment of the fee. A nonresident student enrolled without payment of fees because of falsification of information will be excluded from classes upon notification pending payment of the fee, shall not be readmitted during the semester or summer session from which he/she was excluded and shall not be admitted to any subsequent semester or session until all previously incurred tuition obligations are paid.

### International Students in F-1 Visa Status

Santa Rosa Junior College encourages and welcomes International applicants. We currently host students from over 40 countries around the world.

#### Admission requirements include:

1. Proof of English language proficiency. Applicants must submit TOEFL test results with a minimum score of 475 (paper test) or 153 (computer-based).
2. Documented evidence of financial ability for the first year of study.
3. Health evaluation, including immunization records. Students must also be covered by medical insurance during their enrollment.
4. Official academic transcripts (in English) of all college work, or proof of graduation from secondary school or high school.
5. Application for admission.
6. Application processing fee of \$25.00 US dollars.
7. All applicants must be at least 18 years of age.
8. Transfer students attending another U.S. institution must submit a Transfer Eligibility Form.
9. Students are required to enroll in 12 units per semester to maintain their status.

### Application Filing Periods

#### Fall semester:

March to July;  
Deadline: July 10.

#### Spring semester:

September to November;  
Deadline: November 20.

For more information on application procedures and admission requirements, please contact International Admissions:

Kim Hunt, Admissions Specialist  
Santa Rosa Junior College  
1501 Mendocino Avenue  
Santa Rosa, CA 95401  
Phone: (707) 524-1751  
Fax: (707) 527-4798  
Email: [khunt@santarosa.edu](mailto:khunt@santarosa.edu)

Website: <http://www.santarosa.edu>

*This school is authorized under Federal law to enroll non-immigrant alien students.*

## Fee Schedule and Information

### Expenses

#### Tuition, Books, Fees, and Housing

Even though there is a state-mandated enrollment fee for all students, there is no tuition charge at Santa Rosa Junior College for California residents. Living costs vary because of many different factors, but the following figures may be helpful in estimating expenses for one semester:

Room and Board (living at home)	\$1224.00*
Transportation (living at home)	\$ 370.00*
Personal expenses (living at home)	\$ 774.00*
Transcript (first two are free)	\$ 1.00
Enrollment Fee	\$ 11.00 per unit **
Health Services Fee	\$ 11.00
Non-resident tuition	\$ 145.00 per unit
International Student Tuition	\$ 156.00 per unit
Student Representation Fee	\$ 1.00

\* Variable \*\*Subject to change by State Legislature

Non-resident tuition is based upon \$151 per unit for the 2001-2002 academic year. See the current Schedule of Classes for subsequent semesters.

Students must have sufficient funds to pay for fees and books at the time of enrollment.

#### Students are required to pay a Health Fee and Student Representation Fee.

The Health Fee supports Student Health Services at Santa Rosa Junior College, which provides a range of health-related services to registered students. The Health Fee may vary depending on the semester/session in which a student is enrolled.

The Student Representation Fee provides support for student representatives who state positions and view points before city, county and district governments and before offices and agencies of the state and federal government. See the current Schedule of Classes for details regarding the fee amounts, refund policy and services available.

Information about waiver eligibility can be obtained at registration for the Health Fee and at Student Affairs for the Student Representation Fee.

#### Refunds

Due to changing registration and other state-mandated fees, up-to-date refund schedules are contained in the current Schedule of Classes.

# Academic Regulations and Standards

## Academic Integrity

Santa Rosa Junior College holds that its primary function is the development of intellectual curiosity, integrity, and accomplishment in an atmosphere that upholds the principles of academic freedom. All members of the academic community – student, faculty, staff, and administrator – must assume responsibility for providing an environment of the highest standards, characterized by a spirit of academic honesty and mutual respect. Because personal accountability is inherent in an academic community of integrity, this institution will not tolerate or ignore any form of academic dishonesty.

Academic dishonesty is regarded as any act of deception, benign or malicious in nature, in the completion of any academic exercise. Examples of academic dishonesty include cheating, plagiarism, impersonation, misrepresentation of idea or fact for the purpose of defrauding, use of unauthorized aids or devices, falsifying attendance records, violation of testing protocol, inappropriate course assignment collaboration, and any other acts that are prohibited by the instructor of record.

*Ed Code: 66300-01, 76030-37; Policy 3.11 May 2001.*

Faculty and students are partners in maintaining the college's academic integrity, in accordance with the guidelines delineated below:

### Faculty Responsibilities

1. Conduct your classroom in a manner that encourages mutual respect, honorable behavior, and learning, thereby promoting student success and discouraging academic dishonesty.
2. Inform students of the course requirements, grading procedures, and rules and expectations for acceptable conduct and behavior in your class, including definitions of plagiarism and the ethical use of technology.
3. Inform students of the SRJC policy (3.11) on Academic Integrity and the Student Conduct Code, which is in the SRJC catalog and part of Policy 8.2.8, Student Discipline.

Explain how these policies will be applied in your classes.

4. Inform students of their rights to due process should they wish to contest an allegation or penalty that you have determined.

### Student Responsibilities

1. Conduct yourself in a manner that encourages mutual respect, honorable behavior, and learning, thereby promoting student success and discouraging academic dishonesty.
2. Learn and understand the course requirements, grading procedures, and rules and expectations for acceptable conduct and behavior in each of your classes, including definitions of plagiarism and the ethical use of technology.
3. Learn and understand SRJC policy (3.11) on Academic Integrity and the Student Conduct Code, which is in the SRJC catalog and part of Policy 8.2.8, Student Discipline and how these policies will be applied in your classes.
4. Learn and understand your rights to due process should you wish to contest an allegation or penalty made by an instructor or other representative of the college.

These procedures focus on academic integrity in the context of the instructor-student relationship in the setting of an instructional program. Instructor obligations are further delineated in Policy 3.9 Instructor's Obligation to the Student. Appropriate student conduct is further delineated in The Student Conduct Code, which is part of SRJC Policy 8.2.8 and is published in the SRJC Catalog.

*Ed Code: 66300-01, 76030-37; Policy 3.11P April 2001.*

## Academic Standards for Probation, Dismissal, and Readmission

### Academic Probation

A student who has attempted (CR grades are not counted) at least 12 semester units as shown by the official academic record shall be placed on academic probation if the student has earned a cumulative GPA between 1.00 and 1.99 in all units which were graded.

### Progress Probation

A student who has enrolled in a total of at least 12 semester units as shown by the official academic record shall be placed on progress probation when the percentage of all units in which a student has enrolled and for which entries of "W", "I" and "NC" are recorded reaches or exceeds fifty percent (50%).

### Removal from Probation

A student on academic probation for a grade point deficiency shall be removed from probation when the student's cumulative GPA is 2.00 or higher.

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

### Standards for Dismissal

For purposes of this section, semesters shall be considered consecutive on the basis of the student's enrollment pattern rather than the calendar pattern. For example, the semesters of a student enrolled Fall, not Spring, but again Fall are considered to be consecutive.

A student who earns a GPA of less than 1.00 for nine (9) or more units attempted during any given semester is subject to dismissal.

A student who is on academic probation shall be subject to dismissal if the student earned a cumulative GPA of 1.99 or below in all units attempted in each of three consecutive semesters which were graded on the basis of the grading scale.

A student who has been placed on progress probation shall be subject to dismissal if the percentage of units in which the student has been enrolled for which entries of "W", "I", and "NC" are recorded in at least three consecutive semesters reaches or exceeds fifty percent (50%).

# Academic Regulations and Standards (continued)

## Qualification for Readmission following Academic/Progress Dismissal

A dismissed student may be readmitted on Probation 1 after fulfilling one of the following conditions:

1. Successful completion (grade of “C” / “CR” or better) of Guidance 56 “Take Charge of Your Learning”, OR
2. An absence of one or more semesters (Fall or Spring only), OR
3. Successful completion of at least one three unit course (letter grade only) with a 2.00 (“C”) or better GPA in summer session, OR
4. Successful completion of at least one three unit course (letter grade only) with a 2.00 (“C”) or better GPA in summer session at another accredited college. Students will be responsible for providing an official transcript to Santa Rosa Junior College’s Admissions Records, & Enrollment Development Office.

The readmitted student is then subject to the normal probation/dismissal standards.

## Exceptions to Dismissal

Readmission is possible by petition: Students who do not meet one of the Qualifications for Readmission following Academic/Progress Dismissal conditions may petition to the Admissions, Records & Enrollment Development Office. The criteria for approval of the petition is:

1. Verifiable special and serious circumstances, such as health, personal or military issues, and
2. Establishing an approved semester plan with a College counselor.

Note: dismissal shall only occur at end of spring semester.

The student readmitted by petition will continue on dismissal status for their readmitted semester of enrollment.

## Progress Renewal Procedure

The alleviation of previously recorded “No Credits” and “Withdrawals” (“NC, “W”) completed at Santa Rosa Junior College will be considered upon submission of this petition by the student to the Admissions Records, & Enrollment Development Office. Upon approval by the Dean of Admissions Records, & Enrollment Development Office, the academic record of the student will be so annotated with appropriate adjustments to the student’s progress status. All previously recorded work, however, will remain legible, ensuring a true and complete academic history. Twenty-four units is the maximum amount of course work to be adjusted.

This procedure is applicable in either of the following cases:

1. The student:
  - a. has not received any “Withdrawals”, “Incompletes”, or “No Credits” in two consecutive semesters following the receipt of “Withdrawals”, “Incompletes”, or “No Credits” and
  - b. has completed a minimum of 4 semester units and
  - c. has a cumulative GPA of 2.0 or better or
2. The passage of four years since the “No Credits” and/or “Withdrawals” were recorded (at the end of the semester).

*Title 5: 55754, 55756 (a-d); Proc: 8.2.6 revised April 2001.*

## Grading

Every course in the College is placed in one of the following grading categories:

- Letter grades only
- Credit/No Credit grades only
- Letter or Credit/No Credit grades
- Ungraded

The determination of the student’s grade by the instructor shall be final in the absence of mistake, fraud, bad faith, or incompetency.

*Ed Code: 70901, 70902, 76000, 76224; Title 5: 55760, 55750-2, 55758; Policy 3.10 Revised May 2001.*

## Grades and Grade Points

<b>A</b> - excellent	4 grade points per unit
<b>B</b> - good	3 grade points per unit
<b>C</b> - satisfactory	2 grade points per unit
<b>D</b> - passing <i>Less than satisfactory</i>	1 grade point per unit
<b>F</b> - failing	0 grade points per unit
<b>I</b> - incomplete <i>Units not counted in GPA</i>	0 grade points 0 units attempted
<b>CR</b> - credit earned <i>At least satisfactory, units not counted in GPA</i>	0 grade points 0 units attempted
<b>NC</b> - no credit <i>Less than satisfactory, not counted in GPA</i>	0 grade points 0 units attempted
<b>W</b> - withdrawal <i>Units not counted in GPA</i>	0 grade points 0 units attempted
<b>MW</b> -military withdrawal <i>Units not counted in GPA or Progress Status</i>	0 grade points 0 units attempted
<b>IP</b> - in progress <i>Units not counted in GPA</i>	0 grade points 0 units attempted

## Unit Defined

One lecture hour and two hours of outside work throughout the semester ordinarily serve as a basis for one unit of credit. The number of hours required per semester unit of laboratory or other activity is approximately three, depending upon the character of the work. Thus, one semester credit hour of community college work should be approximately 48 hours of lecture, study, recitation, demonstration-discussion and laboratory work or any combination thereof.

## Grade Point Average (GPA)

GPA is computed by dividing the total units attempted (including units for courses repeated) into the total grade points. “CR”, “NC”, “I” and “W” are not included in the total course units attempted. For example, a student who earns a grade of “A” in six units, “B” in three units, “C” in three units, “D” in three units and “F” in two and one-half units would have a GPA of 2.40.



# Academic Regulations and Standards (continued)

The computation is shown here:

6.0 units	A x 4 =	24.0 grade points
3.0 units	B x 3 =	9.0 grade points
3.0 units	C x 2 =	6.0 grade points
3.0 units	D x 1 =	3.0 grade points
2.5 units	F x 0 =	0.0 grade points
<b>17.5 units =</b>	<b>42 grade points</b>	
<b>42 grade points/17.5 units = 2.40 GPA</b>		

The GPA for the overall number of units attempted and overall number of grade points can be similarly computed and is known as the Cumulative GPA.

In calculating students' degree applicable grade point averages, grades earned in non-degree applicable courses shall not be included.

*Ed Code: 70901, 70902, 76000, 76224; Title 5: 55760, 55750-2, 55758; Policy 3.10P Revised May 2001.*

## Change of Grades

A change of grade is permitted only in cases of instructor error in the computation of the final grade. Grades cannot be changed by retaking examinations or submitting additional work after the semester is completed.

## Grade Reports

Notices may be issued at midterm time to students enrolled in semester length courses when unsatisfactory progress has been recorded.

Students must request final grades through TLC at the close of the semester to the address carried by the college, providing all obligations are cleared.

## Repetition of a Course

This policy is applicable in any of the following cases:

1. All courses taken here or at any other accredited institution, which Santa Rosa Junior College recognizes as equivalent and for which substandard academic performance is recorded (D, F, NC), may be repeated once beginning Fall 1983.
2. Courses so indicated in this College Catalog may be repeated for the maximum amount of credit awarded regardless of the grade earned.
3. When substandard work has not been recorded, a student may repeat a class that is a requirement for mandated training as a condition of continued paid or volunteer employment without petition.  
*Ed Code: 55763(c).*
4. No other courses may be repeated, unless approved by petition prior to enrollment.
5. The most recent grade earned will determine grade points earned. Additional units attempted will not be charged unless the most recent grade is lower than the previous grade.
6. Additional units completed will not be granted for repetition of a course for which college credit has already been granted unless the course description specifically states otherwise. Repeated courses, when credit has already been granted, will not be used in determining total unit load for financial or other benefits based upon enrollment status.
7. Units will not be granted for a course taken after the completion of a higher course in the same sequence.
8. Students seeking to adjust averages through course repetition must file a request upon completion of the repeated course.

# Associate of Arts & Associate of Science Degrees

The degree of Associate of Arts and Associate of Science can be earned at Santa Rosa Junior College. Requirements for graduation with an Associate Degree are prescribed by the California Community College System and the Board of Trustees of Santa Rosa Junior College.

It is the student's responsibility to file a "Petition to Graduate" by the deadline date during the semester in which he/she plans to complete the requirements. Official transcripts from all colleges previously attended should be submitted as part of the graduation evaluation process. Applicants are notified by mail of their eligibility for the degree.

Commencement exercises for August and December graduates and candidates for May graduation are held on a Saturday morning at the close of the semester in May. The graduation date is recorded on the student's permanent record at the end of the semester in which the requirements are met. Diplomas are mailed several months later.

## General Education Statement of Philosophy

General Education is a body of knowledge that is studied for the purpose of helping each student discover a deeper understanding of the self and a wider understanding of the world. The goal of General Education is to enable each student to recognize the value of intellectual inquiry, of physical well-being, of personal responsibility, and of ethical behavior; to discover the interdisciplinary nature of knowledge; to find joy in the process of self-discovery and creative expression; and to demonstrate critical awareness of and informed participation in the natural and social worlds in which we live.

The General Education requirements for the Associate degree at Santa Rosa Junior College are intended to provide students with a broad yet integrated and coherent introduction to the skills, knowledge, and insights that are the foundation of a college education, the basis for career development, and the motivation for lifelong learning. The intent of the education ideals embodied in general education courses is to cultivate in each student:

1. The skills necessary to think clearly, logically, and ethically; to find information from a variety of sources and technologies; to examine information critically, to communicate effectively both in speaking and in writing; and to reason quantitatively.
2. An understanding of scientific principles and methods of inquiry.

3. An understanding of the complex and interdependent world and biosphere in which we live, including the issues that are essential to the long term well-being of the natural world and to the human community as a part of that world.

4. Knowledge and appreciation of the arts, ideas, and values expressed in the world's cultural traditions.

5. An understanding of history the political and economic practices of societies, and the social and psychological dimensions of human behavior.

6. An understanding and appreciation of the differences and commonalities that exist within the pluralistic society of the United States, including the rights and responsibilities of participating within its democracy.

The completion of General Education at Santa Rosa Junior College represents a substantial achievement that has ongoing, lifelong value to the individual and to society.

## Catalog Rights

Graduation requirements for an Associate Degree are determined according to the catalog in effect at the time of initial enrollment. If enrollment is in any credit course and is continuous (at least one course is taken each academic year), then graduation requirements are taken from the catalog in effect at the time of initial enrollment. When a break in enrollment occurs, graduation requirements are determined according to the catalog in effect at the time of re-entry into continuous enrollment. Students may choose to graduate under the catalog in effect at the time of the petition to graduate. Each new academic year begins with the summer session.

## Unit Requirement

A student must complete a minimum of 60 units in courses numbered 1-299. Courses numbered 300-399 are not applicable to the Associate Degree. Many of the course offerings at the Santa Rosa Junior College do not apply towards the Associate Degree. Plan your course of study carefully with a counselor. Courses numbered 300-399 are designed to meet a variety of student needs and are not applicable toward Associate Degree requirements.

## Scholarship Requirement

A student must have a minimum GPA of 2.00 ("C") or better in graded units which the College accepts toward the Degree and a

minimum GPA of 2.00 ("C") or better in courses taken at Santa Rosa Junior College and submitted as a part of the 60 units.

## Residence Requirement

A student must be enrolled during the semester in which the Degree is granted. A minimum of 12 units must be completed at Santa Rosa Junior College.

## Degree Honors

Degree honors are determined by the student's overall grade point average and includes transfer work submitted to SRJC. A student who has maintained a GPA between 3.20 and 3.39 will be graduated with honors; 3.40 and 3.59, with high honors; and 3.60 or higher, with highest honors.

## Major Requirements

Completion of at least 22 units (exclusive of any other units offered in satisfaction of the Associate Degree requirements) in one of the following patterns:

1. The lower division pattern in a given field for any accredited four-year college or university.
2. The occupational curricula described in the Curricula section of this catalog.

The following majors receive the Associate of Science Degree: Administration of Justice, Agriculture, Chemistry, Computer and Information Sciences, Earth Sciences, Engineering, Fire Technology, all Health Sciences, Life Sciences, Natural Resources, Physics, all Trade/Technical. All other majors receive the Associate of Arts Degree. Refer to the current Schedule of Classes for more information on majors.

## General Education Requirements

Beginning Fall 2000, students have three options in meeting the general education requirements toward earning an Associate in Arts or an Associate in Science Degree at Santa Rosa Junior College. These options are the following:

### Option A

Complete the 22 units of the Associate Degree General Education course requirements, OR

### Option B

Complete the California State University (CSU) General Education course requirements (full certification of 39 units), OR

### Option C

Complete the Intersegmental General Education Transfer Curriculum (IGETC) (full certification).

# General Education Requirements for the Associate Degree

## 2001 Associate in Arts or Associate in Science General Education Requirements Option A

---

### Area A- English Composition

4 units

Engl 1A, 84A, 100B, 104

---

### Area B- Communication & Analytical Thinking

3 units

BAD 52 BMG 53 CIS 5 COMM 5, 66  
ENGL 5 PHIL 3, 4, 5 SPCH 1A, 3A, 9, 60

OR

APTECH 90A, 90B ELEC 90B MATH 1A, 4, 8A, 9, 10, 15, 16, 27, 32, 36, 38, 155 PHYS 1

*Courses underlined also meet the math competency requirement for graduation and must be completed with a grade of C or better.*

*+See other options for completion of math competency on this page.*

---

### Area C- Natural Sciences

3 units

#### Physical Sciences

ASTRON 2, 3, 4, 5 CHEM 1A, 4A, 10, 60  
ELEC 50A ENVS 12 GEOG 4 GEOL 1, 5  
METRO 10 PHYS SCI 1, 10 PHYS 2A, 4A, 10

#### Life Sciences

AG 10, 51 ANAT 1, 51, 58 ANTHRO 1  
BIO 2A, 2B, 3, 10, 12, 13, 15, 20, 25, 60, 80  
BOTANY 10, 60, FDNT 10 HLC 50  
MICRO 5, 60 NRM 10, 51 PHYSIO 1, 58

---

### Area D- Social & Behavioral Sciences

3 units

#### Social Sciences

AJ 25, 56 AG 7 ANTHRO 3, 21, 32 BAD 10,  
51 CHILD 10, 68, 90.1 COMM 7 ECON 1A,  
10, 20, 30 GEOG 3, 7 HIST 17.1, 17.2, 18.1,  
18.2, 20, 21, 33 POLS 1, 2, 18, 25, 70  
SOCS 12, 100

#### Behavioral Sciences

ANTHRO 2, 30 COUN 74 PSYCH 1A, 5, 30,  
34, 53 SOC 1, 2, 10, 30

---

### Area E- Humanities

3 units

#### Fine Arts and Humanities

ANTHRO 31, 43 ART 1.1, 1.2, 2.1, 2.2, 2.3  
HIST 1.1, 1.2, 4.1, 4.2 HUMAN 4.1, 4.2, 6, 7,  
8, 9, 10.1, 10.2, 10.3, 10.4, 106 INTDIS 1, 2  
MEDIA 4, 41, 42 MUS 6.1, 6.2, 6.3, 7.1, 7.2,  
7.3, 9 PE 40 SPCH 2 THAR 1, 6

#### Philosophy and Literature

ASL 1A, 1B, 2A, 2B ENGL 1B, 2, 3, 7, 15, 22,  
25, 30.1, 30.2, 31, 32, 33, 44.1, 44.2, 46.1,  
46.2 Modern & Classical Languages 1, 2, 2S  
3, 4, 39, 39.1, 39.2 PHIL 6, 7, 8, 9, 12, 20,  
21 THAR 12

---

### Area F- American Institutions

3 units

HIST 17.1, 17.2, 18.1, 18.2, 21 POLS 1  
SOCS 100

---

### Area G- American Cultures/Ethnic Studies

3 units

#### American Cultures

ANTHRO 21 BAD 66 CHILD 68 COMM 7  
COUN 74 ENGL 22 HIST 21, 22 HUMAN 6,  
10.4, 106, INTDIS 2 LIR 22 PHIL 9  
POLS 20 PSYCH 34 SOC 30 SPAN 4  
THAR 6

#### Ethnic Studies

ANTHRO 31, 32, 34, 43 ENGL 32, 33 HIST 30

### Please Note:

Students are encouraged to choose courses from a wide variety of disciplines. In areas B through E, no more than 3 units from any one discipline may be counted in fulfillment of graduation requirements. No course may be used more than once to fulfill areas A through G.

### + Math Competency

Competency in mathematics may be demonstrated by completing any of the following:

1. Completion of the following coursework with a grade of C or better: AG 78, BMG 54, or IED 90B.
2. Completion of approved Area B math coursework with a grade of C or better.
3. High School coursework plane geometry or higher with a grade of C or better.
4. Satisfactory score on the Math competency exam. (Exam may be taken only once every six months).

*Elimination of math recency requirement Board approved May 2001. Effective date begins with Summer 2000.*

# CSU General Education Pattern

## 2001 California State University General Education Requirements and Associate Degree Option B

CSU regulations state that to earn a Bachelor's Degree, each student must complete at least 48 units of General Education. Of these 48 units, 9 units must be completed after reaching Junior standing and after transferring to the four-year institution.

Some CSU's require additional GE units; check the catalog of the State University of your choice after you have decided upon a major. For advice and assistance, see a counselor or advisor.

Students having 56 transferable semester units with a "C" average (2.0) will be eligible to transfer to any California State University providing a minimum of 30 units in General Education, including all of Area A and B4, is complete with grades of "C" or better.

Santa Rosa Junior College will certify completion of 39 units of the 48 unit General Education requirement for graduation from the CSU. It is required that students complete all of Area A and B4 with grades of "C" or better prior to transfer. No more than 30 lower division units will be certified from Areas B, C, and D combined. Students transferring without certification should consult the catalog of the campus to which they wish to transfer for specific requirements.

To be fully certified, students must complete 9 units in each area of A, B, C, and D and 3 units in Area E.

Completion of the CSU General Education Pattern (full certification of 39 units) is one option (Option B) in meeting the general education requirements toward earning an Associate in Arts or an Associate in Science Degree at Santa Rosa Junior College.

### NOTE:

In addition to courses in general education, major courses may be needed prior to transfer. Check with a counselor.

---

### Area A - Communication in the English Language & Critical Thinking

*9 units required. (One course required from each of A1, A2, and A3).*

#### 1. Oral Communication

SPCH 1A, 60

#### 2. Written Communication

ENGL 1A

#### 3. Critical Thinking

ENGL 5 PHIL 3, 5 SPCH 3A, 9 SOCS 5

---

### Area B - Physical Universe & Its Life Forms

9 units required. (Complete one course from each of B1, B2, B3, & B4).

#### 1. Physical Universe

ASTRON 2\*, 3, 3L\*@, 4, 4L\*@, 5\*, 12\*@ CHEM 1A\*, 1B\*, 4A\*, 4B\*, 8\*, 10 ENVS 12 GEOG 4 GEOL 1, 1L\*, 5\* METRO 10, 10L\* PHYSC 1\*, 10 PHYSICS 2A, 2B, 3A\*, 3B\*, 4A\*, 4B\*, 4C\*, 4D, 10, 10L\*

#### 2. Life Forms

AG 10, 51\* ANAT 1\*, 51\*# ANTHRO 1, 1L\* BIO 2A\*, 2B\*, 3\*, 10\*, 12, 13, 20, 25\*, 60\*, 80\* BOTANY 10\*, 60\* MICRO 5\*, 60\* NRM 10, 51\* PHYSIO 1\*

#### 3. \*Laboratory

Courses with the following symbols meet the laboratory requirement:

\* Any course from Group 1 or 2 with an "\*"

# ANAT 51 must be a minimum of 3 units

\*@ ASTRON 3L, 4L or 12 fulfills Area B-3 only if taken with ASTRON 3 or 4

#### 4. Quantitative Reasoning

MATH 1A, 1B, 4, 8A, 8B, 9, 10, 15, 16, 27, 32, 36, 38

---

### Area C - Arts, Literature, Philosophy & Foreign Languages

9 units required. (Three courses to include at least one course from Arts and one course from Humanities). (No more than two courses can be selected from any one discipline).

#### 1. Arts

ANTHRO 31, 43 ART 1.1, 1.2, 2.1, 2.2, 2.3, 3, 4, 5, 7A, 42 MEDIA 4, 41, 42 MUSIC 6.1, 6.2, 6.3, 7.1, 7.2, 7.3, 9 PE 40, THAR 1, 6

#### 2. Humanities

ASL 1A, 1B, 2A, 2B ENGL 1B, 2, 3, 7, 15, 22, 25, 27, 30.1, 30.2, 31, 32, 33, 44.1, 44.2, 46.1, 46.2 HIST 1.1, 1.2, 4.1, 4.2 HUMAN 4.1, 4.2, 6, 7, 8, 9, 10.1, 10.2, 10.3, 10.4 INTDIS 1, 2 PHIL 6, 7, 8, 9, 12, 20, 21 SPCH 2 THAR 12

Any Modern or Classical Language course numbered 1, 2, 2S, 3, 4, 39, 39.1, 39.2

#### 3. Third course to be chosen from C1 or C2

---

### Area D - Social, Political & Economic Institutions

9 units required. (No more than two courses can be selected from any one discipline).

AJ 56 AG 7 ANTHRO 2, 3, 21, 32 BAD 10, 51, 66 CHILD 10 COMM 7, 10 COUN 74 ECON 1A, 10, 20, 30 GEOG 3, 7 HIST 8.1, 8.2, 17.1, 17.2, 18.1, 18.2, 20, 21, 22, 30, 33 POLS 1, 2, 18, 20, 25, 70 PSYCH 1A, 4, 5, 30 SOCSCI 12 SOC 1, 2, 30

---

### Area E - Lifelong Understanding & Self Development

3 units required.

BAD 52 BIO 15 CHILD 90.1 COMM 5, 66 CNIS 92, 97 COUN 70 FDNT 10 HLE 50 PHYSIO 50 PSYCH 3, 34, 35, 40, 52, 53, 56 SOC 10, 61

---

### Area F - U.S. History, Constitution & Government

Completion of one course in American History and one course in American Government is a requirement to graduate from any CSU campus. All CSU's will allow these courses to be double counted in Area D if certified by SRJC.

#### 1. HISTORY 17.1, 17.2, 18.1, 18.2, 21

#### 2. POLITICAL SCIENCE 1

# Intersegmental General Education Transfer Curriculum

## 2001 IGETC Transfer Pattern to the UC and CSU Systems and Associate Degree Option C

The Intersegmental General Education Transfer Curriculum will permit a student to transfer from a community college to a campus in either the California State University or the University of California system without the need, after transfer, to take additional lower-division, general education courses to satisfy campus general education requirements.

Completion of the IGETC is not a requirement for transfer to a CSU or UC, nor is it the only way to fulfill the lower-division, general education requirements of the CSU or UC prior to transfer. Students may find it advantageous to take courses fulfilling CSU's general education requirements or those of a particular UC campus.

Completion of the IGETC will not automatically satisfy the UC or CSU Systemwide American History and Institutions graduation requirement.

Completion of the IGETC (full certification) is one option (Option C) in meeting the general education requirements toward earning an Associate in Arts or an Associate in Science Degree at Santa Rosa Junior College.

### IGETC After Transfer Policy

This policy provides students with a demonstrated need the opportunity to complete one or two IGETC courses after transferring to UC or CSU providing that those courses are not among those courses required for admission. Please see your counselor for additional information and guidelines.

- \* May be counted in one area only
- \*\* Transfer credit may be limited by the UC. Please consult with a counselor for additional information
- (L) Designates course with a laboratory
- † Effective Fall 1992
- †† Effective Fall 1993
- ‡ Effective Fall 1994
- ‡‡ Effective Fall 1995
- @ Effective Fall 1996
- @@ Effective Fall 1997
- ◆ Effective Fall 1998
- ◆◆ Effective Fall 1999

### Area 1 - English Communication

CSU - 3 courses required, one from each group below;  
UC - 2 courses required, on each from Group A and B.

#### Group A: English Composition

1 course, 3 semester/4-5 quarter units.

English 1A

#### Group B: Critical Thinking - English Composition

1 course, 3 semester/4-5 quarter units.

English 5††

Philosophy 5

Social Science 5@@

Speech 9‡‡

#### Group C: Oral Communication

1 course, 3 semester/4-5 quarter units (required for CSU only).

Speech 1A

### Area 2 - Mathematical Concepts & Quantitative Reasoning

1 course, 3 semester units/4-5 quarter units.

Math 1A\*\*, 1B\*\*, 4, 8A††\*\*, 9, 10, 15††\*\*, 16\*\*, 27\*\*◆

### Area 3 - Arts & Humanities

At least 3 courses, with at least one from the Arts and one from the Humanities. 9 semester/12-15 quarter units.

#### Arts

Anthropology 43

Art 1.1@@, 1.2@@, 2.1, 2.2, 2.3, 3, 4, 42

Media 4\*\*, 41, 42

Music 6.1, 6.2, 6.3‡, 7.1, 7.2, 7.3‡‡, 9

Physical Education 40‡‡

Theatre Arts 1, 6@@

#### Humanities

Anthropology 31

English 1B ‡‡, 2, 3, 7††, 15, 22††, 25@, 27, 30.1, 30.2, 31††, 32, 33, 44.1, 44.2, 46.1, 46.2

French 2, 3, 4, 39.1, 39.2

German 2†, 3, 4, 39

History 1.1‡, 1.2‡, 4.1, 4.2

Humanities 4.1, 4.2, 6, 7\*\*, 8, 9, 10.1, 10.2, 10.3, 10.4@@

Interdisciplinary 1◆◆, 2◆◆

Italian 2, 3, 4, 39.1, 39.2

Japanese 39

Latin 3, 4

Philosophy 6, 7, 8, 9@@, 12@@, 20, 21

Russian 39.1, 39.2

Spanish 2\*\*, 3, 4, 39.1, 39.2

### Area 4 - Social & Behavioral Sciences

At least 3 courses from at least two disciplines or an interdisciplinary sequence. 9 semester/12-15 quarter units.

Anthropology 2, 3, 21, 32

Child Development 10†\*\*

Communication Studies 7‡‡, 10\*\*

Economics 1A, 1B, 10, 20\*\*, 30@

Geography 3, 7

History 8.1, 8.2, 17.1\*\*, 17.2\*\*, 18.1‡\*\*, 18.2‡\*\*, 20†, 21††, 22†, 30, 33@

Political Science 1\*, 2, 18, 20◆◆, 25

Psychology 1A, 3, 4\*\*, 5‡‡, 30, 34\*\*, 35, 40

Social Science 12

Sociology 1, 2, 10, 30\*\*

### Area 5 - Physical & Biological Sciences

2 courses, one Physical Science course and one Biological Science course; at least one must include a laboratory (indicated by "L" in parentheses). 7-9 semester/ 9-12 quarter units.

#### Physical Science

Astronomy 2\*\* (L), 3\*\*, (3L)◆, 4\*\* (4L)◆, 5\*\* (L), 12 (L)

Chemistry 1A\*\* (L), 1B\*\* (L), 4A\*\* (L), 4B\*\* (L), 8\*\* (L)

Geography 4

Geology 1, 1L (L)\*\*, 5 (L)

Meteorology 10, 10L (L)

Physical Science 1\*\* (L), 10\*\*

Physics 2A\*\*, 2B\*\*, 3A (L), 3B (L), 4A\*\* (L), 4B\*\* (L), 4C\*\* (L), 10\*\*, 10L\*\* (L)

#### Biological Science

Anatomy 1 (L)

Anthropology 1, 1L (L)

Biology 2A (L), 2B (L), 3 (L), 10\*\* (L), 12, 13, 20, 25 (L)

Botany 10 (L)

Microbiology 5 (L)

Physiology 1 (L)

### Language Other Than English

(Required for UC certification only)

Proficiency equivalent to two years high school study in the same language with a grade of "C" or better OR earn a score of 3 or higher on the Foreign Language Advanced Placement Test OR 550 on the College Board Achievement Test in Foreign Language OR complete Level 1 at SRJC:

American Sign Language 1A@, French 1, German 1, Italian 1, Latin 1, Spanish 1

### CSU Graduation Requirement in U.S. History, Constitution and American Ideals

(Not part of IGETC; however may be completed prior to transfer) 6 units, one course from group 1 and one course from group 2

1. History 17.1\*, 17.2\*, 18.1\*, 18.2\*, 21\*

2. Political Science 1\*

## Career and Mastery Certificates

Occupational education through the pursuit of a certificate at Santa Rosa Junior College prepares students for employment and/or further study. Specialized instruction in a specific field of interest lends itself to increased opportunity. However, not all preparation required by a vocation can result from an instructional pattern, which is basic and designed to help students prepare for employment or further education.

Instructional programs reflect community and area employment patterns. Citizen advisory committees make recommendations for effective instruction at the College to assist in job placement and occupational advancement.

Upon the successful completion of most occupational curricula the student is graduated and receives an Associate Degree. Students are encouraged to continue their education at four-year institutions. The two-year curriculum affords an opportunity for trainees to develop breadth and depth in their educational experience. General education is considered to be complementary to occupational education.

The College is cognizant of social and technological change and the need for constant review and evaluation of occupational instruction. Training opportunities are provided through evening offerings for those presently employed.

Occupational work experience credit is available to employed students enrolled in occupational programs -both day and evening.

The following is a list of the various certificate programs available at Santa Rosa Junior College. A detailed description of each certificate program can be found in the Schedule of Classes or at <http://www.santarosa.edu/certificates/>.

### Administration of Justice/Public Safety

- Basic Police Academy, Extended
- Basic Police Academy, Intensive
- Children and the Justice System Career Certificate
- Corrections Career Certificate
- Corrections Officer Basic Course Mastery Certificate
- Emergency Medical Technician Mastery Certificate
- Emergency Medical Technician Refresher Mastery Certificate
- Emergency Medical Technician-Paramedic Career Certificate
- Fire Technology Career Certificate
- Firefighter I Academy, Extended
- Firefighter I Academy, Intensive
- Juvenile Counselor Basic Course Mastery Certificate
- Law Enforcement Career Certificate
- Probation Officer Basic Course Mastery Certificate
- Public Safety Dispatcher Mastery Certificate
- Ranger Academy Mastery Certificate

### Agriculture/Natural Resources

- Agribusiness Career Certificate
- Animal Science Career Certificate
- Equine Science Career Certificate
- General Agriculture Career Certificate
- Horticulture - Landscape Management Career Certificate
- Natural Resources Conservation Technology Career Certificate
- Nursery Production Career Certificate
- Park and Recreation Technology Career Certificate
- Plant Science Career Certificate
- Viticulture Management Career Certificate
- Wine Marketing and Sales-Viticulture Career Certificate

### Applied Technology

- Applied Graphics Career Certificate
- Architecture and Construction Technology Career Certificate
- Civil and Surveying Technology Career Certificate

### Art

- Fine Arts Career Certificate

### Business Administration

- Accountant Assistant Career Certificate
- Client Service Specialist Career Certificate
- Hospitality Career Certificate
- Human Resource Administration Career Certificate
- International Business Mastery Certificate
- Office Manager Mastery Certificate
- Real Estate Career Certificate
- Retail Merchandising Management Career Certificate
- Sales and Marketing Career Certificate
- Small Business Management Career Certificate
- Supervisory Management Career Certificate
- Tax Assistant Clerk Mastery Certificate

### Business Office Technology

- Account Clerk Career Certificate
- Administrative Assistant Career Certificate
- Bookkeeper Assistant Career Certificate
- Bookkeeper Career Certificate
- Computerized Office Training Career Certificate
- Entry Level Office Worker Career Certificate
- International Office Assistant Mastery Certificate
- Legal Office Specialist Career Certificate

## Career and Mastery Certificates (continued)

Legal Office Support Mastery Certificate  
Office Assistant Mastery Certificate  
Payroll Mastery Certificate  
Teleservices Mastery Certificate  
Virtual Assistant Mastery Certificate

### Child Development

Associate Teacher Career Certificate  
Early Intervention Assistant Career Certificate  
School Age Care Mastery Certificate  
Teacher Mastery Certificate

### Communication Studies

Communication Studies Career Certificate

### Computer & Information Sciences

Adobe Applications Specialist Mastery Certificate  
Adobe Certification Training in PageMaker Mastery Certificate  
Adobe Certification Training in Photoshop Mastery Certificate  
DreamWeaver Web Content Developer Mastery Certificate  
FrontPage Web Content Developer Mastery Certificate  
General Media Mastery Certificate  
GoLive Web Content Developer Mastery Certificate  
HTML Web Content Developer Mastery Certificate  
Microcomputer Systems Specialist Career Certificate  
Microcomputer Systems User Career Certificate  
Microsoft Office Specialist Mastery Certificate  
Microsoft Office User Mastery Certificate  
Networking with Cisco Mastery Certificate  
Networking with Microsoft Windows Mastery Certificate  
Networking with Microsoft Windows NT Mastery Certificate  
Unix Linux Mastery Certificate  
Web Site Development Mastery Certificate

### Consumer and Family Studies

Baking & Pastry Mastery Certificate  
Culinary Arts Career Certificate  
Culinary Arts Support Services Mastery Certificate  
Culinary Training Career Certificate  
Dietetic Technology Career Certificate  
Fashion Studies - Apparel Design and Production Career Certificate  
Fashion Studies - Custom Clothing & Alterations Career Certificate

Fashion Studies - Merchandising Career Certificate  
Floristry Career Certificate  
Front House Operations Mastery Certificate  
Interior Retail Merchandising (Level1)  
Pre-Professional: Interior Design Assistant (Level2)  
Professional: Interior Design (Level 3) Mastery Certificate

### Counseling

Human Services Career Certificate

### Electronic Technology

Electronic Technology, Day Program Career Certificate  
Electronic Technology, Evening Program Career Certificate

### Health Sciences

Associate Degree Nursing Career Certificate  
Community Health Worker Training Program Career Certificate  
Dental Assisting -11 Month Program Career Certificate  
Dental Assisting - 22 Month Program Career Certificate  
Dental Hygiene Associate Degree Career Certificate  
Medical Assisting - Administrative - Track 2  
Medical Assisting - Clinical - Track 3 Career Certificate  
Medical Assisting-Administrative and Clinical-Track 1 Career Certificate  
Medical Assisting-Claims Processing-Coding-Track 5 Career Certificate  
Medical Assisting-Medical Transcription-Track 4 Career Certificate  
Nurse Assistant - Home Health Aide Career Certificate  
Psychiatric Technician Career Certificate  
Radiologic Technology Career Certificate  
Vocational Nursing Career Certificate  
Vocational Nursing to ADN Career Ladder Mastery Certificate

### Industrial and Trade Technology

Aeronautical and Aviation Technology Career Certificate  
Automotive Technology Career Certificate  
Diesel Equipment Technology Career Certificate  
Machine Tool Technology Career Certificate  
Welding Technology Career Certificate

### Physical Education, Dance & Athletics

Athletic Training Mastery Certificate  
Dance Mastery Certificate

### Theater Arts

Theater Arts Career Certificate

# California Articulation Number (CAN) System

SRJC participates in the California Articulation Number System (CAN). The CAN system is designed to help students transfer to other public colleges in California. In the SRJC Catalog and in the Schedule of Classes, many courses are identified with a CAN. For example, English 1A is identified as CAN ENGL 2 at the end of the course description. This means that all campuses in California participating in the CAN system will accept our English 1A course in lieu of the specific English course on their campus that has been identified as CAN ENGL 2. Each campus retains and uses its own course number and title. The CAN designation identifies courses that can be used in lieu of other courses. To qualify a course for CAN, SRJC needs to have articulated the course with at least four CSU and/or UC campuses. In addition to the CAN courses listed below, many other SRJC courses are articulated with four-year institutions and will fulfill lower division requirements. SRJC courses numbered 1-49 and most Physical Education courses will transfer to the UC system for units. Courses numbered 1-99 and all Physical Education courses will transfer to the CSU system for units.

SRJC Course	CAN Course	SRJC Course	CAN Course
AG 2	AG 2	PHYSIO 1	BIOL 12
AG 20	AG 6	MICRO 5	BIOL 14
AG 51	AG 8	BIO 2A, 2B, 3	BIOL SEQ A
AG 92.1	AG 10	ANAT 1+ PHYSIO 1	BIOL SEQ B
AG 62	AG 20	BAD 1	BUS 2
AG 63	AG 22	BAD 2	BUS 4
AG 25	AG 26	CIS 66	BUS 6
AG 64	AG 28	BAD 18	BUS 12
AJ 21	AJ 2	BAD 1+2	BUS SEQ A
AJ 22	AJ 4	CHEM 1A	CHEM 2
AJ 54	AJ 6	CHEM 1B	CHEM 4
AJ 51A	AJ 8	CHEM 5	CHEM 12
ANTHRO 1	ANTH 2	CHEM 1A+1B	CHEM SEQ A
ANTHRO 2	ANTH 4	CIS 5	CSCI 2
ANTHRO 3	ANTH 6	MATH 36	CSCI 4
ART 2.1	ART 2	CIS 16A	CSCI 6
ART 2.2	ART 4	CIS 12A	CSCI 8
ART 31A	ART 6	CIS 22	CSCI 10
ART 7A	ART 8	CIS 20A	CSCI 16
ART 14A	ART 10	CIS 10A, 10B	CSCI 22
ART 33A	ART 12	CIS 11	CSCI 24
ART 3	ART 14	THAR 10A	DRAM 8
ART 5	ART 16	THAR 26	DRAM 10
ART 36	ART 18	THAR 20	DRAM 12
ART 24	ART 20	THAR 22A	DRAM 14
ART 4	ART 22	THAR 25	DRAM 16
ART 12	ART 24	ECON 1A	ECON 2
ART 71A	ART 26	ECON 1B	ECON 4
ART 2.1+2.2	ART SEQ A	ENGL 1A	ENGL 2
BIO 3	BIOL 2	ENGL 1B	ENGL 4
BIO 2A	BIOL 4	ENGL 4A or 4B or 4C	ENGL 6
BIO 2B	BIOL 6	ENGL 46.1	ENGL 8
ANAT 1	BIOL 10	ENGL 46.2	ENGL 10

SRJC Course	CAN Course
ENGL 30.1	ENGL 14
ENGL 30.2	ENGL 16
ENGL 2	ENGL 18
ENGL 3	ENGL 20
ENGL 1A+1B	ENGL SEQ A
ENGL 46.1+46.2	ENGL SEQ B
ENGL 30.1+30.2	ENGL SEQ C
ENGR 25	ENGR 2
ENGR 45	ENGR 4
ENGR 16	ENGR 6
ENGR 34	ENGR 8
ENGR 1	ENGR 10
FDNT 10	FCS 2
FASH 8	FCS 6
FASH 70A	FCS 10
SOC 10	FCS 12
CHILD 10	FCS 14
FREN 1	FREN 2
FREN 2	FREN 4
FREN 3	FREN 8
FREN 4	FREN 10
FREN 1+2	FREN SEQ A
FREN 3+4	FREN SEQ B
GEOG 4	GEOG 2
GEOG 7	GEOG 4
GEOL 1+1L	GEOL 2
GEOL 5	GEOL 4
GERM 1	GERM 2
GERM 2	GERM 4
GERM 3	GERM 8
GERM 4	GERM 10
GERM 1+2	GERM SEQ A
GERM 3+4	GERM SEQ B
POL SC 1	GOVT 2
HIST 4.1	HIST 2
HIST 4.2	HIST 4
HIST 17.1	HIST 8
HIST 17.2	HIST 10
HIST 1.1	HIST 14
HIST 1.2	HIST 16
HIST 4.1+4.2	HIST SEQ A
HIST 17.1+17.2	HIST SEQ B
HIST 1.1+1.2	HIST SEQ C
ITAL 1	ITAL 2
ITAL 2	ITAL 4
ITAL 3	ITAL 8
ITAL 4	ITAL 10
ITAL 1+2	ITAL SEQ A
ITAL 3+4	ITAL SEQ B
JOUR 2	JOUR 2

SRJC Course	CAN Course
JOUR 1	JOUR 4
MATH 10	MATH 2
MATH 9	MATH 12
MATH 1A	MATH 18
MATH 1B	MATH 20
MATH 2A	MATH 22
MATH 2B	MATH 24
MATH 5	MATH 26
MATH 8A	MATH 30
MATH 8B	MATH 32
MATH 16	MATH 34
MATH 1A+1B	MATH SEQ B
MATH 1A+1B+2A	MATH SEQ C
MATH 8A+8B	MATH SEQ D
MUS 2A+3A	MUS 2
MUS 2B+3B	MUS 4
MUS 6.1	MUS 8
MUS 6.2	MUS 10
MUS 2A+2B+3A+3B	MUS SEQ A
MUS 6.1+6.2	MUS SEQ B
PHIL 6	PHIL 2
PHIL 7	PHIL 4
PHIL 4	PHIL 6
PHIL 20	PHIL 8
PHIL 21	PHIL 10
PHIL 20+21	PHIL SEQ A
PHYS 2A+3A	PHYS 2
PHYS 2B+3B	PHYS 4
PHYS 4A	PHYS 8
PHYS 4C	PHYS 12
PHYS 2A+2B+3A+3B	PHYS SEQ A
PHYS 4A+4B+4C+4D	PHYS SEQ C
PSYCH 1A	PSY 2
PSYCH 1B	PSY 8
NRM 60	REC 6
SOC 1	SOC 2
SOC 2	SOC 4
SPAN 1	SPAN 2
SPAN 2	SPAN 4
SPAN 3	SPAN 8
SPAN 4	SPAN 10
SPAN 1+2	SPAN SEQ A
SPAN 3+4	SPAN SEQ B
SPCH 1A	SPCH 4
SPCH 3A	SPCH 6
COMM 66	SPCH 8
COMM 5	SPCH 10
MATH 15	STAT 2

Qualified courses as of 3/2001  
www.cansystem.org



# General Course Information

## Course Numbering

SRJC courses numbered 1-99 are designated as baccalaureate degree courses and are accepted by the CSU system.

The UC will accept only those courses numbered 1-49. These courses are noted at the end of the course description with a (CSU/UC) to indicate their transferability.

Courses numbered 100-199 are intended for the Associate Degree and are not accepted by the CSU system or by the UC.

Courses numbered 200-299 are designed as part of specialized programs for various fields.

Please note: A particular CSU may, at its discretion, accept 200-299 courses, which have not been certified or identified as baccalaureate level, after admission eligibility has been determined (56 units of courses numbered in the 1-99 series), if, in its judgement, these courses are applicable to a particular Baccalaureate Degree program.

Courses numbered 300-399 are courses designed to meet various student needs and are not applicable to the Associate Degree or to transfer.

Courses numbered 400-899 do not carry any credit.

## Course Offerings

Since course offerings are modified continuously, the College may cancel any course having insufficient enrollment.

The responsibility for fulfilling all requirements of the Junior College and the transfer institution is the student's. The requirements and policies vary in different colleges and universities; therefore, the student should consult the latest catalog of the institution to which he/she plans to transfer.

## Course Symbols

Where applicable, following the end of each course description it is noted if the course meets requirements for the SRJC Associate Degree, CSU General Education pattern, and/or the IGETC pattern. It should be noted that both the graduation and transfer requirements are subject to change. Students should consult their counselors for a final decision.

### Example:

#### **ANAT 1 General Human Anatomy**

*5 units/3 hours lecture, 6 hours laboratory. CR/NC option.*

*Prerequisite: College biology with grade of "C" or better.*

*Recommended: Eligibility for ENGL 100A or equivalent.*

Developmental, gross and microscopic structure of mammalian tissue and organs with emphasis on the human. (CSU/UC)

*AA/AS area C; CSU areas B2 & B3; IGETC area 5; CAN BIOL 10*

## Prerequisites, Corequisites and Advisories

If a course has a prerequisite or corequisite indicated, a student is not allowed to enroll in the class unless he or she has met the stated prerequisite(s). A student has the

right to challenge a course corequisite/prerequisite based on the following grounds: the corequisite/prerequisite has not been established in accordance with the district's process for establishing corequisite/prerequisites; the corequisite/prerequisite is either unlawfully discriminatory or is being applied in an unlawfully discriminatory manner; or the student has the knowledge or ability to succeed in the course or program despite not meeting the corequisite/prerequisite. The burden of proof is on the student. If the challenge is upheld, the student may enroll; if not, the student will be dropped or not allowed to enroll in the class.

Each student is responsible for meeting all course corequisite/prerequisites.

Students may not receive credit for a Santa Rosa Junior College course which is a prerequisite to a Santa Rosa Junior College course he or she has already completed.

Many courses have "recommended preparations".

While students can enroll in the course without completing the recommended course, it must be taken seriously. If you are not sure if you are prepared to take a course, see your counselor or advisor.

## Provisional Prerequisites

Prerequisites for specific courses are considered "provisional" until the prerequisite is validated as required by Title 5 mandates through the process established under Santa Rosa Junior College's District Model Policy. This is the standard requirement for all new courses with an English or computational prerequisite.

## Unit Defined

One lecture hour and two hours of outside work throughout the semester ordinarily serve as a basis for one unit of credit. The number of hours required per semester unit of laboratory or other activity is approximately three, depending upon the character of the work. Thus, one semester credit hour of community college work should be approximately 48 hours of lecture, study, recitation, demonstration-discussion and laboratory work or any combination thereof.

## Repeat Codes

See Individual Course Descriptions. There are limitations on the number of times you may repeat a course. In this publication all courses with no repeat notation following the course descriptions may be repeated once only if a grade of D, F, or N/C was earned. A student may petition to repeat a course beyond the limitations listed providing there are extenuating circumstances such as verified cases of accidents, illness, or other circumstances beyond the control of the student or because there has been a significant lapse of time (3 years or longer) since the student previously took the course.

Courses taken in the Fall 1983 semester count as first time.

1. May be taken for a total of 1 unit.
2. May be taken for a total of 2 units.

3. May be taken for a total of 3 units.
4. May be repeated with different topics.
5. May be taken for a total of 4 units.
6. May be taken for a total of 4 units within 4 semesters.
7. May be taken for a total of 5 units within 4 semesters.
8. May be taken for a total of 6 units.
9. May be taken for a total of 6 units within 4 semesters.
10. May be taken for a total of 8 units.
11. May be taken for a total of 8 units within 4 semesters.
12. May be taken for a total of 9 units.
13. May be taken for a total of 10 units within 2 semesters.
14. May be taken for a total of 12 units.
15. May be taken for a total of 12 units within 4 semesters.
17. May be taken twice if necessary to qualify for ENGL 1A.
18. MUS 5A, 5B, 5C and 5D, 5E, 5F may be taken 4 times total in any combination.
19. MUS 10A, 10B, 10C, 10D, 11A & 11B may be taken 4 times total in any combination.
20. May be taken for a total of 4 units in any combination.
22. All P.E. activities (e.g. tennis, golf, soccer, swimming, etc.) may be completed 4 times for credit in whatever combination of levels (beginning, intermediate or advanced).
23. All intercollegiate athletics courses may be taken twice or for a total of 4 units.
24. May be taken for a total of 14 units.
25. May be taken for a total of 16 units.
26. May be taken for a total of 18 units.
27. Course exempt from repeat provisions.
28. May be repeated with different topics for a total of 6 units.
29. May be taken for a total of 12 units in any combination.
30. May be taken for a total of 6 units in any combination.
31. May be taken for a total of 4 units in any combination.
32. May be taken for a total of 2 units in any combination.
33. May be taken a total of 3 times.
34. May be taken a total of 4 times.
36. Students are limited to a total of 6 units of independent study including 49 and 98 courses.
37. May be repeated by students completing CMT prior to September 1985.
38. Each may be repeated 3 times for a total of 12 units each.
39. May be taken a total of 2 times.
40. May be repeated for a total of 3 units in any combination.
41. May be repeated for a total of 7 units.

# Announcement of Courses

## Adapted Physical Education

(previously listed under Disability Resources as LPE courses)

### APE 101 Adapted Swimming

(Formerly LPE 101) 0.5-1.5 units/up to 3 hours laboratory. CR/NC option.

Designed for students with physical disabilities. The individualized and group aquatic exercise programs include: strength, endurance, flexibility training and instruction in swimming skills. There will be an emphasis on encouraging independence and teaching lifelong fitness knowledge and skills. May be taken for a total of 6 units within 4 semesters.

### APE 109 Adapted Body Conditioning

(Formerly LPE 109) 0.5-1.5 units/up to 3 hours laboratory. CR/NC option.

This program is designed for students with physical disabilities. The individualized and group exercise programs include strength, endurance and flexibility training with an emphasis on encouraging independence and teaching lifelong fitness skills. May be taken for a total of 6 units within 4 semesters.

### APE 110 Adapted Functional Movement

(Formerly LPE 110) 0.5-1.5 units/up to 3 hours laboratory. CR/NC option.

Designed for students with disabilities. Individualized and group exercises will focus on functional motor control, balance, coordination flexibility, developmental movement, therapeutic exercises, and strength and endurance. There will be an emphasis on encouraging independence and teaching lifelong fitness knowledge and skills. May be taken for a total of 6 units within 4 semesters.

### LPE 116.5 Wheelchair Basketball

1 unit/3 hours laboratory. CR/NC option.

Introduction to the basic skills, rules, and safety concerns of competitive wheelchair basketball. This course is designed for, but not limited to, wheelchair users.

May be taken for a total of 4 units.

## Administration of Justice

### AJ 21 Introduction to Administration of Justice - CP1

3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent.

History and philosophy of Administration of Justice in America; recapitulation of the system; identifying the various subsystems, role expectations and their interrelationships in society; theories of crime, punishment, and rehabilitation; education and training for professionalism in the criminal justice system. (CSU/UC)

CAN AJ 2

### AJ 22 Concepts of Criminal Law - CP2

3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent.

Historical development, philosophy of law and constitutional provisions; definitions, classification of crime and their application to the system of Administration of Justice; legal research, study of case law, methodology and concepts of law as a social force. Law as it affects the correctional component of the justice system will be clearly identified. (CSU/UC)

CAN AJ 4

### AJ 25 Community Relations - CP 7

3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent.

An in-depth survey of the relationship of the criminal justice system and the community. Through study and interaction the student will probe the causal and symptomatic aspects of community misunderstanding, lack of cooperation, and mistrust. The course examines the concept that community relations develops through a continuing process of interaction between the criminal justice practitioner and the citizen. Emphasis will be directed not only to the character of community relations, but also to methods for understanding how such a relationship is developed, maintained and may be changed. In addition, this course will present students with a perspective of major cultural groups in California that surpasses the views commonly found in society. (CSU/UC)

AA/AS area D

### AJ 50 Criminal Law - CP3

3 units/3 hours lecture. Grade only. Prerequisite: AJ 22 or equivalent. Recommended: Eligibility for Engl 100A or equivalent.

An in-depth study of the substantive law 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 and case law interpretation of statutes. (CSU)

### AJ 51A Basic Criminal Investigation

3 units/3 hours lecture. Grade only. Prerequisite: AJ 50, 54, and 55. Recommended: Eligibility for Engl 100A or equivalent.

Study of basic principles of all types of investigations utilized in the justice system. Coverage includes human aspects in dealing with the public, specific knowledge necessary for handling crime scenes, interviews, evidence, surveillance, follow-up, technical resources, and case preparation. (CSU)

CAN AJ 8

### AJ 51B Basic Criminal Investigation

3 units/3 hours lecture. Grade only. Prerequisite: AJ 51A completed. Recommended: Eligibility for Engl 100A or equivalent.

Advanced principles in major felony investigations with emphasis on physical evidence and forensic science application in preliminary investigation. Follow-up investigation and courtroom presentation. (CSU)

### AJ 52 Public Safety Communications - CP5

3 units/3 hours lecture. Grade only. Prerequisite: Completion of AJ 50 and AJ 51A with a C or better.

This is an introductory course dealing with all aspects of public safety communication. It will cover the techniques of effectively communicating facts, information, and ideas in a clear and logical manner for a variety of public safety systems reports, i.e. crime/violation/incident reports, letters, memoranda, directives, and administrative reports. Students will gain practical experience in interviewing, note taking, report writing and testifying. (CSU)

### AJ 53 Juvenile Procedures

3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent.

Organization, functions, and jurisdiction of juvenile agencies; the processing and detention of juvenile case disposition; juvenile statutes and court procedure. (CSU)

### AJ 54 Introduction to Evidence - CP6

3 units/3 hours lecture. Grade only. Prerequisite: AJ 22 and 55 completed.

Origin, development, philosophy and legal basis of evidence; types and ways of presenting evidence; judicial decisions and statutory rules of evidence governing the admissibility of testimony, writings, and materials objects at a criminal trial; constitutional and procedural considerations affecting searches, seizures, admissions and confessions. (CSU)

CAN AJ 6

### AJ 55 Criminal Procedures - CP4

3 units/3 hours lecture. Grade only. Recommended: Engl 100A.

A comprehensive examination of the origin, development, philosophy, and legal basis of criminal procedures in California. Procedural, statute law, case law, constitutional law and judicial rules governing pre-arrest, arrest, custody, crime charging, motions, applicable rules of discovery and evidence, California grand jury system, pretrial court procedures, adult and juvenile court procedures, verdict, sentencing, and the appellate process. (CSU)

### AJ 56 Crime and Criminal Justice in Society

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv.

A critical examination of the nature and extent of crime in contemporary society and the social, legal and political responses to criminal and delinquent behavior. Does not apply to Administration of Justice majors. (CSU)

AA/AS area D; CSU area D

### AJ 58 Current Issues in Administration of Justice

0.5-1.5 units/up to 24 hours lecture for 1 week. CR/NC only. Recommended: AJ 200.1 or equivalent or eligibility for Engl 100A or equivalent.

Issues of current interest in the field of criminal justice selected for intensive development. Special subjects are announced in the schedule of classes. (CSU)

May be repeated with different topics.

### **AJ 59 Criminal Justice Pre-Employment Preparation**

*3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equiv.*

This course is designed to evaluate, counsel and prepare students to satisfactorily complete law enforcement pre-employment testing. Additionally, to prepare students intending to enter any of the Public Safety state-mandated training courses. Testing and evaluation will include, but not be limited to, written exams, oral boards, physical agility requirements, firearms training and technical driving skills. (CSU)

### **AJ 61A Patrol**

*2 units/1 hour lecture, 4 hours laboratory. CR/NC only. Prerequisite: Completion of or current enrollment in AJ 21, 22, & 55; Administration of Justice major. Recommended: Eligibility for Engl 100A or equivalent.*

Classroom instruction in techniques of campus security, parking, crowd control, legal authority, and requirements; briefing of current campus events pertaining to security. Uniformed Campus Patrol: traffic and patrol on campus, application of techniques and methods learned in the classroom. (CSU)

*May be taken for a total of 8 units.*

### **AJ 61B Patrol**

*2 units/1 hour lecture, 4 hours laboratory. CR/NC only. Prerequisite: Completion of or current enrollment in AJ 21, 22, & 55; Administration of Justice Major. Recommended: Eligibility for Engl 100A or equivalent.*

Classroom instruction in techniques of campus security, parking, crowd control, legal authority, and requirements; briefing of current campus events pertaining to security. Uniformed Campus Patrol: traffic & patrol on campus, application of techniques and methods learned in the classroom. (CSU)

*May be taken for a total of 8 units.*

### **AJ 61C Patrol**

*2 units/1 hour lecture, 4 hours laboratory. CR/NC only. Prerequisite: Completion of or current enrollment in AJ 21, 22, & 55; Administration of Justice major. Recommended: Eligibility for Engl 100A or equivalent.*

Classroom instruction in techniques of campus security, parking & crowd control, legal authority, and requirements; briefings of current campus events pertaining to security. Uniformed Campus Patrol: traffic & patrol on campus, application of techniques & methods learned in the classroom. (CSU)

*May be taken for a total of 8 units.*

### **AJ 61D Patrol**

*2 units/1 hour lecture, 4 hours laboratory. CR/NC only. Prerequisite: Completion of or current enrollment in AJ 21, 22, & 55; Administration of Justice major. Recommended: Eligibility for Engl 100A or equivalent.*

Classroom instruction in techniques of campus security, parking & crowd control, legal authority, and requirements; briefing of current campus events pertaining to security. Uniformed Campus Patrol: traffic & patrol on campus, application of techniques & methods learned in the classroom. (CSU)

*May be taken for a total of 8 units.*

### **AJ 63 Patrol Procedures**

*3 units/3 hours lecture. Grade only. Prerequisite: AJ 50 or equivalent. Recommended: Eligibility for Engl 100A or equivalent.*

The history and development of patrol philosophy; planning for field activities to include functions of patrol, traffic, and other preliminary investigative duties of the field officer, technique for planning patrol activities; handling complaints and request for services; mechanics of field interviews, searches, and arrest; the handling of traffic related problems; civil and domestic disturbances and other community crime incidents. (CSU)

### **AJ 70 Introduction to Corrections**

*3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent.*

This course is designed to provide the student with an overview of the history and trends of adult and juvenile corrections including probation and parole. It will focus on the legal issues, specific laws and general operation of correctional institutions. The relationship between corrections and other components of the judicial system will also be examined. (CSU)

### **AJ 71 Correctional Interviewing & Counseling**

*3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent; AJ 21, 55, & 70.*

This course is an overview of the techniques in counseling and interviewing available to practitioners in Corrections. The student will learn the use of appropriate techniques and theories in confidence building which may be used by the correctional employee in client interviews and counseling. A basic course for students planning to enter or already employed within the Correctional Science field. (CSU)

### **AJ 98 Special Studies in Administration of Justice**

*1-3 units/up to 9 hours by arrangement. Grade only. Prerequisite: Application to department. AJ 21 completed.*

*Recommended: Eligibility for Engl 100A or equivalent. Administration of Justice major and second year status.* Seminars or individual conferences by arrangement to provide for independent study and enriched academic experience. (CSU)

*Independent study including 49 and 98 courses - 6 unit total.*

### **AJ 99I Occupational Work Experience-Intern Program**

*1-8 units/up to 40 hours by arrangement. Grade only.*

Occupational Work Experience Internship is supervised employment extending classroom learning at an on-the-job learning station relating to the student's educational or occupational goal. May be repeated for a total of sixteen (16) units, four (04) units maximum per semester (Repeat Code 25 for all Parallel Plan). Must be enrolled in 7 units including Work Experience units (for summer school - Work Experience and one other course). Alternate Plan - designed to offer students opportunities to attend college full-time one semester and work full-time the following semester. Job experience must relate directly to the student's educational goals. Up to

eight (08) units may be earned in one semester. Students may not be enrolled in more than one other course or transfer from Alternate to Parallel or vice-versa without completing 7 units between plans. (CSU)

*May be taken for a total of 16 units.*

### **AJ 200.1 Basic Police Academy**

*16 units/29.7 hours lecture, 9.7 hours laboratory for 20 weeks. Grade only. Prerequisite: Must pass a Dept. of Justice Criminal Records Check and possess a valid California driver's license. Pass the P.O.S.T. Reading and Writing test with a score of T-42 or higher.*

A Basic Police Academy certified by the Commission on Peace Officer Standards and Training (P.O.S.T.) for the State of California. This intensive 20 week Academy teaches Criminal Law, Laws of Search & Seizure, Laws of Evidence, Traffic Laws, Investigative Techniques, Patrol Procedures, Firearms, Defensive Driver Training, Defensive Tactics, Police Report Writing, First Aid, and C.P.R. The Basic Police Academy provides instruction and evaluation of all academic, physical, and behavioral traits required by the State of California to meet the minimum standards to be employed as a peace officer in California.

*May be taken for a total of 2 times.*

### **AJ 200.2A Basic Academy Extended Format - Part I**

*4 units/13 hours lecture, 2 hours laboratory. Grade only. Prerequisite: Must pass a Dept. of Justice Criminal Records check and possess a valid California Driver's License; pass the P.O.S.T. Reading and Writing test with a score of T-42 or higher or equivalent. Recommended: Successful completion of AJ 22, AJ 50 and AJ 54 with a "C" or better. Completion of Engl 100B or equivalent with grade of "C" or better.*

Part I of the Basic Academy Extended Format partially fulfills the minimum requirements for completion of the Basic Academy, certified by Peace Officer Standards and Training. Persons enrolled in Part I must complete Part II immediately following Part I in order to be certified for successful completion of the Basic Course. This course also fulfills the minimum requirements for those persons who have successfully completed the AJ Core Courses in the Pre-Service Program denoted as CP1-CP8 and EMC290 (CP9). The topical course material taught in Part I includes History, Ethics, Community Relations, Criminal Law, Evidence, Search and Seizure, Laws of Arrest, Custody, Report Writing and Cultural Diversity.

*May be taken for a total of 2 times.*

### **AJ 200.2B Basic Academy Extended Format-Pt.2**

12 units/18.8 hours lecture, 4.4 hours laboratory for 23 weeks. Grade only. Prerequisite: Successful completion of AJ 200.2A. Recommended: Completion of Engl 100B or equivalent with grade of "C" or better.

Part II of the Basic Police Academy is certified by the Commission on Peace Officer Standards and Training and fulfills the training requirements for academic, physical, and psychomotor skills required by the State of California to meet the minimum standards to be employed as a peace officer. This portion of the basic course includes topical areas in traffic law, accident investigation, narcotics law, investigation techniques, firearms, defensive tactics, physical fitness, officer safety, and driving techniques. Students who have completed Module A&B of the Reserve Modularized Basic Course may take Part II for completion of Module C-Level I Reserve Training.

May be taken for a total of 2 times.

### **AJ 200.3 Ranger Academy**

5 units/21 hours lecture, 15 hours laboratory, 0.2 hour by arrangement for 8 weeks. Grade only. Recommended: Eligibility for English 100A or equiv.

Basic Law Enforcement Training approved by the Federal Government to certify graduates for employment in the National Parks.

May be taken for a total of 10 units within 2 semesters.

### **AJ 200.12 Reserve Training - Level III**

3 units/7.3 hours lecture, 4.3 hours laboratory for 14 weeks. Grade only. Prerequisite: Legal Requirement: Under California Penal Code Section 11311.5, all persons enrolling in training that includes basic law enforcement, reserve officer training or training required by Penal Code 832 that requires the carrying and/or use of firearms must submit to a criminal history background investigation. This investigation will minimally include the submission of fingerprints to the California Dept. of Justice (DOJ) to determine the absence of certain criminal convictions. A conviction of Penal Code Section 12021 and 12021.1 and enumerated sub-sections would preclude the possession of a firearm based on the conviction. Because this course has 28 hours of firearms training, a criminal history is mandated by State law and submission of fingerprints to the DOJ with a return letter of clearance is required prior to enrollment.

A course certified by the Commission on Peace Officer Standards and Training. Students will study the concepts of the criminal justice system, community relations, and California criminal law. Other topical areas will include vehicle operation, custody, legal and ethical use of force, firearms safety, firearms training, First-Aid/CPR and arrest and control techniques.

### **AJ 200.13 Reserve Training - Level II**

4 units/11.5 hours lecture, 2.7 hours laboratory. Grade only. Prerequisite: AJ 200.12 including California Dept. of Justice Firearms clearance. Recommended: Completion of Engl 100A/B.

A course certified by the Commission on Peace Officer Standards and Training and fulfills the State requirements for Level II Reserve Officer Training. Students will study relationship of law enforcement to the community, California criminal law, search and seizure, presentation of evidence, law enforcement report writing, patrol techniques, vehicle stop procedures, preliminary investigation,

issues involving persons with disabilities, and cultural diversity. Other topical areas will include situational firearms training, lifetime fitness and arrest and control techniques.

### **AJ 205.14 Supervising Police Traffic Control**

#### **Function**

1 unit/40 hours lecture for 1 week. CR/NC only. Prerequisite: AJ 200.1 or equivalent.

General use of CVC as a reference source; case law research; deployment of personnel; recognizing stress symptoms in traffic officers and providing solutions.

### **AJ 205.15 Patrol Aspects of Traffic Law Enforcement**

1 unit/40 hours lecture for 1 week. CR/NC only. Prerequisite: AJ 200.1 or equivalent.

Designed to provide technical training for the student who is a generalist patrolman with traffic law enforcement responsibilities.

### **AJ 205.16 Field Training Officer**

1 unit/40 hours lecture for 1 week. CR/NC only.

This course is designed to meet the needs of the newly assigned field training officer of a law enforcement agency, who is given responsibility to train new employees.

### **AJ 205.17 Background Investigation**

1 unit/40 hours lecture for 1 week. CR/NC only.

This course is designed for those individuals who conduct preemployment personnel background investigations for public safety employment. The student will be introduced to the federal and state fair employment laws, job dimensions, job traits, and essential functions of the background investigator. The student will understand the role and responsibilities of the investigator in the preemployment background investigation process, and will gain the ability to conduct effective preemployment interviews as well as how to document a thorough preemployment background investigation.

May be taken for a total of 4 units.

### **AJ 205.18 Interviews & Interrogation**

1 unit/40 hours lecture for 1 week. CR/NC only. Prerequisite: AJ 200.1 or equivalent.

Individual methods and aids employed in various aspects of interrogations and interviews. Psychological advantages and disadvantages for the interviewer during the investigation process.

### **AJ 210.1 Officer Safety Field Tactics**

1 unit/40 hours lecture for 1 week. CR/NC only. Prerequisite: AJ 200.1 or equivalent.

Legal and moral obligations of officers involved in critical situations. Special training, tactics and procedures for protection to the officer and the public.

Course exempt from repeat provisions.

### **AJ 210.3 Defensive Tactics-Instructor**

2 units/40 hours lecture for 2 weeks. CR/NC only.

Prerequisite: AJ 200.1 or equivalent.

This instructors' course deals with contemporary

issues and tactics for self-defense, and arrest techniques. It is an extremely physically and mentally challenging program.

### **AJ 210.9 Survival Shooting Instruction**

1 unit/40 hours lecture for 1 week. CR/NC only. Prerequisite: AJ 200.1 and Basic Firearms Instructor Course.

Recommended: Function as a firearms instructor.

Safety instructions for firing range, fundamentals of single action and double action revolver shooting. Operation and firing of various types of hand guns and shoulder weapons. Various firearms courses used in police training. Students operate as instructors. Non-lethal chemical agents and their use in law enforcement.

May be taken for a total of 2 times.

### **AJ 210.11 Special Weapons & Tactics**

1 unit/40 hours lecture for 1 week. CR/NC only. Prerequisite: AJ 200.1 or equivalent.

Advanced officer training in new court decisions, laws, ethics, community relations, with emphasis on types of weaponry and their use in an emergency situation.

May be taken for a total of 2 times.

### **AJ 210.16 Defensive Tactics/Baton Techniques**

1.5 units/1 hour lecture, 2 hours laboratory. CR/NC only. Recommended: Eligibility for Engl 100A or equivalent.

Basic knowledge of Defensive Tactics and Baton techniques. The techniques learned will enable the students to defend themselves and to control people in a safe manner.

May be taken for a total of 4 units.

### **AJ 210.17 Arrest/Control Tactics**

1.5 units/1 hour lecture, 2 hours laboratory. CR/NC only. Recommended: Eligibility for Engl 100A or equivalent.

Basic knowledge of Arrest/Control techniques. The techniques learned will enable the students to search, handcuff, and control people in a safe manner.

May be taken for a total of 4 units.

### **AJ 214.1 Supervisory Field Training Officer**

0.5 unit/24 hours lecture for 1 week. CR/NC only.

Prerequisite: AJ 200.1 or equivalent. Recommended: Supervisory responsibility or agency assignment.

A course of instruction for supervisors who are assigned as the field training supervisor to a newly appointed supervisor. Course deals with transition, evaluation, training, reporting, and issues.

May be taken for a total of 1 unit.

### **AJ 215.1 Law Enforcement Supervisor Techniques**

2 units/40 hours lecture for 2 weeks. CR/NC only.

Prerequisite: Prior qualification for AJ 215.1; OR completion of AJ 200.1.

This course will identify the training necessary for law enforcement supervisors mandated by Peace Officer Standards and Training, a state regulatory agency. This course will address leadership styles, motivation, communication, problem solving and discipline issues.

May be taken for a total of 2 units.

### **AJ 215.3 Unusual Incidents Tactics**

*0.5 unit/24 hours lecture for 1 week. CR/NC only. Prerequisite: AJ 200.1 or equivalent.*

A course in planning and tactics for public safety management personnel. The course explores recent disasters and incidents, and develops skills in planning for such events.

### **AJ 216.1 Civilian Supervision**

*1 unit/64 hours lecture for 1 week. CR/NC only.*

Provides newly appointed supervisors with training in concepts, techniques, and application of basic supervisory skills.

*May be taken for a total of 2 times.*

### **AJ 221.1 PC 832 Arrest Course**

*(Formerly AJ 299.72) 1 unit/32 hours lecture, 8 hours laboratory for 1 week. CR/NC only. Recommended: Eligibility for Engl 100A or equivalent or departmental entrance exam.*

Fulfills requirements of Section 832 of the Penal Code as mandated by peace officer standards and training. Laws of arrest, search and seizure, communications and arrest control.

### **AJ 221.2 Corrections Officer Basic Course**

*(Formerly AJ 299.73) 5 units/26 hours lecture, 14 hours laboratory for 5 weeks. CR/NC only.*

This course will identify the training necessary for entry level corrections officers mandated by Standards and Training for Corrections, a state regulatory agency. Issues addressed will consist of legal issues, classification, contraband, booking and release information, security, supervising inmates and report and record keeping. Significant emphasis placed on defensive tactics training.

*May be taken for a total of 5 units within 4 semesters.*

### **AJ 221.4 Juvenile Counselor Basic Course**

*3 units/34 hours lecture for 4 weeks. CR/NC only.*

This course will identify the training required for entry level positions for juvenile counselor as mandated by Standards and Training for Corrections, a state regulatory agency. The class will address juvenile law, institutional security, booking and release issues, and public relations.

*May be taken for a total of 3 units.*

### **AJ 221.5 Jail Management**

*1 unit/30 hours lecture, 10 hours laboratory for 1 week. CR/NC only.*

Designed for jail managers with direct working responsibility for Type I and II facilities. Emphasis on problem-solving, enhanced by experienced instructors facilitating the sharing of group experience, current issues and practical solutions to existing problem areas.

*May be taken for a total of 1 unit.*

### **AJ 221.7 PC 832 Firearms Course**

*0.5 unit/24 hours lecture for 1 week. CR/NC only.*

*Prerequisite: Proof of attendance in AJ 221.1 (formerly AJ 299.72) or similar course.*

Fulfills the requirements for Section 832 of the penal code; firearms training.

*May be taken for a total of 1 unit.*

### **AJ 221.8 Probation Officer Basic Course**

*(Formerly AJ 399.05) 4 units/40 hours lecture, 6 hours by arrangement for 4 weeks. CR/NC only.*

This course will identify and specify the training necessary for entry level probation officers who have no prior training or experience in the correctional field. Issues addressed will consist of those knowledge and skills which are essential for the newly hired probation officer to meet minimum performance standards for entry level personnel and to obtain maximum benefit from subsequent on-the-job training experience. The student will be introduced to the adult/juvenile court systems and processes which will cover court reports, writing initial violator reports, case information gathering, conducting interviews and assessments. The student will also be introduced to crisis intervention counseling.

*May be taken for a total of 4 units.*

### **AJ 240.1 Defensive Tactics Instructor Update**

*0.5 unit/8 hours lecture, 8 hours laboratory for 1 week. CR/NC only. Prerequisite: Must have taken AJ 210.3 (80 hours).*

This course will update the Defensive Tactics Instructor on new methods and techniques designed for law enforcement professionals assisted by their agencies as trainees.

*May be repeated with different topics.*

### **AJ 240.4 Survival Shooting Instructor Update**

*0.5 unit/4 hours lecture, 4 hours laboratory for 1 week. CR/NC only. Prerequisite: Completion of AJ 200.1; OR prior qualification for AJ 240.4. Recommended: Survival shooting instructor.*

An 8 hour course that brings public safety survival shooting instructors together to review contemporary survival shooting techniques, as well as refresher training. Also deals with issues regarding legal and moral aspects.

*May be taken for a total of 2 units.*

### **AJ 240.5 Impact Weapons Instructor Update**

*0.5 unit/4 hours lecture, 12 hours laboratory for 1 week. CR/NC only. Prerequisite: AJ 200.1 or equivalent. Recommended: Impact weapons instructor.*

A 16-hour impact weapons course introduces contemporary techniques as well as updates the legal and moral aspects and issues.

*May be taken for a total of 2 units.*

### **AJ 240.7 Management Update Seminar**

*0.5 unit/28 hours lecture for 1 week. CR/NC only.*

This course is designed to provide public service managers with updated knowledge on management issues. New laws and legal issues relevant to managers, new regulatory and procedural law, as well as timely issues are part of the flexible curriculum.

*May be repeated with different topics.*

### **AJ 245.1 Effective Report Writing for Peace Officers**

*0.5 unit/24 hours lecture for 1 week. CR/NC only.*

*Prerequisite: Prior qualification for AJ 245.1; OR completion of AJ 200.1.*

This course is designed for the public safety employee to improve their report writing skills in the area of

writing theory, sentence structure, writing exercises, and fundamental principals of effective writing.  
*May be repeated with different topics.*

### **AJ 259 Public Safety Skills Assessment**

*2 units/3.5 hours lecture, 4.5 hours laboratory for 8 weeks. CR/NC only. Recommended: Engl 355.*

The course is designed to evaluate, counsel and prepare students intending to enter any of the public safety state mandated training courses. Included is the law enforcement basic academy, fire fighter academy, corrections course and emergency medical service courses. Testing and evaluation will include, but not be limited to, writing skills, firearms training, driving skills and psychomotor skills specifically related to task oriented fire fighting requirements and evacuation of injured persons.

*May be taken for a total of 6 units.*

### **AJ 299 Selected Topics in Administration of Justice**

*0.5-10 units/up to 1 hour lecture, 1 hour laboratory. CR/NC only. Prerequisite: Prior qualification for AJ 299; OR completion of AJ 200.1. Recommended: Employment in the Public Safety field.*

A series of selected topics designed to meet a specific public safety training need, including P.O.S.T. certified skills and knowledge learning modules. Each section carries a specific title relative to the subject matter to be covered.

*May be repeated with different topics.*

### **AJ 305.1 Advanced Officer Training**

*(Formerly AJ 205.10) 0.5-3 units/up to 40 hours lecture for 3 weeks. CR/NC only.*

This course is designed for the law enforcement employee who must update their training in order to meet state-mandated laws requiring currency in legal and personnel matters.

*May be taken for a total of 12 units in any combination.*

### **AJ 305.2 Citizens Academy**

*(Formerly AJ 399.07) 1-2 units/up to 7 hours lecture for 12 weeks. CR/NC only.*

This course is designed to familiarize the student with the criminal justice system and how the system impacts the law enforcement agencies and the communities. The student will be introduced to the law and how it pertains to public safety, communication theory, referral services, and critical incident situations.

*May be taken for a total of 2 units.*

**AJ 305.10 Public Safety Dispatcher Basic Course**  
(Formerly AJ 399.06) 3 units/40 hours lecture for 3 weeks.  
CR/NC only.

This course will identify and specify the training necessary for entry level public safety dispatchers who have no prior training or limited experience in the area of dispatching. Issues addressed will consist of knowledge and skills necessary for dispatchers to meet minimum performance standards for entry level positions. The student will be introduced to the criminal justice system, the laws as they pertain to dispatchers and public safety, communication theory, telephone procedures, radio procedures, resource and referral services, and critical incidents. The student will also be introduced to stress management.  
May be taken for a total of 3 units.

**AJ 310.1 Concealed Weapons (Firearms)**

(Formerly AJ 210.6) 0.5 unit/8 hours lecture, 16 hours laboratory for 1 week. CR/NC only.

Current laws regarding use of firearms. Legal and moral responsibility. Individual instruction in use of various firearms to develop weapons proficiency and familiarization in order to make proper decisions concerning use of the handgun.

**AJ 310.2 Concealed Weapons Update**

0.5 unit/4 hours lecture, 4 hours laboratory for 1 week. CR/NC only. Prerequisite: AJ 310.1 (formerly AJ 210.6), 24 hours.

Review of current issues in the use of force including legal and moral requirements in the use of deadly force. The class will also encompass safety issues related to the handling of firearms and a mandatory handgun requalification examination. The course is designed for those persons who have applied for renewal of a concealed weapons permit and are required to requalify for the permit.  
May be taken for a total of 4 units.

**AJ 340.11 Dispatch Module 1**

0.5 unit/8 hours lecture for 1 week. CR/NC only. Recommended: Functioning as a dispatcher in law enforcement.

An 8-hour course, part of a specialized in-service, pre-service program for public safety dispatchers and communicators. The course explores the role of the dispatcher, presents techniques for interviews, contacts, and prioritizing.

Course exempt from repeat provisions.

**AJ 340.12 Dispatch Module II**

0.5 unit/8 hours lecture for 1 week. CR/NC only. Recommended: Functioning as a dispatcher in law enforcement.

Designed for experienced law enforcement dispatchers and communicators. The seminar covers: communication techniques and managing stress.

Course exempt from repeat provisions.

**AJ 340.13 Dispatcher Module III**

0.5 unit/8 hours lecture for 1 week. CR/NC only. Recommended: Functioning as a dispatcher in law enforcement.

A specialized program for public safety dispatchers and communicators. Covers hostage negotiations from a dispatcher's perspective, hazardous material response, and specialized communications.

Course exempt from repeat provisions.

**AJ 340.15 Dispatcher Module V**

0.5 unit/8 hours lecture for 1 week. CR/NC only. Recommended: Functioning as a dispatcher in law enforcement.

A course of instruction exploring the various methods and techniques available to work effectively with difficult people.

Course exempt from repeat provisions.

**AJ 399 Selected Topics in Administration of Justice**

0.5-10 units/up to 1 hour lecture, 1 hour laboratory. CR/NC only.

A series of selected topics designed to meet a specific public safety training need, including P.O.S.T. certified skills and knowledge learning modules. Each section carries a specific title relating to the subject matter to be covered.

May be repeated with different topics.

## Aeronautics

**AERO 50 Airplane Pilot Basic Course**

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv.

Basic pilot introductory course in aviation studies. Comprehensive course of safe aircraft operations and aircraft aerodynamics and performance, FAR's weather, navigation, publication. Successful completion meets prerequisite specified in part 61 of the "Federal Air Regulations" for the Private Pilot Airplane Written Test. (CSU)

**AERO 50L Airplane Pilot Basic Course Lab**

2 units/1 hour lecture, 3 hours laboratory. CR/NC option. Recommended: Enrollment in Aero 50, or possession of an equivalent FAA Certification or rating.

Lecture and laboratory which allows for the expansion of material presented in Aeronautics 50; emphasis on practical application of subject matter through student use of aircraft simulators and audio visual aids. Additional drills and exercises to include copying and understanding ATC clearances, flight communication management and aircraft control. (CSU)

**AERO 51 Instrument/Pilot Ground School**

3 units/3 hours lecture. CR/NC option. Recommended: Aero 50 or possession of private pilot's certificate. Concurrent enrollment in Aero 51L.

Instrument flight conditions as they relate to pilot and aircraft: basic aerodynamics; IFR preflight procedures including regulations and procedures for IFR VOR flight; navigation relating to departure, enroute, arrival, and landing. (CSU)

**AERO 51L Instrument Pilot Rating Course, Lab/ Lecture**

2 units/1 hour lecture, 3 hours laboratory. CR/NC option. Recommended: Aero 50L or equivalent FAA rating; concurrent enrollment in Aero 51.

Expansion of material presented in Aero 51. Instrument flight conditions as they relate to pilot

and aircraft; basic aerodynamics; IFR preflight procedures including regulations and procedures for IFRVOR flight; navigation relating to departure, enroute, arrival, landing, and emergency procedures IFR. (CSU)

**AERO 52 Airplane Pilot Advanced Course**

3 units/3 hours lecture. CR/NC option. Recommended: Aero 50 or equiv. or possession of a private pilot's certificate.

Study of advanced aviation aircraft pilot subjects to a level of knowledge and academic skills as is required of the FAA certified commercial pilot. (CSU)

**AERO 52L Airplane Pilot Advanced Course, Lab/ Lecture**

2 units/1 hour lecture, 3 hours laboratory. CR/NC option. Recommended: Enrollment in Aero 52.

Expansion of the material presented in Aeronautics 52. Emphasis on practical application of the subject matter through student use of aircraft simulators and audio visual aids. (CSU)

**AERO 55 Aviation Weather**

3 units/3 hours lecture. CR/NC option. Recommended: Math proficiency.

Practical application of weather data to flight planning for the general aviation pilot. Discussion of fronts, systems, observations, forecasts, winds and the identification of potentially hazardous weather. (CSU)

**AERO 390 Selected Topics in Aeronautical & Aviation Technology**

2 units/2 hours lecture. CR/NC option. Prerequisite: Completion of Aero 50 or possession of FAA private pilot certificate.

Designed to provide aviation ground and flight instructor applicants the skills and knowledge needed to meet the FAA standards for instructors.  
May be repeated with different topics.

## Agriculture

**AG 2 Agricultural Computer Applications**

(Formerly AG 76) 3 units/2 hours lecture, 3 hours laboratory. Grade only. Recommended: Eligibility for English 100A or equiv.

Computer use in the workplace with emphasis on agribusiness situations. Computer applications including word processing, spreadsheets, databases, and presentation managers will be covered. Also included will be accessing information through the Internet and World Wide Web, telecommunications, an introduction to web page design and other software appropriate to agribusiness. (CSU/UC)  
CAN AG 2

### **AG 7 Agricultural Economics**

*(Formerly AG 70) 3 units/3 hours lecture. Grade only. Recommended: Eligibility for English 100A or equiv.*  
Introduction to the economic aspects of agriculture and their implications to the market. The role of agricultural resources (land, labor, capital management), major agricultural resource issues, and their policy remedies. Understanding the breadth and depth of the agribusiness industry. Evaluating market structure and price for marketing factors for agricultural products and inputs. (CSU/UC)  
*AA/AS area D; CSU area D*

### **AG 10 Introduction to Agricultural Sciences**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*  
A course designed to acquaint students with basic scientific principles through applied experiences of an agricultural nature. Specific topics include taxonomy, physiology, reproduction, biochemistry, genetics, economics, and consumerism as they relate to the plant and animal sciences. (CSU/UC)  
*AA/AS area C; CSU area B2*

### **AG 20 Basic Animal Science**

*(Formerly AG 60) 3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent.*  
A survey of the livestock industry, supply of animal products and their uses. A special emphasis on the origin, characteristics, adaptation and contributions of farm animals to the agriculture industry. Analyze the economic trends and career opportunities in animal agriculture. (CSU/UC)  
*CAN AG 6*

### **AG 25 Equine Science**

*(Formerly AG 65) 3 units/2 hours lecture, 3 hours laboratory. Grade only. Recommended: Eligibility for English 100A or equiv.*  
A survey of the equine industry including selection, feeding, breeding, facilities, handling and diseases will be emphasized to ensure scientifically based management decisions. (CSU/UC)  
*CAN AG 26*

### **AG 26 Livestock Evaluation**

*(Formerly AG 66.1) 3 units/2 hours lecture, 3 hours laboratory. Grade only. Recommended: Eligibility for English 100A or equiv.*  
Detailed analysis of various visual and physical methods of appraising beef, sheep, swine and horses concerning functional and economic value. Written and oral summaries of evaluation will be learned. Specific reference will be made to performance data and factors determining carcass value. (CSU/UC)  
*May be taken for a total of 6 units.*

### **AG 26L Livestock Judging & Selection**

*(Formerly AG 66.1L) 2 units/3 hours laboratory, 9 hours by arrangement for 8 weeks. Grade only. Prerequisite: Completion of or concurrent enrollment in Ag 26. (Formerly AG 66.1 or AG 66A). Recommended: Eligibility for Engl 100A or equivalent.*  
Selection and comparative judging of beef, sheep, swine and horses. Selection is based on physical appearance, production records, pedigree, and expected progeny differences. (CSU/UC)  
*May be taken for a total of 4 units.*

### **AG 51 Introduction to Plant Science**

*3 units/2 hours lecture, 3 hours laboratory. CR/NC option. Recommended: Eligibility for English 100A or equiv.*  
An introductory course in plant ecology, fundamental botany and taxonomy with emphasis on plant structure, function and identification. The principles and practices of crop production as they relate to plant, soil and climatic relationships will be stressed. (CSU/UC)  
*AA/AS area C; CSU areas B2, B3; CAN AG 8*

### **AG 52 Pest Management**

*3 units/2 hours lecture, 3 hours laboratory. Grade only. Prerequisite: Agriculture major. Recommended: Eligibility for Engl 100A or equivalent.*  
Types of agricultural pests including weeds, insects and diseases as they impact the production of commercial crops. All methods of pest control are explored as they relate to the concept of integrated pest management. Students will be prepared to take the California Pest Control Advisor's licensing test. (CSU)

### **AG 53 Soil & Plant Nutrition**

*3 units/2 hours lecture, 3 hours laboratory. Grade only. Recommended: Eligibility for English 100A or equiv.*  
Physical, chemical and biological properties of soil; influences on soil by climate, parent material, topography, time and microorganisms; methods of evaluating soil and soil use; soil, water, plant and fertilizer relationships; fertilizer composition, manufacture, distribution and application techniques; field laboratories and trips required. (CSU)

### **AG 54 Fruit, Vine & Vegetable Production**

*3 units/2 hours lecture, 3 hours laboratory. Grade only. Recommended: Eligibility for English 100A or equiv.*  
Methods and practices associated with successful production of orchard, vineyard and garden plots including land preparation, layout, rootstocks and grafting; management decisions and programs for irrigation, fertilization, pruning, pest control and product marketing. (CSU)

### **AG 57A Viticulture**

*3 units/2 hours lecture, 3 hours laboratory. Grade only. Recommended: Eligibility for English 100A or equiv.*  
Introductory course in the production and marketing of wine grapes in the north coast region, emphasizing fall vineyard practices including budding, harvesting and pruning. (CSU)

### **AG 57B Viticulture**

*3 units/2 hours lecture, 3 hours laboratory. Grade only. Recommended: Ag 57A and eligibility for Engl 100A or equivalent.*  
Continuation of Agriculture 57A emphasizing spring vineyard operations; vineyard establishment training, pest control, frost protection and irrigation. (CSU)

### **AG 57C Vineyard Management**

*3 units/2 hours lecture, 3 hours laboratory. Grade only. Prerequisite: Completion of AG 57A, and completion of AG 57B. Recommended: Eligibility for English 100A or equiv.*  
Analyzing and diagnosing vineyard problems and

determining correct procedures to remedy problems. Current economic problems of North Coast vineyard operators. (CSU)

### **AG 57E Winemaking in the Vineyard**

*3 units/2 hours lecture, 3 hours laboratory. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent and 6 units of viticulture/ enology courses.*  
Analyzes the importance of the cultural practices utilized in the vineyard to produce high quality North Coast wines. A thorough look at the practices of fertilization, irrigation, trellis design and canopy management as they relate to wine quality factors. Includes lectures, guest speakers and field trips to local vineyards and wineries. (CSU)  
*May be taken for a total of 3 units.*

### **AG 59 Winery Practices**

*3 units/2 hours lecture, 3 hours laboratory. Grade only. Recommended: Eligibility for English 100A or equiv.*  
Process of making wine. Practical operations which affect both the grape producer and winery worker. Survey of Sonoma County wine industry. (CSU)

### **AG 60.1 Equine Nutrition**

*1 unit/3 hours lecture for 6 weeks. CR/NC option. Recommended: Eligibility for English 100A or equiv.*  
This course will enable a student to develop a horse feeding program with consideration given to horse types, level of activity, available feedstuffs, cost factors and basic nutritional requirements. Feeding for maintenance, growth and reproduction as well as feeding methods will be discussed. (Formerly AG 280.44). (CSU)

### **AG 60.2 Horse Health Mini Course**

*0.5 unit/3 hours lecture for 4 weeks. CR/NC option. Recommended: Eligibility for English 100A or equiv.*  
Preventative medicine, bandaging, first aid, foot problems and lameness. When to call the vet from a vet's perspective, pre-purchase exam and introduction to reproductive health. (Formerly AG 280.16). (CSU)

### **AG 61 Livestock Feeding and Nutrition**

*3 units/3 hours lecture. Grade only. Recommended: Eligibility for English 100A or equiv.*  
The science of animal nutrition is the basis for "Livestock Feeding and Nutrition". The fundamentals of digestion and absorption in both ruminants and non-ruminants are discussed. The nutritive value of feeds as they relate to the formulation of livestock rations will be emphasized including by-product feeding. (CSU)

### **AG 62 Beef Cattle Science**

*3 units/2 hours lecture, 3 hours laboratory. Grade only. Recommended: Eligibility for English 100A or equiv.*  
A study of the principles of purebred and commercial beef cattle production throughout the World, United States and California. Emphasis to be placed on the importance of breeds, breeding principles, selection, nutrition, environmental management, health, marketing and recordkeeping to ensure scientifically based management decisions and consumer product acceptance as applied to beef cattle. (CSU)  
*CAN AG 20*

### **AG 63 Sheep Science**

*3 units/2 hours lecture, 3 hours laboratory. Grade only.*  
A survey of the sheep industry including management of commercial, purebred and small farm flocks; selecting, feeding, breeding and basic care of ewes and lambs plus marketing of lambs and wool. (CSU)  
CAN AG 22

### **AG 64 Dairy Cattle Industry/Dairy Cattle Science**

*3 units/2 hours lecture, 3 hours laboratory. Grade only. Recommended: Eligibility for English 100A or equiv.*  
History, development and projections of the dairy industry. General information on the economics of dairying, facts, trends, selection, culling, fitting, showing, judging, pedigrees, feeding and basic management skills; employment opportunities and requirements. (CSU)  
CAN AG 28

### **AG 66.2 Meat Technology**

*(Formerly AG 66B) 0.5-3 units/up to 2 hours lecture, 3 hours laboratory. Grade only. Recommended: Eligibility for Engl 100A or equivalent.*  
Evaluation of live animals: beef, sheep, hogs. Evaluate carcasses of animals. Learn wholesale and retail cuts and how to break carcasses into these cuts. Economics of carcass traits is emphasized. (CSU)

### **AG 67 Veterinary Practices**

*3 units/2 hours lecture, 2 hours laboratory, 1 hour by arrangement. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*  
Allow student to become familiar with the safe use of various vaccines, equipment and restraint techniques used in the routine treatment of farm animals. The selection of proper treatment techniques, veterinary terminology and handling practices will be included. (CSU)

### **AG 67.1 Veterinary Laboratory and Pharmacy Procedures**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv.*  
Introduction to manual and automated veterinary lab techniques and procedures, including work with blood, urine, fecal and skin samples. Also includes discussion of veterinary pharmacology and common items dispensed with emphasis on proper labeling and dispensing instructions. (CSU)

### **AG 67.2 Veterinary Anatomy**

*3 units/3 hours lecture. CR/NC option.*  
Introduction to all anatomical systems of the canine and feline species, with emphasis on medical terminology, functional anatomical importance, and application of knowledge to the clinical situation. (CSU)

### **AG 67.4 Small Animal Disease Recognition and Transmission Control**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv.*  
This course is designed to fulfill one area of study for the requirement for a registered veterinary technician. Disease recognition, transmission control, hospital sanitation and sterilization

procedures. Zoonoses. Awareness and protection. Microbiology of bacterial, viral, and fungal infections, chemical disinfectant handling. Basic emergency recognition and care; medical record-keeping. (CSU)

### **AG 69 Horse Health and Reproduction**

*3 units/2 hours lecture, 3 hours laboratory. CR/NC option. Recommended: Eligibility for English 100A or equiv.*  
Horse diseases and their control; infections, nutritional and parasitic. First aid and practical information of respiratory, excretory, endocrine and digestive system as they pertain to health. Physiological process of horse reproduction, reproductive systems, hormones, estrus cycle and semen evaluation. (CSU)  
*May be taken for a total of 3 units.*

### **AG 70.1 Agriculture Leadership**

*2 units/2 hours lecture. Grade only. Recommended: Eligibility for English 100A or equiv.*  
The course is designed to assist students in developing their knowledge and skills regarding leadership theory and practice related to agricultural organizations. It will improve their understanding of group dynamics and human interactions associated with a variety of private, governmental, and non-profit agriculture enterprises. Practical experience will be gained through participation in a number of parliamentary and administrative activities with varying degrees of diversity between semesters. (CSU)  
*May be taken for a total of 8 units.*

### **AG 70.2 Introduction to Agribusiness**

*3 units/3 hours lecture. Grade only. Recommended: Eligibility for English 100A or equiv.*  
Self management, communication, and interpersonal skills necessary in developing managerial abilities, leadership qualities, and facilitating teamwork within the agribusiness sector. Industry opportunities ranging from input and output products and services along with government and special interest groups will be surveyed. Special consideration to history, culture, and commodities of California agriculture. (CSU)

### **AG 71 Agriculture Economics**

*3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent.*  
Changes in agriculture and agricultural production in response to changing economic conditions. Optimum methods of agricultural production. Impacts of technological change on resource use. Evaluating market structure and price formulating factors for agricultural products and inputs. (CSU/UC)  
AAAS area D

### **AG 72 Agricultural Sales and Communication**

*3 units/3 hours lecture. Grade only. Recommended: Eligibility for English 100A or equiv.*  
This course involves the study of principles and practices of the selling process: selling strategies and approaches, why and how people buy, prospecting, territory management, and customer service. Self management, communication, and interpersonal

skills necessary in developing managerial abilities, leadership qualities, and facilitating teamwork within the agribusiness sector will be explored. Students will gain experience through role play, formal sales presentations, and job shadowing. The course content is organized to give students an in depth understanding of the factors and influences that affect the agribusiness industry on a day to day basis. Communication, leadership, and management skills are basic tools necessary for future career development within the agribusiness sector, as well as other aspects of life. (CSU)

### **AG 73 Agricultural Accounting**

*3 units/2 hours lecture, 3 hours laboratory. Grade only. Recommended: Eligibility for English 100A or equiv.*  
Principles of agricultural accounting systems and type of records, their use and how to compute and use measures of earnings and cost of production to improve agribusiness efficiency. Also included are farm income tax, Social Security, and employee payroll records. (CSU)

### **AG 74 Agricultural Marketing**

*3 units/3 hours lecture. Grade only. Recommended: Eligibility for English 100A or equiv.*  
Survey of marketing aspects of the agriculture industry. An overview of the structure and institutional aspects of the marketing system including global agricultural markets. Industry studies of the marketing of selected locally grown commodities will be made. (CSU)

### **AG 75 Agriculture Management**

*3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent.*  
Management principles encountered in the day to day operation of an agricultural enterprise are stressed especially as they relate to the decision making process. Personnel, taxation, laws and regulations, records management, public relations, finance, marketing and contemporary issues will be covered. (CSU)

### **AG 77 Agricultural Finance**

*3 units/3 hours lecture. Grade only. Recommended: Ag 73 or BAD 1 or equivalent experience; eligibility for Engl 100A or equivalent.*  
Fundamentals of financial analysis for investment and management decision making within a farm or non farm agribusiness. Available sources and uses of credit. Principles of lending and credit costing. (CSU)

### **AG 78 Agricultural Computations**

*3 units/3 hours lecture. Grade only. Recommended: One year elementary algebra or equivalent with grade 'C' or better; eligibility for Engl 100A or equivalent.*  
Practical applications of mathematical problems facing agriculture and forestry personnel. Increase and strengthen understanding of a mathematical approach to problem solving. Microcomputers and their use in solving practical management problems. (CSU)



### **AG 80 Small Gasoline Engines**

2 units/1 hour lecture, 2 hours laboratory, 1 hour by arrangement. Grade only. Recommended: Eligibility for English 100A or equiv.

The practical aspects of the repair and safe operation of small gasoline engines are emphasized. Troubleshooting, disassembly, repair, reassembly and appropriate use of engines found on equipment such as lawn mowers, rototillers, chain saws, wood splitters, etc., are covered. (CSU)

### **AG 81 Soil Fertility & Fertilization**

3 units/3 hours lecture, 1 hour by arrangement. Grade only. Recommended: Ag 53 completed or in progress; eligibility for Engl 100A or equivalent.

Techniques for assessing soil fertility and the development of fertilization programs to meet the needs of a wide variety of crops. Available fertilizers and their costs are emphasized along with soil plant fertilizer relationships. (CSU)

### **AG 82 Irrigation**

3 units/2 hours lecture, 3 hours laboratory. Grade only. Recommended: Ag 52 completed or in progress; eligibility for Engl 100A or equivalent.

Types of irrigation systems and their application to crops common to the area. Irrigation system design, installation, operations, maintenance and costs are discussed. Water conservation, quality and development are stressed. (CSU)

### **AG 85.1 Agriculture Mechanics**

(Formerly AG 85A) 3 units/2 hours lecture, 2 hours laboratory, 1.5 hours by arrangement. CR/NC option. Recommended: Eligibility for English 100A or equiv.

Basic skills course that includes leveling, land measurement practices, and blueprint reading for agriculture; tool identification and maintenance; plumbing; woodwork; sheet metal layout; electrical wiring; ropework. (CSU)

May be taken for a total of 6 units.

### **AG 85.2 Agriculture Mechanics**

(Formerly AG 85B) 2 units/1 hour lecture, 3 hours laboratory. CR/NC option. Recommended: Eligibility for English 100A or equiv.

Basic skills course that encompasses wiring of electrical circuits using nonmetallic sheathed cable and electrical metallic tubing (EMT). Practical farm and home wiring situations are emphasized. Information on concept of electrical power, costs of power, 220 volt circuits, motors and electrical controls. (CSU)

### **AG 85.3 Agriculture Mechanics**

(Formerly AG 85C) 2 units/1 hour lecture, 3 hours laboratory. CR/NC option. Recommended: Eligibility for English 100A or equiv.

A basic skills course involving the fabrication of steel. Includes fabrication of steel by use of hand and power tools using saws, drills, files, taps, dies; sheet metal and soldering tool maintenance; forging and heat treatment of steels; basic electric and gas welding; selection and use of various forms of steel. (CSU)

### **AG 86 Machinery & Equipment Skills**

2 units/1 hour lecture, 3 hours laboratory. Grade only. Recommended: Eligibility for English 100A or equiv.

The operational skills associated with the safe start-up, operation and maintenance are emphasized. Students operate tractors and common farm implements as well as learn the proper techniques for the service and repair of agriculture equipment. (CSU)

### **AG 90 Introduction to Ornamental Horticulture**

3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent.

Exploration of horticulture as an applied science, a craft, and a rewarding career. Current and historical perspectives on horticultural practices with emphasis on the more recent developments and discoveries. Basics of plant classification; plant structure, growth, and environmental needs. Landscape, nursery and associated career areas studied, including licenses and professional certifications. Field trip and guest speakers. (CSU)

#### **AG 90.1 Herbs; Their Culture and Use**

1.5 units/3 hours lecture for 8 weeks. CR/NC option.

Propagation, cultivation and uses of herbs; planning and planting an herb garden, uses of herbs, including culinary, medicinal and household; harvesting; drying and crafts involving herbs. (CSU)

#### **AG 90.2 Beginning Bonsai Culture**

1.5 units/3 hours lecture for 8 weeks. CR/NC option.

Bonsai tree and container selection, styles, training, care and maintenance of bonsai specimens. (CSU)  
May be taken for a total of 3 times.

#### **AG 91A Landscape Construction/Estimation**

3 units/2 hours lecture, 3 hours laboratory. Grade only. Recommended: Eligibility for Engl 100A.

Introduction to the field of landscape contracting. Study of the California Contractors Law Book, cost estimating and bidding procedures prepares students for the C-27 Landscape Contractors License exam. Tools and materials used in the construction of landscape features such as paving, fences and decks. (CSU)

#### **AG 91B Landscape Irrigation/Drainage**

3 units/2 hours lecture, 3 hours laboratory. Grade only.

A look at irrigation design and estimation, proper landscape drainage methods, survey techniques for contracting and the labor code and regulations. (CSU)

#### **AG 92.1 Plant Propagation**

(Formerly AG 92A) 3 units/2 hours lecture, 3 hours laboratory. Grade only. Recommended: AG 51, Eligibility for Engl 100A or equivalent.

Introduction to commercial practices of plant propagation by seed and vegetative means. Propagation structures, media, hormones and propagation practices, including seed treatment and sowing, cuttings, layering, grafting/budding, and tissue culture. (CSU)  
CAN AG 10

### **AG 92.2 Nursery Production**

(Formerly AG 92B) 3 units/2 hours lecture, 3 hours laboratory. Grade only. Recommended: Eligibility for English 100A or equiv.

Production and cultural care of commercial container grown and field grown nursery operations. A study of crop scheduling, growing media, watering, fertilization, post harvest handling, marketing and sales. (CSU)

### **AG 92.3 Greenhouse Production**

(Formerly AG 92C) 3 units/2 hours lecture, 3 hours laboratory. Grade only.

Greenhouse structures and equipment as well as heating, cooling, venting and shading techniques. Actual production and cultural care of potted and foliage plants under greenhouse conditions. (CSU)

### **AG 93 Landscape Practices**

3 units/2 hours lecture, 3 hours laboratory. Grade only. Recommended: Eligibility for Engl 100A or equivalent.

Proper care and maintenance of plant material and turfgrass within the landscape. Basic principles of soil management, fertilization and watering practices, planting and transplanting, staking. Discussion of career opportunities in Landscape Management as well as maintenance contracts and image projection. (CSU)

### **AG 94A Basic Landscape Drafting & Design**

3 units/2 hours lecture, 3 hours laboratory. Grade only. Recommended: Eligibility for Engl 100A or equivalent.

Introduction to basic drafting principles and techniques of working drawings, detailed views, lettering and standards; as well as the basic principles of landscape design, selection to plant materials and site planning. Drafting equipment required. (CSU)

### **AG 94B Advanced Landscape Design**

3 units/2 hours lecture, 3 hours laboratory. Grade only. Prerequisite: AG 94A or equivalent experience. Recommended: Eligibility for Engl 100A or equivalent.

Principles and application of various landscape styles. Projects dealing with differing design materials and problem solving related to differing site features. Use of detailed design drafts. Drafting equipment required. (CSU)

### **AG 95.1 Ornamental Plant Identification**

(Formerly AG 95A) 3 units/2 hours lecture, 3 hours laboratory. Grade only. Recommended: Eligibility for Engl 100A or equivalent.

Identification, growth habits, cultural requirements and uses of ornamental and native shrubs, vines, and groundcovers. (CSU)

### **AG 95.2 Ornamental Plant Identification**

(Formerly AG 95B) 3 units/2 hours lecture, 3 hours laboratory. Grade only. Recommended: Eligibility for Engl 100A or equivalent.

Identification, growth habits, cultural requirements, and use of ornamental and native trees and herbaceous materials. (CSU)

### **AG 96 Turf Management**

*3 units/2 hours lecture, 3 hours laboratory. Grade only. Recommended: Eligibility for Engl 100A or equivalent.* Turf species, their growth, characteristics, and common usage. Management and installation of turf, including irrigation, drainage, fertilization, pest control, and use of common equipment. (CSU)

### **AG 97 Basic Arboriculture**

*3 units/3 hours lecture. CR/NC option.* The understanding of ecological growth and maintenance of wood plants to include selection, planting, pruning for shape, health and safety, improving growth, diagnosing and control of common tree pests. (CSU)  
*May be taken for a total of 3 units.*

### **AG 98 Special Studies in Agriculture**

*1-3 units/up to 3 hours lecture, 6 hours by arrangement. Grade only. Prerequisite: Application to department. Recommended: Eligibility for Engl 100A or equivalent.* Seminars and individual conferences by arrangement to provide for independent study and enriched academic experience. (CSU)  
*Independent study including 49 and 98 courses - 6 unit total.*

### **AG 99 Occupational Work Experience Education**

*0.5-8 units/up to 36 hours by arrangement. Grade only.* Occupational Work Experience is supervised employment extending classroom learning at an on-the-job learning station relating to the student's educational or occupational goal. Students gain this experience by enrollment in the parallel or alternate plan. (CSU)  
*May be taken for a total of 16 units.*

### **AG 99I Occupational Work Experience-Intern Program**

*1-8 units/up to 40 hours by arrangement. Grade only.* Occupational Work Experience Internship is supervised employment extending classroom learning at an on-the-job learning station relating to the student's educational or occupational goal. May be repeated for a total of sixteen (16) units, four (04) units maximum per semester (Repeat Code 25 for all Parallel Plan). Must be enrolled in 7 units including Work Experience units (for summer school - Work Experience and one other course). Alternate Plan - designed to offer students opportunities to attend college full-time one semester and work full-time the following semester. Job experience must relate directly to the student's educational goals. Up to eight (08) units may be earned in one semester. Students may not be enrolled in more than one other course or transfer from Alternate to Parallel or vice-versa without completing 7 units between plans. (CSU)  
*May be taken for a total of 16 units.*

### **AG 110 Introduction to Therapeutic Riding Principles**

*(Formerly AG 280.66) 1 unit/6 hours lecture for 3 weeks. CR/NC option. Recommended: Eligibility for English 100A or equiv.* An overview of the history, organization, principles and procedures in a therapeutic riding program for

persons with disabilities. Skills and training required for staff, instructors, therapists, and volunteers will be covered in this course. The student will also learn how to select and care for a therapy horse.

*May be taken for a total of 2 times.*

### **AG 111 Therapeutic Riding Program Procedures**

*(Formerly AG 280.68) 1.5 units/2 hours lecture, 3 hours laboratory for 10 weeks. CR/NC option. Prerequisite: Completion of Ag 110 with a grade of "C" or better. (Formerly AG 280.66). Recommended: Eligibility for English 100A or equiv.*

Theory and practical application of the skills necessary to assist in providing a safe, challenging and effective therapeutic riding experience to participants with disabilities. Familiarization with the use of adaptive equipment, saddle/tack fitting and lesson structure. Assessment, selection, handling, training, and management practices of therapy horses.

*May be taken for a total of 2 times.*

### **AG 112 Therapeutic Riding Program Operations**

*3 units/3 hours lecture. CR/NC option. Prerequisite: Completion of AG 110 with a grade of "C" or better. (Formerly AG 280.66). Recommended: Eligibility for English 100A or equiv.*

A survey course designed for the individual interested in operating or working in a therapeutic riding program. Understanding the client base: what disabilities may be served, and how their needs can most effectively be addressed in the therapeutic riding setting. Aspects of business organization, physical plant operations, personnel procedures and inter-agency relations will be presented.

*May be taken for a total of 2 times.*

### **AG 120 Introduction to Ecological Farming Systems**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv.*

Introduction to the history, theory and current status of ecological farming systems worldwide. Basic principles of ecological production. Methods of quality control and analysis. Includes recent developments in ecosystem health as it applies to agriculture. Surveys applications of ecological theory to regional farming industries.

### **AG 121 Organic Gardening and Food Production**

*4 units/3 hours lecture, 3 hours laboratory. CR/NC option. Recommended: Eligibility for English 100A or equiv.*

Introduction to professional food production with ecological production methods. Theory and practice with an emphasis on vegetables, fruits, and herbs. Application of techniques for locally appropriate production. Greenhouse, shade-house, & field labs. (Formerly AG 297.54F & AG 297.55F).

### **AG 122 Organic Viticulture**

*4 units/3 hours lecture, 3 hours laboratory. CR/NC option. Recommended: Eligibility for English 100A or equiv.*

Introduction to professional organic wine and table grape production with ecological production methods. Theory and practice with an emphasis on regional growing conditions. Includes appropriate stock, planting, maintenance, soil fertility,

biodiversity, immunological response building, and ecological pest management. Survey of economic outlook. (Formerly AG 297.70 and AG 297.71).

### **AG 167.5 Intro to Vet Medical Terminology, Anatomy, and Physiology**

*(Formerly AG 280.79) 3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent and completion of Bio 10.*

Commonly used terminology and biological concepts used in veterinary medicine. Includes study of basic normal anatomy and physiology (small animal emphasis) in a body systems format, along with related vocabulary and spelling. Commonly used veterinary acronyms and abbreviations are woven throughout the course where relevant.

### **AG 167.6 Veterinary Medical Office Procedures**

*(Formerly AG 280.61) 3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv.*

This course covers customer service, medical communication skills, office organization, scheduling, emergency recognition, stress management, dealing with grief, preventative health programs, payments, collections, computer and telephone skills, and medical record keeping.

### **AG 167.7 Small Animal Disease Recognition & Transmission Control**

*(Formerly AG 280.70) 3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv.*

Disease recognition, transmission control, hospital sanitation and sterilization procedures. Zoonoses awareness and protection. Introduction to the microbiology of bacterial, viral, and fungal infections, and chemical disinfectant handling.

### **AG 168.1 Care and Maintenance of Small Animals**

*(Formerly AG 280.72) 1 unit/3 hours lecture for 6 weeks. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*

Course is designed to enable pet owners to have a better understanding of companion animals. Anatomy, physiology, and behavioral patterns will be studied. Nutrition, housing, medical attention and use of proper terminology for communicating with veterinarians will be addressed. Responsibility of owners, city, state, and county will be discussed.  
*May be taken for a total of 2 times.*

### **AG 170 Professional Wine Judging**

*(Formerly AG 270.38) 1.5 units/3.5 hours lecture for 8 weeks. CR/NC option. Prerequisite: Must be age 21 or older. Recommended: Eligibility for English 100A or equiv.*

Professional wine competition organization, methodology, and awards. Critical evaluation of selected varietal wines with regard to wine judging competitions hosted by professional wine judges. An advanced sensory course for wine industry personnel and trade.

### **AG 171 Vocational Wine Component Tasting**

*1.5 units/3.5 hours lecture for 8 weeks. CR/NC option.*

*Prerequisite: Must be age 21 or older.*

Designed for wine industry personnel to learn organoleptic tasting techniques including varietal characteristics and other components of the fermentation process. A sensory course. (Formerly AG 281.23).

### **AG 172 Winemakers of Sonoma County**

*1.5 units/3 hours lecture for 8 weeks. CR/NC option.*

*Prerequisite: Must be age 21 or older.*

An eight part series involving discussions and tastings of six major varietals of Sonoma County, their styles and characteristics. Course will look at Sonoma County's position and place in the United States and foreign markets from a wine quality and wine varietal perspective. Some of the great winemakers of Sonoma County will participate as guest speakers. (Formerly AG 281.35).

### **AG 180A Horsemanship, Riding, and Safety A**

*(Formerly AG 280.56) 1.5 units/1.5 hours lecture, 1.5 hours*

*laboratory for 12 weeks. CR/NC option. Recommended:*

*Eligibility for English 100A or equiv.*

Introduction to riding skills, saddling, grooming, and bridling. Acquire basic knowledge of equipment and safety procedures. Use of riding aids and transitions.

*May be taken for a total of 2 times.*

### **AG 180B Horsemanship, Riding, and Safety B**

*(Formerly AG 280.67) 1.5 units/1.5 hours lecture, 1.5 hours*

*laboratory for 12 weeks. CR/NC option. Prerequisite:*

*Completion of AG 180A (or AG 280.56). Recommended:*

*Eligibility for English 100A or equiv.*

An introduction to leads and application of these aids. The refinement of direction as it applies to transitions and speed adjustment. A detailed study of the three basic gaits of the horse. Basic costs leading to management decisions in the industry.

*May be taken for a total of 2 times.*

### **AG 180C Horsemanship, Riding, and Safety C**

*(Formerly AG 280.53) 1.5 units/1.5 hours lecture, 1.5 hours*

*laboratory for 12 weeks. CR/NC option. Prerequisite:*

*Completion of AG 180B (or AG 280.67). Recommended:*

*Eligibility for English 100A or equiv.*

Instruction of basic horse training skills using a snaffle bit. Students will demonstrate the ability to move various parts of the horse in order to perform certain equine performance exercises.

*May be taken for a total of 2 times.*

### **AG 180.3 Horse Housing & Facilities**

*1 unit/3 hours lecture for 6 weeks. CR/NC option.*

*Recommended: Eligibility for English 100A or equiv.*

Discussion of design and layout of horse stables and facilities, various types of materials and construction available. Barns, corrals, fencing, stable equipment for small and large horse ranches. (Formerly AG 280.30).

### **AG 190 Horse Handling Skills**

*(Formerly AG 280.63) 1.5 units/1.5 hours lecture, 1.5 hours*

*laboratory for 12 weeks. CR/NC option. Prerequisite:*

*Completion of AG 180A (or AG 280.56). Recommended:*

*Eligibility for English 100A or equiv.*

Introduction to fundamental training of the horse. Exploring horse behavioral patterns, horse handling skills such as trailering, lunging, round pen training, and additional riding skills. Also exploring the interaction of horse and rider as it relates to performance.

*May be taken for a total of 2 times.*

### **AG 240.1 Sheep Fitting & Showing**

*(Formerly AG 240A) 1 unit/3 hours lecture for 6 weeks. CR/*

*NC option.*

Basic principles of selection, feeding, fitting and presentation of sheep for show and sale.

### **AG 240.2 Swine Fitting & Showing**

*1 unit/3 hours lecture for 6 weeks. CR/NC option.*

Basic principles of selection, feeding, fitting and presentation of swine for show and sale.

### **AG 240.3 Beef Fitting & Showing**

*(Formerly AG 240C) 1 unit/3 hours lecture for 6 weeks. CR/*

*NC option.*

Basic principles of selection, feeding, fitting and presentation of beef cattle for show and sale.

### **AG 241 Swine Production**

*3 units/3 hours lecture. CR/NC option. Recommended:*

*Eligibility for English 100A or equiv.*

Overview of the swine industry in California and the United States; swine breeds, developing a swine herd, feeding, breeding, merchandising and raising of replacements; health and selection of live animals and carcasses.

### **AG 242 Practical Bird Care**

*3 units/3 hours lecture. CR/NC option. Recommended:*

*Eligibility for English 100A or equiv.*

Care of birds in cages including pheasants, doves, pigeons, finches, hook-bills and waterfowl. Selection, feeding, disease control, housing and routine problems.

### **AG 243 Poultry Husbandry**

*3 units/3 hours lecture. CR/NC option. Recommended:*

*Eligibility for English 100A or equiv.*

Overview of poultry industry with emphasis on brooding, rearing, feeding, health and housing of fryers, replacements and laying of hens. Topics of particular interest to the small and medium producers are emphasized.

### **AG 244 Gamebird Management**

*3 units/3 hours lecture. CR/NC option. Recommended:*

*Eligibility for English 100A or equiv.*

Comprehensive study of gamebird types, as well as their breeding, feeding, housing and health care.

### **AG 246.1 Cattle Reproduction Management**

*1 unit/17 hours lecture for 1 week. CR/NC option.*

*Recommended: Eligibility for Engl 100A or equivalent.*

Physiological aspects of cattle as it relates to reproductive management, reproductive systems, hormones, semen evaluation and the estrus cycle.

### **AG 246.2 Horse Reproduction**

*(Formerly AG 246B) 1 unit/17 hours lecture for 1 week. CR/*

*NC option. Recommended: Eligibility for English 100A or*

*equiv.*

Covers areas of the physiological aspects of horses as they relate to reproductive management, reproductive systems, hormones, semen evaluation and the estrus cycle.

### **AG 246.3 Sheep Reproduction**

*(Formerly AG 246C) 1 unit/18 hours lecture for 1 week. CR/*

*NC option. Recommended: Eligibility for English 100A or*

*equiv.*

Covers areas of ram semen testing, pregnancy detection, out of season breeding, heat detection, ova transfer and artificial insemination.

### **AG 247 Artificial Insemination of Cattle**

*3 units/3 hours lecture. CR/NC option. Prerequisite:*

*Completion of AG 245; OR prior qualification for AG 247.*

*Recommended: Eligibility for Engl 100A or equivalent.*

For livestock owners and managers; includes anatomy and physiology of the bovine reproductive process; collection and processing of semen; proper handling of frozen semen, estrus detection and manipulation methods. Application of theory put into use in extensive laboratory exercise in rectal palpation and artificial insemination technique.

### **AG 248 Packing Livestock for Wilderness Travel**

*3 units/3 hours lecture. CR/NC option. Recommended:*

*Eligibility for Engl 100A or equivalent.*

Fundamental packing techniques such as tying pack hitches (Box and Diamond) over bulky loads and caring for livestock on the trail for extended periods will be emphasized. Land and trail preservation techniques will be discussed in addition to safety, first aid, and camp management.

### **AG 250 Master Gardening**

*4 units/4 hours lecture. CR/NC option.*

A practical course for the serious gardener with intensive coverage of weeds, diseases, insects, soils, water, fertilizers, fruits and landscape trees, pesticides, vegetables and irrigation techniques. Several representatives of the University of California serve as guest lecturers.

### **AG 251 Specialty Crop Production**

*3 units/2 hours lecture, 1 hour by arrangement. CR/NC*

*option. Recommended: Eligibility for Engl 100A or*

*equivalent.*

Production of specialty horticulture crops including cultural practices, marketing and management decisions. Emphasis on Sonoma County fruit, vegetable and berry production for the gourmet market.

### **AG 253 Soil Management**

*3 units/3 hours lecture. CR/NC option. Recommended:*

*Eligibility for Engl 100A or equivalent.*

Study of soil as a medium to support plant growth; testing the physical and chemical properties of soil; managing soils in regard to fertilization, irrigation, and conservation.

### **AG 254 Practical Beekeeping**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv.*

Principles and practices of beekeeping, especially in regard to hive design, usage and repair, as well as bee culture. Diseases, queen care and product marketing are emphasized.

### **AG 256 Basic Wine Grape Viticulture**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv.*

Basic knowledge and skills required to establish a wine grape vineyard in Sonoma County.

### **AG 259 Basic Enology**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv.*

History, chemistry and technology of wine making; emphasis on the California industry.

### **AG 261 Feeds & Feeding**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv.*

Animal feeds, digestion, utilization and assimilation of feeds; metabolism and nutrient requirements of livestock; composition and nutritive values of animal feeds and balancing of rations.

### **AG 262 Beef Production**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv.*

Covers all aspects of beef cattle management including breed options, feeds and feeding practices, pasture management, selection, herd health and production skills. Course is beneficial to large and small farmers desiring to improve their knowledge of beef production.

### **AG 263A Sheep Production**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv.*

Fundamental knowledge and skill to successfully raise sheep in Sonoma County. Discussion of sheep breeds, pasture management, nutrition, health, general management. Guest speakers.

### **AG 263B Advanced Sheep Production**

*3 units/3 hours lecture. CR/NC option. Prerequisite: Ag 263A completed or equivalent experience. Recommended: Eligibility for Engl 100A or equivalent.*

Management of highly productive flock especially as it relates to breeding, nutrition, disease prevention and marketing. Field trips will be taken to outstanding local ranches.

### **AG 264A Livestock Health Practices**

*3 units/3 hours lecture. CR/NC option.*

Importance of maintaining good health among farm animals. Common diseases, parasites, reproductive and other animal health problems are discussed.

### **AG 264B Advanced Livestock Health Practices**

*3 units/3 hours lecture. CR/NC option. Prerequisite: Ag 264A, consent of instructor, or equivalent. Recommended: Eligibility for Engl 100A or equivalent.*

Discussion of physiological effects of disease, environment, management, and treatment upon domestic livestock.

### **AG 265A Horse Husbandry**

*3 units/3 hours lecture. CR/NC option.*

Selection, use breeds, feeding, breeding, handling, and diseases with horses. Emphasis on Western United States.

### **AG 265B Horse Management**

*3 units/3 hours lecture. CR/NC option. Prerequisite: Completion of AG 265A; OR prior qualification for AG 265B; OR completion of AG 25 (or AG 65). Recommended: Eligibility for Engl 100A or equivalent.*

Emphasizing the management aspects of horse husbandry. Nutrition, reproduction, disease prevention, and control housing and equipment, as well as equinomics will be covered.

### **AG 266A Horseshoeing Principles and Practices**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*

Basic anatomy and physiology of the horse as it relates to the foot, pastern, leg and skeletal sections of the horse associated with horseshoeing.

### **AG 266B Intermediate Horseshoeing**

*3 units/3 hours lecture. CR/NC option. Prerequisite: Completion of AG 266A; OR prior qualification for AG 266B.*

Technical aspects of horse anatomy and physiology as they relate to shoeing, preventative care, corrective shoeing and other specialized hoof/leg management practices. Students participate in hands on experience.

### **AG 267 Livestock Selection**

*3 units/3 hours lecture. CR/NC option.*

Selection of breeding and market lambs, hogs and beef utilizing a wide variety of selection techniques. Live animal and carcass evaluation.

### **AG 269 General Livestock Practices**

*3 units/3 hours lecture. CR/NC option.*

Breeding, feeding, handling and basic veterinary skills involved in raising farm animals.

### **AG 270 Selected Topics in Agriculture Management**

*0.5-2 units/up to 3 hours lecture for 3 weeks. CR/NC option.*

Series of courses designed to provide agriculture management students with special skills in dealing with current trends and topics in today's complex organizations.

### **AG 276 Agricultural Law**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv.*

Contemporary legal issues impacting the ownership and management of farms, ranches and agribusiness enterprises are the focus of the course. Property rights, contracts, estate planning, labor and water are among the topics discussed.

### **AG 277 Wine Marketing Fundamentals**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*

Practical approach to marketing wine, from production planning, marketing channels, marketing methods and techniques, marketing strategy, sales disciplines, effective public relations.

### **AG 278 Agricultural Microcomputer Applications**

*3 units/3 hours lecture. CR/NC option.*

This course is designed to familiarize the students with the various types of computer hardware and software available for use in agriculture. Emphasis will be placed on system selection and usage. Students will perform various agricultural exercises using spreadsheets (LOTUS), word processing (WordPerfect), and database management decisions (d-Base III). The course will also cover speciality agriculture software such as accounting programs and agriculture telecommunications.

### **AG 280 Selected Topics in Animal Science**

*0.5-2 units/up to 2 hours lecture, 3 hours laboratory. CR/NC option. Recommended: Eligibility for English 100A or equiv.*

Designed to provide those involved with the animal science industry and related business with skills and knowledge needed to deal with current topics in today's complex animal science industry. *May be repeated with different topics.*

### **AG 281 Selected Topics in Viticulture**

*0.5-3 units/up to 3 hours lecture. CR/NC option.*

Basic vineyard and small winery techniques.

### **AG 282 Pest Control Management Update**

*0.5 unit/10 hours lecture for 1 week. CR/NC option. Recommended: Eligibility for English 100A or equiv.*

Primarily for upgrading those persons with pest control license. Involves pest management lectures by experts in entomology, plant pathology and related subjects.

*May be taken for a total of 18 units.*

### **AG 290 Ornamental Garden Planting/Care**

*2 units/1 hour lecture, 3 hours laboratory. CR/NC option. Recommended: Eligibility for English 100A or equiv.*

Development of a complete ornamental garden including plant selection, spacing, soil preparation, planting, composting, irrigation, pruning, training and maintenance of all garden elements. Emphasis is placed on trees, annual flowers, perennial flowers and lawns and their compatibility with the natural garden environment.

### **AG 292 Propagation Practices**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv.*

Introduction into the common practices of plant propagation by seed and vegetative means, a look at basic propagation procedures, structures, media, fertilizers, and hormone applications.

### **AG 293 Landscape Installation & Maintenance**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv.*

Proper care and maintenance of plants within a landscape. Basic principles of soil management, planting/transplanting, fertilization and watering practices.

### **AG 294 Landscape Design**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv.*

Basic principles of residential landscape design. Discussion on selection and use of plant materials. Practice and drawing a landscape design to scale.

### AG 295.1 Trees

(Formerly AG 295A) 1 unit/3 hours lecture for 6 weeks. CR/NC option. Recommended: Eligibility for English 100A or equiv.

Identification of trees; their characteristics, landscape use and maintenance requirements.

### AG 295.2 Shrubs, Vines, Groundcovers

(Formerly AG 295B) 1 unit/3 hours lecture for 6 weeks. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Identification of shrubs, vines, and groundcovers; their characteristics, landscape use and maintenance requirements.

### AG 295.3 Annuals & Perennials

(Formerly AG 295C) 1 unit/3 hours lecture for 6 weeks. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Identification of flowering annuals and perennials including some houseplants; their characteristics, home or landscape use and maintenance requirements.

### AG 297 Selected Topics in Horticulture

0.5-2 units/up to 9 hours lecture for 1 week. CR/NC option. Recommended: Eligibility for English 100A or equiv.

Designed to provide those involved with horticultural enterprises and related businesses with the special skills and knowledge needed to deal with current topics in today's complex horticultural industry.

## American Sign Language

### ASL 1A American Sign Language 1A

(Formerly ASL 51A) 3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Everyday communication in ASL: Exchanging information; identifying others; making requests; giving reasons, options, simple directions; asking for clarification. Topics center around personal information and the immediate environment. (CSU/UC)

AA/AS area E; CSU area C2; IGETC language

### ASL 1B American Sign Language 1B

(Formerly ASL 51B) 3 units/3 hours lecture. CR/NC option. Prerequisite: ASL 1A (formerly ASL 51A, SE 214A) or equivalent. Recommended: ASL 5 (formerly ASL 55, SE 217).

Continuation of ASL 1A. Everyday communication: discussion of classes, the campus, home, work and transportation; physical descriptions of peoples and objects; general conversation skills; visual perception and spatialization skills. (CSU/UC)

AA/AS area E; CSU area C2

### ASL 2A American Sign Language 2A

(Formerly ASL 52A) 3 units/3 hours lecture. CR/NC option. Prerequisite: ASL 1B (formerly ASL 51B, SE 214B) or equivalent. Recommended: ASL 5 (formerly ASL 55, SE 217).

Expansion of conversational functions and grammar introduced in ASL 1A and ASL 1B; locating things, asking for solutions to everyday problems, telling

about life events and personal background, making suggestions, requests, and asking permission. (CSU/UC)

AA/AS area E; CSU area C2

### ASL 2B American Sign Language 2B

(Formerly ASL 52B) 3 units/3 hours lecture. CR/NC option. Prerequisite: ASL 2A (formerly ASL 52A, SE 214C) or equivalent. Recommended: ASL 5 (formerly ASL 55, SE 217).

Continuation of ASL 2A. Conversation and narration skills: describing and identifying things; describing problems at home, work and school; expressing opinions and feelings; describing disrupted plans. (CSU/UC)

AA/AS area E; CSU area C2

### ASL 5 History and Culture of Deaf People in America

(Formerly ASL 55) 3 units/3 hours lecture. CR/NC option. Historical and cultural overview of the American Deaf community and its language, including: notable deaf persons of the past and present; political and educational issues of the past and present; the development of ASL and deaf culture in America. (CSU/UC)

### ASL 48 Selected Topics in American Sign Language and Deaf Culture

1-3 units/up to 3 hours lecture. CR/NC option. Prerequisite: Vary depending on specific selected topic offered. Corequisite: Vary depending on specific selected topic offered. Recommended: Vary depending on specific selected topic offered.

Intensive study of a topic in American Sign Language and Deaf culture. Designed to stimulate serious thought and advanced knowledge and skills in ASL and Deaf culture by an in-depth analysis of a subject area through lecture, discussion, seminar, research, video, film and other media. (CSU/UC)

May be repeated with different topics.

## Anatomy

### ANAT 1 General Human Anatomy

5 units/3 hours lecture, 6 hours laboratory. CR/NC option. Prerequisite: Bio 10 with grade of "C" or better.

Structure and functional morphology of the human body. Developmental, gross and microscopic structure of human tissues, organs and organ systems including laboratory dissections of human cadavers. (CSU/UC)

AA/AS area C; CSU areas B2, B3; IGETC area 5B; CAN BIOL 10; ANAT 1 + PHYSIO 1 = CAN BIOL SEQ B

### ANAT 51 Anatomy & Physiology

1-5 units/up to 10 hours by arrangement. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent and completion of high school or college biology course with grade of "C" or better.

Individualized instruction in basic structure and function of human tissues, organs, and organ systems. (CSU)

AA/AS area C; CSU areas B2, B3

May be taken for a total of 5 units within 4 semesters.

### ANAT 58 Introduction to Human Anatomy

3 units/2 hours lecture, 3 hours laboratory. CR/NC option. Recommended: Completion of BIO 10, and eligibility for ENGL 100A.

A survey of human anatomy including study of gross and microscopic tissue organized by systems. This introductory course is designed for allied health majors who require a fundamental background in human anatomy. (Not intended for physical education, nursing (RN) or physical therapy majors.) (CSU)

AA/AS area C

## Anthropology

### ANTHRO 1 Physical

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Human evolution and variation as a biocultural study. Origins of humankind are explored through surveys of the fossil record, primate social behavior, human genetics and comparative primate anatomy. (CSU/UC)

AA/AS area C; CSU area B2; IGETC area 5B; CAN ANTH 2

### ANTHRO 1L Physical Anthropology Lab

1 unit/3 hours laboratory. CR/NC option. Prerequisite: Completion of Anthro 1. Corequisite: Concurrent enrollment in Anthro 1.

An introductory laboratory course in which scientific methodology is taught and used to explore/experiment with topics found in lecture sections of Anthro 1. Topics will be selected from the following according to instructor interest: Mendelian genetics, population genetics, human variability, forensics, medical anthropology, epidemiology, hominid dietary patterns, non-human primates, primate dental and skeletal anatomy, fossil hominids, chronometric dating, environmental challenges to hominids, environmental impact of hominid behavior, general methodologies utilized in physical anthropological research, and the general study of hominids as bio-culturally adapting animals. (CSU/UC)

CSU area B3; IGETC area 5B

### ANTHRO 2 Cultural

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Exploration of the concept of culture. Method and theory of field work and ethnology. Analysis of western and non Western traditions with examples taken from tribal, peasant, and urban settings. (CSU/UC)

AA/AS area D; CSU area D; IGETC area 4; CAN ANTH 4

### **ANTHRO 3 Prehistory & Archaeology**

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Introduction to prehistory as a modern anthropological study, traces the origin, development and change of human cultures from their beginnings to the advent of cities and literate civilizations. Special attention is given to theory, methods and the goals of modern archaeology. (CSU/UC)

AA/AS area D; CSU area D; IGETC area 4; CAN ANTH 6

### **ANTHRO 21 American Folklore and Folklife**

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv.

Survey of the forms and functions of American oral traditions and folklife customs. Analysis of myth, legend, proverb, riddle, humor, life cycle events, and other folklore/life traditions in American community and neighborhood settings. Cultural comparisons will include no less than three of the following groups: African American, Asian American, Chicano/Latino American, European American, Indigenous Peoples of the Americas, and Americans of Middle Eastern Origin. (CSU/UC)

AA/AS areas D, G; CSU area D; IGETC area 4

### **ANTHRO 30 Peoples & Cultures of the World**

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Comparative study of traditions in a wide range of cultures throughout the world. Sampling of cultures according to instructor's areas of interest. Comparative aspects of day-to-day living as well as larger social institutions such as kinship, religion or political institutions. Requirements for Anthropology 30 include term paper, additional examinations, readings, and summaries. (CSU/UC)

AA/AS area D

### **ANTHRO 31 Mesoamerican Origins of Latino Culture**

3 units/3 hours lecture, 0.5 hour by arrangement. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Ancient civilizations of Mesoamerica as the cultural foundation for Latino American peoples in the United States today. This class examines religious ideas, monumental architecture, art, writing systems, astronomy calendrics, the nature of city and social life, agricultural and food practices, the cultural and environmental impact of Spanish contact and colonial periods, and the distribution of Mesoamerican cultural traditions throughout much of the United States today. (CSU/UC)

AA/AS areas E, G; CSU area C1; IGETC area 3B

### **ANTHRO 32 Native Cultures of North America**

3 units/3 hours lecture, 0.5 hour by arrangement. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

A comparison of diverse native American cultures in North America, from the Pleistocene to the present time, including the Native cultural responses to European and other cultural contact. (CSU/UC)

AA/AS areas D, G; CSU area D; IGETC area 4

### **ANTHRO 34 Native Cultures of California**

3 units/3 hours lecture, 0.5 hour by arrangement. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

A comparison of diverse Native American cultures in California from the Pleistocene to the present time, including the Native cultural responses to the colonial influences of the Spanish, Russians, and other Euro-American people. (CSU/UC)

AA/AS area G

### **ANTHRO 43 Native-American Art**

3 units/3 hours lecture, 0.5 hour by arrangement. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Introductory survey emphasizing the interrelationship of art, culture, and the individual artist in numerous Native American cultures. Additional emphasis on the interactions and influences of non-Indian cultures on native art beginning in colonial times and continuing today. (CSU/UC)

AA/AS areas E, G; CSU area C1; IGETC area 3A

### **ANTHRO 48 Selected Topics**

3 units/3 hours lecture. CR/NC option. Prerequisite: Completion of PSYCH 1A; OR completion of SOC 1; OR completion of ANTHRO 1; OR completion of ANTHRO 2; OR prior qualification for ANTHRO 48. Recommended: Eligibility for Engl 100A or equivalent.

An intensive study of selected topics of current importance in anthropology by an instructor who has specialized in that area. The particular emphasis is listed in the Class Schedule. Stimulates serious thought by means of an in-depth presentation. (CSU/UC)

May be taken for a total of 6 units.

### **ANTHRO 70 Field Archaeology**

2-4 units/up to 4 hours lecture, 36 hours by arrangement for 4 weeks. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Primarily a field excavation experience. Instruction in all aspects of modern archaeological excavation methods including preliminary data analysis and specimen cataloguing. Field activities are designed to acquaint the student with the goals of modern archaeology: the study of culture history, the reconstruction of ancient life styles, and the investigation of ways in which human cultures changed in prehistory. (Repeat Code 14) (CSU)

May be taken for a total of 12 units.

### **ANTHRO 71 Introduction to Museology**

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Introduction and survey of museum technology. Care, handling, and preservation of artifacts. Principles of museum design and display. Theory and technique of museum research. General principles in management of public museums. (CSU)

### **ANTHRO 370 Field Archaeology**

2-4 units/up to 3 hours lecture, 32 hours laboratory for 4 weeks. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Primarily a field excavation experience. Instruction in all aspects of modern archaeological excavation methods including preliminary data analysis and specimen cataloguing. Field activities are designed to acquaint the student with the goals of modern archaeology: the study of cultural history, the reconstruction of ancient life styles and the investigation of ways in which human cultures changed in prehistory.

May be taken for a total of 12 units.

## **Applied Graphics**

### **APGR 50 Introduction to Typography**

2 units/2 hours lecture, 2 hours laboratory. Grade only. Prerequisite: Completion of or concurrent enrollment in APGR 91.

Development of practical and visual skills for using type in effective graphic communication. Includes, terminology, survey of typefaces, design basics, advanced typography skills and computer production techniques. (CSU)

### **APGR 51 Computer Related Design Basics and Application**

2.5 units/2 hours lecture, 2 hours laboratory. Grade only. Corequisite: APGR 91 or equivalent.

This course provides the graphic design student with introductory history, information, skills, and material relevant to basic graphic design communication. The basic principles of design and specific problem solving skills are applied for production on the computer. (CSU)

### **APGR 52 Intermediate Design Graphics**

4 units/2 hours lecture, 6 hours laboratory. Grade only. Prerequisite: Completion of APGR 51.

Emphasizes a continuation of the practices of graphic design and line art preparation. (CSU)

### **APGR 53A Advanced Design Graphics**

2 units/2 hours lecture, 2 hours laboratory. Grade only. Prerequisite: APGR 52 with "C" or better or equivalent.

Theory and practice of graphic design in a project oriented atmosphere. Student will be exposed to the design process, four-color process, and basic color rendering techniques and digital imaging and production. (CSU)

### **APGR 53B Advanced Design Graphics**

2 units/2 hours lecture, 2 hours laboratory. Grade only. Prerequisite: APGR 53A.

Theory and practice of graphic design in a project oriented atmosphere. Students will learn to apply the design process, advanced typography skills, digital imaging and production to practical design projects. (CSU)

### **APGR 54 Commercial Illustration**

*3 units/2 hours lecture, 4 hours laboratory. Grade only. Recommended: Art 7A or equivalent; must register first class meeting and present portfolio of work.*

Demonstration and use of techniques and media in professional illustration. Emphasis on developing and marketing student's personal style through evolution of strong portfolio and knowledge of commercial market(s). Second semester repeat focuses on fine-tuning of style and professionalism by closely approximating actual client/artist contact and deadline constraints students will face in professional marketplace. (CSU)

*May be taken for a total of 6 units.*

### **APGR 56 Introduction to Print Production**

*1 unit/2 hours lecture, 2 hours laboratory for 8 weeks. Grade only. Prerequisite: Completion of or concurrent enrollment in APGR 91; OR prior qualification for APGR 56.*

This course offers an overview of graphic production for printing with lectures and demonstrations for introduction of graphic design processes. (CSU)

### **APGR 58 Digital Prepress**

*2 units/2 hours lecture, 2 hours laboratory. Grade only. Prerequisite: Completion of APGR 93; OR completion of APGR 60; OR prior qualification for APGR 58.*

A course designed to prepare the graphic design student for dealing with the prepress process. The student will learn the skills needed to create accurate film for offset printing as well as learn skills necessary to communicate and work with service bureaus and printing firms. (CSU)

### **APGR 59 Digital Design Production and Process**

*3 units/2 hours lecture, 2 hours laboratory, 1 hour by arrangement. Grade only. Prerequisite: Completion of APGR 91 or equivalent Macintosh or PC experience. Recommended: Some design experience and/or FreeHand experience.*

An intensive course designed to teach the graphic design student how to create effective graphic images and produce operative files for print production. (CSU)

*May be taken for a total of 6 units.*

### **APGR 60 Production Techniques in Illustrator**

*3 units/2 hours lecture, 2 hours laboratory, 1 hour by arrangement. Grade only. Prerequisite: Completion of APGR 91 or equivalent Macintosh and PC experience. Recommended: Some design experience and/or Illustrator experience.*

An intensive course designed to teach the student how to create effective graphic images and produce operative files for print production using Adobe Illustrator. (CSU)

*May be taken for a total of 6 units.*

### **APGR 61 Digital Design Production and Process**

*1.5 units/2 hours lecture, 2 hours laboratory, 1.5 hours by arrangement for 8 weeks. Grade only. Prerequisite: APGR 91. Recommended: Some design experience and/or FreeHand experience.*

An intensive course designed to teach the graphic design student how to create effective graphic images and produce operative files for print production. (CSU)

### **APGR 62 Long Publication Production**

*1.5 units/2 hours lecture, 2 hours laboratory, 1 hour by arrangement for 8 weeks. Grade only. Recommended: Completion of APGR 91 or equivalent.*

This course will offer advanced techniques for producing long publications. Topics to be covered will include: a systematic approach to creating book layouts, advanced use of style sheets and master pages, table of contents and indexing, generating one publication from numerous files, typographic fine tuning, importing and manipulating images, defining spot and process colors. (CSU)

*May be taken for a total of 3 units.*

### **APGR 64 Contemporary Hand-Lettering, Type and Calligraphy**

*0.5 unit/0.5 hour lecture, 1.5 hours laboratory for 8 weeks. Grade only.*

This course is designed to instruct the student in hands-on application of hand-lettering to include a varied look at the structure of letters from the Roman and Italic calligraphy. Pen and brush innovative techniques are emphasized as they apply to color and paper choices. (CSU)

### **APGR 65 The Business of Graphic Design**

*1.5 units/2.5 hours lecture, 1.5 hours laboratory for 8 weeks. Grade only.*

A course designed to prepare the design student for dealing with the business side of graphics. The student will learn the information necessary to develop accurate bids, schedule projects, keep accurate records, set up a freelance business, legally understand taxes and work with clients, vendors and colleagues in a copacetic manner. (CSU)

### **APGR 66 Interactive Multimedia Design**

*1.5 units/2 hours lecture, 2 hours laboratory, 1 hour by arrangement for 8 weeks. CR/NC option.*

Course is an introduction to the principles of successful multimedia design. Students will utilize an industry-standard multimedia application (such as Macromedia Director) to develop successful multimedia projects for CD-ROM and the web. Topics will include: multimedia overview, project development steps, multimedia design principles, incorporating graphics, typography, sound, and video, and converting files for web delivery using shockwave. Familiarity with the World Wide Web and Photoshop is recommended. (CSU)

### **APGR 67 Commercial Illustration: Basics**

*1.5 units/2 hours lecture, 4 hours laboratory for 8 weeks. Grade only. Recommended: Completion of ART 7A.*

Demonstration and use of techniques and media in professional illustration. Emphasis on developing and marketing student's personal style through evolution of strong portfolio and knowledge of commercial market(s). (CSU)

*May be taken for a total of 6 units.*

### **APGR 68 Commercial Illustration: Digital Imagery**

*1.5 units/2 hours lecture, 4 hours laboratory for 8 weeks. Grade only. Prerequisite: Completion of or concurrent enrollment in APGR 67 and APGR 61 and ART 82 (formerly Art 390.72) OR completion of or concurrent enrollment in APGR 67 and APGR 60 and ART 82 (formerly Art 390.72).*

Application of basic commercial illustration skills using computer applications. Emphasis on developing and marketing student's personal style through evolution of strong portfolio and knowledge of commercial market(s). (CSU)

*May be taken for a total of 6 units.*

### **APGR 69 Online Resources for Graphic Designers**

*1-1.5 units/up to 9 hours by arrangement for 8 weeks. CR/NC option.*

An online course to survey the resources available for graphic designers on the Internet and World Wide Web. Topics will include: how to find and assess online graphic design and prepress information, techniques for downloading fonts and graphics, using e-mail to transfer information, and subscribing to Internet discussion groups that specialize in graphic design. Previous computer experience is highly recommended. If possible, students should apply for a SLIP/PPP computer account on Nermal or another Internet Service Provider before the first class meeting. (CSU)

### **APGR 70 Creating the Professional Portfolio**

*1.5 units/2.5 hours lecture, 1.5 hours laboratory for 8 weeks. Grade only. Recommended: A body of 10-15 pieces of work completed for portfolio development.*

A course designed to prepare the student for portfolio presentations. The student will learn skills needed to create a professional quality portfolio, resume, and self-promotions piece. The student will also learn how to shoot slides of the work completed. (CSU)

### **APGR 71 Innovative Thinking for Graphics Professionals**

*0.5 unit/1 hour lecture, 1 hour laboratory for 8 weeks. CR/NC only.*

A comprehensive class on the use of specific traditional and non traditional techniques for idea development and problem solving in the design process. Focus is on unlocking creative thinking potential and transforming project limitations into innovative solutions. (CSU)

*May be taken for a total of 2 units.*

### **APGR 72 Principles of Screen Design**

*1.5 units/2 hours lecture, 2 hours laboratory, 1 hour by arrangement for 8 weeks. Grade only. Prerequisite: CIS 58.51B (formerly CIS 84.42B) AND CIS 73.31A (formerly CIS 83.12A) with a grade of "C" or better, or equivalent experience. Recommended: Some design experience and computer experience.*

An intensive course designed to teach the web design student how to create effective web sites utilizing typographic and design principles. (CSU)

*May be taken for a total of 3 units.*

### **APGR 73 Animation Design for the Web**

*1.5 units/2 hours lecture, 2 hours laboratory, 1 hour by arrangement for 8 weeks. CR/NC option.*

A course designed to teach students how to apply the principles of design, typography, color and animation to web animation projects using an industry-standard animation software (such as Macromedia Flash). Experience in web page development and web graphics software is recommended. (CSU)

### **APGR 91 Introduction to Computer Based Design**

*2 units/2 hours lecture, 2 hours laboratory. Grade only.*

A basic course in micro computer operations specific to the graphic design field. Emphasis is placed on design, computer skills on both the Macintosh and PC platforms using graphics software packages, dealing with type in a professional manner, graphic imaging and digital print production. (CSU)

### **APGR 92 Tools, Methods and Materials**

*2 units/2 hours lecture, 2 hours laboratory. Grade only.*

A basic course concentrating on hands-on knowledge of basic comprehensive techniques for the graphic designer. Student will learn how to use a variety of graphic tools, materials and techniques to create professional quality pieces. Students have an opportunity to learn by demonstration and application the basic methods of inking, marker rendering, simple illustration techniques, stat camera operation, type comprehensive techniques. (CSU)

### **APGR 93 Introduction to QuarkXpress for the Designer**

*3 units/2.5 hours lecture, 1.5 hours laboratory. Grade only. Recommended: APGR 91 or equivalent or Macintosh experience.*

A basic introductory course in QuarkXpress for the graphic designer. Emphasis will be placed on design, practical computer skills, and program operations. The student will explore the features of QuarkXpress through a variety of design projects including: flyers, advertisements, brochures, forms, and newsletters. The course will cover the following topics: document layout and set-up, working with type, importing graphics, style sheets, text linking, master pages, working with multi page documents, and production output for the printing industry. (CSU)

### **APGR 95 Advanced Quark Xpress**

*3 units/2.5 hours lecture, 1.5 hours laboratory. Grade only. Prerequisite: Completion of APGR 93; OR completion of CIS 73.37 (or CIS 83.8); OR prior qualification for APGR 95. Recommended: Previous experience using QuarkXPress.*

This course will offer advanced techniques for developing high-quality, multi-page documents using QuarkXPress. Topics to be covered will include: advanced use of style sheets and master pages, typographic fine tuning, importing and manipulating images, defining spot and process colors, trapping, separating color designs, working with a service bureau or printer, and using Quark to create electronic World Wide Web pages. (CSU)

### **APGR 98 Special Studies in Applied Graphics**

*1-3 units/up to 9 hours by arrangement. Grade only.*

*Prerequisite: Application to department*

*Enrollment in Applied Graphics courses.*

Seminars or individual conferences by arrangement to provide for independent study and enriched academic experience. (Repeat Code 36) (CSU)  
*Independent study including 49 and 98 courses - 6 unit total.*

### **APGR 99I Occupational Work Experience-Intern Program**

*1-8 units/up to 40 hours by arrangement. Grade only.*

Occupational Work Experience Internship is supervised employment extending classroom learning at an on-the-job learning station relating to the student's educational or occupational goal. May be repeated for a total of sixteen (16) units, four (04) units maximum per semester (Repeat Code 25 for all Parallel Plan). Must be enrolled in 7 units including Work Experience units (for summer school - Work Experience and one other course). Alternate Plan - designed to offer students opportunities to attend college full-time one semester and work full-time the following semester. Job experience must relate directly to the student's educational goals. Up to eight (08) units may be earned in one semester. Students may not be enrolled in more than one other course or transfer from Alternate to Parallel or vice-versa without completing 7 units between plans. (CSU)

*May be taken for a total of 16 units.*

possibilities Hands-on exposure to computers and the Arc-View 3.1, GIS software package is provided during laboratory. (CSU)

*May be taken for a total of 3 times.*

### **APTECH 55 Basic Drafting Skills**

*(Formerly IED 55) 1.5 units/2 hours lecture, 3 hours laboratory for 8 weeks. Grade only.*

Introduction to basic manual drafting skills, this course will teach the student: how to use drafting tools; the development of linework and lettering skills; the procedures for executing geometric construction; techniques of freehand drafting; and fundamentals of orthographic projections and isometric drawing. (CSU/UC)

*May be taken for a total of 3 units.*

### **APTECH 56 Introduction to Computer-Aided Drafting**

*(Formerly ENGR 56) 2 units/2 hours lecture, 3 hours laboratory, 3 hours by arrangement for 8 weeks. Grade only.*

*Prerequisite: Completion of or concurrent enrollment in APTECH 55 (or IED 55).*

Introduction to computer-aided drafting utilizing the AutoCAD software program. Course will teach the student how to use this Windows-based commercial software to execute professional quality drafting/design work. Particular attention will be given to the components of a CAD system, the software interface, drawing set-up, geometric construction & editing, orthographic projection, dimensioning, plotting, and an introduction to 3-dimensional drafting/design. (CSU/UC)

*May be taken for a total of 4 units.*

### **APTECH 57 Advanced AutoCAD**

*3 units/2 hours lecture, 3 hours laboratory, 2 hours by arrangement. Grade only. Prerequisite: APTECH 56 (formerly ENGR 56 and ENGR 22) with a grade of "C" or better or equivalent.*

Computer-aided drafting using the AutoCAD software program. Areas covered include: advanced layout, construction and editing techniques, advanced dimensioning practices, isometric drawing, 3D modeling and rendering, software customization and project-oriented architectural, civil and mechanical engineering applications. (CSU)

## Applied Technology

### **APTECH 53 Computer Modeling & Animation with 3D Studio Max**

*3 units/2 hours lecture, 3 hours laboratory, 2 hours by arrangement. Grade only.*

Three-Dimensional modeling, rendering, and animation using the windows-based 3D Studio Max Software program. The student will create professional quality 3D models, photo-realistic still images and film quality animation at the personal computer. Topics include: creating 3-Dimensional objects and scenes, assigning and editing bitmap materials, creating and setting light sources and camera, casting shadows, and describing movement of: objects, camera, and lights to produce desired results at computer animations. (CSU)

*May be taken for a total of 2 times.*

### **APTECH 54 Introduction to Geographic Information System (G.I.S.)**

*2 units/3 hours lecture, 3 hours laboratory for 8 weeks. Grade only. Recommended: A working knowledge of the IBM compatible computer system is advised.*

An introduction to geographical information systems (GIS), including their use, input, analysis and output of spatial data. Topics include elements of a GIS, data structures and their management, and basic input and output functions and mapping



### APTECH 58 AutoCAD for Mechanical Design

(Formerly APTECH 86) 1.5 units/2 hours lecture, 2 hours laboratory, 1 hour by arrangement for 8 weeks. Grade only. Prerequisite: Completion of APTECH 56 (or ENGR 56 or ENGR 22).

Advanced AutoCAD topics applicable to the mechanical drafting and designing industries. Solid modeling with the standard AutoCAD primitives as well as AutoCAD's Designer add-on software package for mechanical design. The course also covers AutoCAD's geometric dimensioning and tolerancing dialog boxes. The Designer software features a sketching approach to solids creation using a constrain based system to generate a unique object definition. Parametric dimensioning establishes a flexible system that allows interrelationships between feature sizes as well as new feature editing capabilities. Automatic multiview drawing capability generates working drawings with dimensions from the solid model. Bidirectional associativity between model and drawing speeds editing. (CSU)

May be taken for a total of 3 units.

### APTECH 66 Computer-Aided Design for Engineers

2 units/2 hours lecture, 3 hours laboratory, 3 hours by arrangement for 8 weeks. CR/NC option. Prerequisite: APTECH 55 (formerly IED 55) or High School drafting with a grade of "C" or better.

Introduction to computer-aided design and drafting (CAD) as a tool for creating engineering 3 Dimensional models and for generating engineering drawing hardcopy. Students use up-to-date versions of CADKEY software to produce three dimensional databases on IBM compatible computer work stations. Hands-on use in a lab environment develops proficiency in the concepts and specifics of CAD software packages. Course focuses on computers as a design tool rather than a drafting aid. (CSU)

May be taken for a total of 4 units.

### APTECH 84 Computer Animation for Drafting/ Design

3 units/2 hours lecture, 3 hours laboratory, 2 hours by arrangement. Grade only. Prerequisite: AP TECH 57. Computer animation utilizing AutoDesk's 3D Studio Software. Topics covered will include: creating 3 Dimensional scenes, assigning and editing bitmap materials, creating and setting light sources and camera, casting shadows, and describing movement of: objects, camera, and lights to produce desired results at computer animations. The student will produce broadcast quality animations of architectural walkthroughs, flyarounds and other 3 Dimensional scenes. (CSU)

May be taken for a total of 6 units.

### APTECH 87 3D Modeling and Rendering Using CAD

2 units/2 hours lecture, 3 hours laboratory, 3 hours by arrangement for 8 weeks. Grade only. Prerequisite: Completion of APTECH 57.

A review of 3D Modeling skills covered in ApTech57, Advanced AutoCAD, and a comprehensive study of AutoCAD's Render Program. The student will construct, view, and render computer-generated 3D models. Rendering concepts, lighting sources and

angles, reflectivity, surface designation and defining scenes will be covered. Model walkthrough and fly around slide shows will be created. (CSU)

### APTECH 88 Customizing AutoCAD

2 units/2 hours lecture, 3 hours laboratory, 6 hours by arrangement for 8 weeks. Grade only. Prerequisite: AP TECH 57 with a grade of "C" or better or equivalent. Customization of the AutoCAD Software Program. Topics include: an overview of the AutoCAD menu file, customization of screen, Pop-down, tablet, and icon menus, creation of macro commands, command aliases, dialogue boxes, and an introduction to the AutoLISP Programming Language. (CSU)

### APTECH 89 AutoLISP Programming for CAD

2 units/2 hours lecture, 3 hours laboratory, 3 hours by arrangement for 8 weeks. Grade only. Prerequisite: AP TECH 57 with a grade of "C" or better or equivalent. Utilization of the AutoLISP programming language to enhance productivity of the computer-aided drafter. The student will be provided with the principles and applications of AutoLISP which will result in a flexible degree of control over the customizable aspects of the AutoCAD Software Program. (CSU)

### APTECH 90A Applied Mathematics

(Formerly CET 90A) 3 units/3 hours lecture. Grade only. Recommended: Standard 1st year HS algebra course with "C" or better or successful completion of Math 150B or Math 151, completed within the prior four years If the student has not completed this recommendation then they must take the Applied Mathematics Assessment Test prior to the first class meeting.

An investigation of intermediate algebra topics with emphasis on the investigation and application of polynomials and rational expressions, rational exponents, equations and inequalities, functions and relations, exponential and logarithmic functions, sequence and series and binomial theorem, theory of equations, and an introduction to numerical trigonometry involving trigonometric functions, tables, and applications of the right triangle to problems encountered in surveying, civil engineering, construction technology, electronic and related engineering technologies. (CSU)

AA/AS area B

### APTECH 90B Quantitative Reasoning in Applied Technology

(Formerly CET 90B) 3 units/3 hours lecture. CR/NC option. Prerequisite: Prior qualification for APTECH 90B (or CET 90B); OR completion of APTECH 90A (or CET 90A); OR completion of MATH 155 or higher (V1); OR completion of MATH 155 or higher (V2). Recommended: That the prerequisite coursework be completed within the prior two years.

A course in quantitative reasoning which applies trigonometry principles to problems encountered in surveying, civil engineering, construction, electronics and related engineering technologies The areas of study are the analysis, solution and application of angle measurements and their related functions, associated graphical representations, solution to triangles, complex numbers and analytic geometry, as they are related to the trades and various technologies. (CSU)

AA/AS area B

### APTECH 92 Introduction to Technology

(Formerly CET 92) 3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100A. Introduction to technology development and technical problem-solving in the construction industry context. This course will: place technology development in an historic context; introduce the topic of technology assessment; delineate roles and responsibilities of participants in the construction industry; explore career options in this field; introduce a problem-solving process and apply it to a project; introduce the principles of time management and scheduling; and provide opportunities to develop skills in problem-solving, time management, scheduling, and the presentation of graphs and written documentation. (CSU)

### APTECH 399 Selected Topics in Applied Technology

0.5-2 units/up to 2 hours lecture. CR/NC option. Recommended: Computer-Aided Drafting/Design or related computer applications. A series of short courses, each dealing with a specific topic of relevance to Applied Technology. (Repeat Code 4)

May be repeated with different topics.

## Apprenticeship Education

To meet requirements established by State Law for indentured apprentices, covering practices and principles of occupation; laws relating to the worker; safety procedures; care and use of tools and equipment; materials; applied mathematics and science. For information, see director of Apprenticeship Education.

Carpenter  
Electrician  
Painter  
Plumber  
Roofer

## Art

### ART 1.1 World Art History to 1500

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv. History and aesthetic appreciation of World Art to 1500 AD. Includes representative art from Europe, Asia, Africa and the Americas. May be taken independently of Art 1.2. May be used to fulfill requirement for the Fine Arts Certificate. (CSU/UC)

AA/AS area E; CSU area C1; IGETC area 3A

## **ART 1.2 World Art History Since 1500**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv.*

History and aesthetic appreciation of World Art since 1500 AD. Includes representative art from Europe, Asia, Africa and the Americas. May be taken independently of Art 1.1. May be used to fulfill requirement for the Fine Arts Certificate. (CSU/UC) AA/AS area E; CSU area C1; IGETC area 3A

## **ART 2.1 Ancient to Renaissance Art History and Appreciation**

*(Formerly ART 2A) 3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A*

History and aesthetic appreciation of Prehistoric, Egyptian, Greek, Roman, Early Christian, and Medieval art. Optional field trip to Bay Area museums. May be taken independently of Art 2.2 and Art 2.3. Required for the Fine Arts Certificate; fulfills Humanities requirement for transfer to CSU system. (CSU/UC)

AA/AS area E; CSU area C1; IGETC area 3A; CAN ART 2; ART 2.1 + ART 2.2 = CAN ART SEQ A

## **ART 2.2 Renaissance to Modern Art History and Appreciation**

*(Formerly ART 2B) 3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*

History and aesthetic appreciation of Renaissance, Baroque, and Modern Art. Optional field trip to Bay Area museums. May be taken independently of Art 2.1 and Art 2.3. Required for the Fine Arts Certificate; fulfills Humanities requirement for transfer to CSU system. (CSU/UC)

AA/AS area E; CSU area C1; IGETC area 3A; CAN ART 4; ART 2.1 + ART 2.2 = CAN ART SEQ A

## **ART 2.3 Modern Art History & Appreciation**

*(Formerly ART 2C) 3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*

Art of the 19th and 20th centuries; including the works of David, Constable, Turner, Rodin, Monet, Renoir, Cassatt, van Gogh, Cezanne, Picasso, Matisse, Dali, O'Keefe, Hopper, Frankenthaler, Ruscha, Segal, and Diebenkorn, with special attention to the changing aesthetics of Modernism and Post-Modernism in the historical context of urbanization. Field trip to Bay Area museums. May be taken independently of Art 2.1 and Art 2.2. Fulfills Humanities requirement for transfer to CSU. (CSU/UC)

AA/AS area E; CSU area C1; IGETC area 3A

## **ART 3 Introduction to Art & Design**

*1.5-3 units/up to 2 hours lecture, 4 hours laboratory. CR/NC option.*

An introductory studio course in the fundamentals of art and design using shape, value, texture, line, pattern, color and space through exercises in drawing, painting, and collage. The course is required for the Fine Arts Certificate and is accepted for transfer at both the UC and CSU systems. (CSU/UC)

CSU area C1; IGETC area 3A; CAN ART 14  
May be taken for a total of 3 units.

## **ART 4 Principles of Color**

*1.5-3 units/up to 2 hours lecture, 4 hours laboratory. CR/NC option.*

The study and use of color as an element of art and design. Problems exploring the interaction of color and the principles of color harmony. The course is required for the Fine Art Certificate and is accepted for transfer at both the UC and CSU systems. (CSU/UC)

CSU area C1; IGETC area 3A; CAN ART 22  
May be taken for a total of 3 units.

## **ART 5 Three Dimensional Design**

*1.5-3 units/up to 2 hours lecture, 4 hours laboratory. CR/NC option.*

A problem solving approach to spatial organization. Experimental use of paper, cardboard, wood, plastic, wire, string and found objects. Problems designed to encourage personal growth through individual solutions. (CSU/UC)

CSU area C1; CAN ART 16  
May be taken for a total of 3 units.

## **ART 7A Drawing & Composition I**

*1.5-3 units/up to 2 hours lecture, 4 hours laboratory. CR/NC option.*

A basic course in drawing and composition to develop a student's ability to perceive and define shape, mass, contour, volume, space and light, using a variety of graphic media and subject matter. The course is required for the Fine Arts Certificate and is accepted for transfer at both the UC and CSU systems. (CSU/UC)

CSU area C1; CAN ART 8  
May be taken for a total of 3 units.

## **ART 7B Drawing & Composition II**

*1.5-3 units/up to 2 hours lecture, 4 hours laboratory. CR/NC option. Prerequisite: Art 7A or equivalent*

To pursue at greater depth those aspects of drawing offered in Art 7A and to introduce additional concepts and a greater variety and combination of media and tools. May involve concentration on a theme, subject or problem. Work sessions in specific areas off campus. (CSU/UC)

May be taken for a total of 6 units.

## **ART 12 Figure Drawing**

*1.5-3 units/up to 2 hours lecture, 4 hours laboratory. CR/NC option.*

Drawing the human figure employing the basic concepts and skills covered in Art 7A, such as shape, volume, plane, contour, space, light, movement, composition, and expression, using a variety of graphic tools and media. (CSU/UC)

CAN ART 24  
May be taken for a total of 9 units.

## **ART 13 Watercolor**

*1.5-3 units/up to 2 hours lecture, 4 hours laboratory. CR/NC option. Recommended: Art 3, or 4, or 7A. Drawing and design skills.*

A painting class using watercolor to explore color, form, & composition. Working from still life, landscape, the figure, as well as non-objective subject matter. (CSU/UC)

May be taken for a total of 6 units.

## **ART 14A Beginning Painting**

*1.5-3 units/up to 2 hours lecture, 4 hours laboratory. CR/NC option.*

An introductory course in painting involving the basic elements and dynamics of art such as value, color, texture and space, as well as compositional factors and an introduction to the various problems and potentials of painting. (Acrylics or oil paints). (CSU/UC)

CAN ART 10  
May be taken for a total of 3 units.

## **ART 14B Intermediate Painting**

*1.5-3 units/up to 2 hours lecture, 4 hours laboratory. CR/NC option.*

A continuation of the basic pictorial problems and challenges begun in Art 14A, introducing a greater variety of subject matter, concepts, and processes. (CSU/UC)

May be taken for a total of 3 units.

## **ART 14C Advanced Painting**

*1.5-3 units/up to 2 hours lecture, 4 hours laboratory. CR/NC option.*

A continuation of the concerns developed in Art 14B involving more in depth problem solving, individual expression and experimentation with media, methods, and materials. (CSU/UC)

May be taken for a total of 6 units.

## **ART 16 Materials & Techniques of Painting**

*1 unit/1 hour lecture, 1 hour laboratory. CR/NC option.*

Materials and their application to various techniques of painting. (CSU/UC)

## **ART 18.1 Introduction to Computer Graphics in Art**

*(Formerly ART 18A) 1-3 units/up to 2 hours lecture, 4 hours laboratory. CR/NC option. Recommended: Art 3.*

Introduction to the computer as an image generation, processing and manipulation tool for artists. The computer as a device to assist creative thinking and visual editing. (CSU/UC)

May be taken for a total of 6 units.

## **ART 18.2 Computer Graphics II**

*(Formerly ART 18B) 1-3 units/up to 2 hours lecture, 4 hours laboratory. CR/NC option. Recommended: Art 3.*

Introduction to the use of computers as an artistic tool. Students will explore Interactive Multimedia authoring design and photo processing software. Emphasis will be on both technical skills and aesthetic results. (CSU/UC)

May be taken for a total of 6 units.

## **ART 24 Introduction to the Art of Prints**

*1.5-3 units/up to 2 hours lecture, 4 hours laboratory. CR/NC option. Recommended: Art 7A or basic drawing skills.*

Introduction to studio in printmaking, techniques include: Cardboard relief prints, wood cut, etching, collagraph, monotype, embossing, and linoleum cut. (CSU/UC)

CAN ART 20  
May be taken for a total of 3 units.

### **ART 27A Silkscreen Printmaking**

1.5-3 units/up to 2 hours lecture, 3 hours laboratory, 1 hour by arrangement. CR/NC option. Recommended: Art 3, 4 or 7A or equivalent.

Studio course introducing color silkscreen printmaking as a fine art print medium.

Demonstrations and assignments involving paper stencil, knife-cut blockout and photostencils. (CSU/UC)

May be taken for a total of 3 units.

### **ART 27B Silkscreen Printmaking**

1.5-3 units/up to 2 hours lecture, 4 hours laboratory. CR/NC option. Prerequisite: Art 27A. Recommended: Basic drawing and design skills + silkscreen fundamentals.

Continued exploration of the silkscreen process as a fine art print medium. Emphasis on more individual projects at a more advanced level of sophistication. (CSU/UC)

May be taken for a total of 6 units.

### **ART 28A Beginning Etching**

1.5-3 units/up to 2 hours lecture, 4 hours laboratory. CR/NC option. Recommended: Art 7A or portfolio showing drawing ability. Basic drawing skills.

The use of the etching process as a means of artistic expression. How to etch, ink, wipe and print plates.

Presentation of the fine print to include care of prints, matting, numbering of editions. (CSU/UC)

May be taken for a total of 3 units.

### **ART 28B Intermediate Etching**

1.5-3 units/up to 2 hours lecture, 4 hours laboratory. CR/NC option. Prerequisite: Art 28A or equivalent. Recommended: Art 7A or basic drawing skills.

A course for the advanced printmaker emphasizing the etching process. Students may work in both black and white and color. (CSU/UC)

May be taken for a total of 3 units.

### **ART 28C Advanced Etching**

1.5-3 units/up to 2 hours lecture, 4 hours laboratory. CR/NC option. Prerequisite: Art 28A and Art 28B. Recommended: Art 7A or basic drawing skills.

A continuation and further development of Art 28B with the possibility of developing a section in the art of papermaking. (CSU/UC)

May be taken for a total of 6 units.

### **ART 31A Beginning Pottery**

1.5-3 units/up to 2 hours lecture, 4 hours laboratory. CR/NC option.

Wheel and hand-building methods of pottery. Glaze application and decoration techniques. Experiments in glaze making. (CSU/UC)

CAN ART 6

### **ART 31B Intermediate Pottery**

1.5-3 units/up to 2 hours lecture, 4 hours laboratory. CR/NC option. Prerequisite: Art 31A or ART 34A

Wheel and hand-building methods of forming. Surface enrichment and experiments in glaze making. (CSU/UC)

### **ART 31C Advanced Pottery**

1.5-3 units/up to 2 hours lecture, 4 hours laboratory. CR/NC option. Prerequisite: Art 31B or equivalent

Wheel and handbuilding problems. Functional and non-functional advanced experiments in glazemaking. (CSU/UC)

### **ART 31D Advanced Pottery**

1.5-3 units/up to 2 hours lecture, 4 hours laboratory. CR/NC option. Prerequisite: Art 31C or equivalent

Designed around the individual needs and interests of the more advanced student. (CSU/UC)

### **ART 33A Beginning Sculpture**

3 units/2 hours lecture, 4 hours laboratory. CR/NC option. Recommended: Basic interest in art. Art 3 or 5.

Beginning sculpture. Emphasis on basic form appreciation using clay, plaster, wood and found materials. Extensive use of visual information will encourage a historical sensitivity to form. Figurative and non-figurative experiences will be included.

(CAN Art 12) (CSU/UC)

CAN ART 12

May be taken for a total of 3 units.

### **ART 33B Intermediate Sculpture**

3 units/2 hours lecture, 4 hours laboratory. CR/NC option. Prerequisite: Art 33A Recommended: Basic interest in art.

Introduction to large scale and more complex projects in direct plaster and fabrication. Beginning exposure to oxy-acetylene steel welding for the sculpture. (CSU/UC)

May be taken for a total of 3 units.

### **ART 34A Ceramic Sculpture**

3 units/2 hours lecture, 4 hours laboratory. CR/NC option. Recommended: Basic interest in art.

Basic concepts and techniques of clay as a sculptural material. Self expression is encouraged and special emphasis given the interpretation of the human figure. (CSU/UC)

### **ART 34B Advanced Ceramic Sculpture**

3 units/2 hours lecture, 4 hours laboratory. CR/NC option. Prerequisite: Art 34A or equivalent.

Advanced and individualized problems in ceramic sculpture. Self expression is encouraged. (CSU/UC)

### **ART 36 Elementary Photography**

3 units/2 hours lecture, 4 hours laboratory. CR/NC option. Recommended: Students must have a good quality standard or miniature camera.

Theory and practice of photography. Basic skills in developing, enlarging composition, print quality, and photographing a variety of assigned subjects. May sometimes be offered as Art 36, parts I and II. In this format there is one hour of lecture and two hours lab per week. Part I is prerequisite to Part II. (CSU/UC)

CAN ART 18

### **ART 36A Elementary Photography**

1.5 units/1.5 hours lecture, 1.5 hours laboratory. CR/NC option. Recommended: Basic interest in art and photography. Students should have a good quality standard or miniature camera.

Theory and practice of photography. Basic skills in developing, enlarging composition, print quality, and photography a variety of assigned subjects. In this format there is one hour of lecture and two hours of lab per week. Part A is prerequisite to Part B. Also offered as Art 36 for three units, which meets 2 hours lecture and four hours lab per week. (CSU/UC)

### **ART 36B Elementary Photography**

1.5 units/1.5 hours lecture, 1.5 hours laboratory. CR/NC option. Prerequisite: Art 36A. Students should have a good quality standard or miniature camera.

Theory and practice of photography. Basic skills in developing, enlarging composition, print quality, and photographing a variety of assigned subjects. In this format there is one hour of lecture and two hours of lab per week. Also offered as Art 36 for three units. (CSU/UC)

### **ART 37 Intermediate Photography**

3 units/2 hours lecture, 4 hours laboratory. CR/NC option. Prerequisite: Art 36 or Art 36A and 36B. 35mm camera or larger format camera required. Recommended: Basic knowledge of camera operation, darkroom equipment, processing of film and making prints.

Continuation of Art 36. Emphasis on creativity and perfection of techniques used on varied subject matter. May sometimes be offered as Art 37 Parts I and II. In this format there is one hour of lecture and two hours of lab per week. (CSU/UC)

### **ART 42 Oriental Art History & Appreciation**

3 units/3 hours lecture. CR/NC option. Recommended: Art 2.1 (formerly Art 2A) or Art 2.2 (formerly Art 2B); eligibility for Engl 100A or equivalent.

Introduction to the forms of Asian art: Indian temple sculpture, Chinese bronzes and ceramics, Japanese architecture, gardens, and woodblock prints, Korean ceramics, and Southeast Asian temples and masks. The focus will be upon their unique history, aesthetics, and cultural context. Field trips to the Asian Art Museum of San Francisco. Fulfills Humanities requirement for transfer to CSU. (CSU/UC)

CSU area C1; IGETC area 3A

### **ART 46 Traditional Arts of Africa, Oceania & the Americas**

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Survey of the traditional arts of Africa, Oceania, and the Americas, ranging from the powerful masks and spirit figures of Nigeria and Zaire, the mud figures of New Britain, and the delicate tapa cloths of Polynesia to the skull racks, pyramids, and erotic ceramics of Mexico and Peru. The important and complex role played by these arts within their own cultures will be emphasized. Field trip to the Gallery of Africa, Oceania, and the Americans in the de Young Museum in San Francisco. (CSU/UC)

### **ART 47 Art of the Renaissance**

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Masterpieces of Italian Renaissance and Mannerist painting, sculpture, and architecture from 1300 to 1700, with special attention to the techniques and the cultural context of the works. Some of the great artists to be considered will include: Giotto, Duccio, Ghiberti, Donatello, Masaccio, Fra Angelico, Piero della Francesca, Gozzoli, Pollaiuolo, Leonardo da Vinci, Botticelli, Perugino, the Bellini family, Mantegna, Crivelli, Michelangelo, Bramante, Raphael, Correggio, Giorgione, Titian, and Palladio. Field trips to Bay Area museums. (CSU/UC)

### **ART 48 History of Design**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*

A visual survey of design and the applied arts focusing on places people live and work, their tools, objects and how they communicate. Concepts of appropriate technology and culture will be discussed. Taught online. (CSU/UC)

### **ART 49 Special Studies in Art**

*1-3 units/up to 2 hours laboratory, 4 hours by arrangement. Grade only. Prerequisite: Application to the department.*

Seminars or individual conferences by arrangement to provide for independent study and enriched academic experience. (CSU/UC)  
*Independent study including 49 and 98 courses - 6 unit total.*

### **ART 51.1 Graphic Design: Principles of Visual Communication**

*(Formerly ART 51) 1-3 units/up to 2 hours lecture, 4 hours laboratory, 2 hours by arrangement. CR/NC option.*

*Recommended: Art 3, or 7A, or enrollment in the Applied Graphics Program.*

Introduction to the art of graphic design. Emphasis on design principles, aesthetics and concepts necessary for effective visual communication. Projects explore the creative development of ideas and visual forms including: designing pictographs, symbols, image-based logos, developing identity systems, creating type and imagery for posters and other applications. Instruction in the use of traditional design tools and an introduction to the computer. (CSU)

*May be taken for a total of 6 units.*

### **ART 51.2 Graphic Design: Digital Imaging**

*1-3 units/up to 2 hours lecture, 4 hours laboratory. CR/NC option. Recommended: Art 18.1 (formerly Art 18A, Art 18, Art 70) or Art 51.1 (formerly Art 51) or enrollment in the Applied Graphics Program. Basic understanding of computer program.*

Extensive use of the computer to explore the creative development of visual images for graphic design. Introduction of several popular Mac-based graphics software to create original designs for print and screen. Projects explore the manipulation and integration of type and images in a variety of formats. Topics include: contemporary design issues, current methods and the aesthetics of design. (CSU)

*May be taken for a total of 6 units.*

### **ART 51.3 Graphic Design: Type & Letterforms**

*(Formerly ART 50A) 1-3 units/up to 2 hours lecture, 4 hours laboratory. CR/NC option. Recommended: Art 3 or Art 7A or enrollment in the Applied Graphics Program.*

Introduction to the art of typography emphasizing a nontechnical approach. Course focuses on design aesthetics and the creative use of letterforms for graphic design. Topics include: drawing letterforms, using type for communication and visual expression, and an overview of important art movements/design styles. Projects explore the development of original alphabets, letter-based logos, typographic layouts for posters, books and other graphic designs. Instruction in the use of traditional design tools and an introduction to the computer. (CSU)

*May be taken for a total of 6 units.*

### **ART 51.4 Graphic Design: Digital Layout**

*(Formerly ART 50B) 1-3 units/up to 2 hours lecture, 4 hours laboratory. CR/NC option. Recommended: Art 18.1 (formerly Art 18A, Art 18, Art 70), or 51.1 or 51.2, or 51.3 (formerly Art 50A), or enrollment in the Applied Graphics Program. Basic understanding of computer operation.*

Extensive use of the computer as a design tool to develop creative page layouts for print and screen. Several popular Mac-based software programs are explored to design with text and display type in a variety of formats. Projects include the layout and design of ads, newsletters, booklets, and Web pages. Topics include: the art of typography, design principles and aesthetics, and an overview of past and present design styles. (CSU)

*May be taken for a total of 6 units.*

### **ART 52 Graphic Design/Poster Production**

*1-3 units/up to 2 hours lecture, 4 hours laboratory. CR/NC option. Prerequisite: Any of the Art 51 series or Art 27A or Art 27B.*

Advanced graphic design class emphasizing the design, production and printing of posters. While gaining a first-hand experience in production techniques, students will have an opportunity to create highly finished pieces for their portfolios. Projects explore the use of type and imagery for effective visual communication and the preparation of camera-ready art. Course involves a wide range of media and tools including the use of the computer, process camera and silkscreen printing. (CSU)

*May be taken for a total of 6 units.*

### **ART 53 Electronic Exhibition Design**

*1-3 units/up to 2 hours lecture, 4 hours by arrangement. CR/NC option. Prerequisite: Completion of ART 2.1 (or ART 2A); OR completion of ART 3; OR completion of ART 5.*

Research, analysis and creation of electronic exhibitions using the World Wide Web. Support the SRJC Art Gallery, student galleries and special projects. Use of electronic paint programs, scanners and encoding for Web publishing. Create online information and documentation for SRJC Art Gallery exhibitions. Maintain the Art Department's electronic exhibition Web pages. Special projects include designing informational pages for artists or other relevant people, events or institutions of unique historical or regional importance. (CSU)

*May be taken for a total of 9 units.*

### **ART 54 Online Art Using the World Wide Web**

*(Formerly ART 390.77) 1-3 units/up to 6 hours by arrangement. CR/NC option.*

An Online Art class exploring the use of the World Wide Web for both research and display of image, text and links to related sites. Students will learn to find, download and manipulate images and will create personal homepages using graphics. For online information use URL: <http://www.santarosa.edu/~jwatrous/classpage.html> (CSU)

*May be taken for a total of 6 units.*

### **ART 57 Advanced Photography**

*3 units/2 hours lecture, 4 hours by arrangement. CR/NC option. Prerequisite: Art 36 (or Art 36A and 36B) and Art 37. Recommended: Thorough knowledge of photographic equipment, materials and techniques.*

Advanced level course for students with technical

proficiency wishing to further their concentration on photo-imagery as a means of self-expression by preparation of a portfolio. Includes studies of significant photography of the nineteenth and twentieth centuries as related to problems facing contemporary photography today. (CSU)

### **ART 58 Practical Field Experience in Photography**

*1.5-2 units/up to 19 hours by arrangement for 3 weeks. Grade only. Prerequisite: Art 36*

Photography of a variety of subject matter in the field, coupled with practical demonstrations and discussions of techniques and equipment. Includes field trips, laboratory work and preparation of a portfolio. (CSU)

*May be taken for a total of 4 units.*

### **ART 59A Photojournalism**

*3 units/2 hours lecture, 4 hours laboratory. Grade only. Recommended: An interest in photography from a photojournalistic viewpoint.*

Skills and techniques required for newspaper or magazine photography, including instruction in the basic skills of camera operation, film and print operation, film and print processing and photographic techniques. Includes photojournalism history, news values, equipment use, layouts and reproduction, ethics, legal problems and other matters of concern in photojournalism. A number of projects, including a major picture story, will be undertaken. (CSU)

### **ART 59B Photojournalism**

*3 units/2 hours lecture, 4 hours laboratory. Grade only. Prerequisite: Art 59A or equivalent experience. Recommended: Basic photo skills and understanding of photojournalism.*

For those already possessing basic photographic skills which offers the opportunity for individual photojournalism work with campus publications. As a continuation of Art 59A, course provides for individual refinement of techniques and skills. (CSU)

*May be taken for a total of 6 units.*

### **ART 60A Studio Photography**

*1.5-3 units/up to 2 hours lecture, 4 hours laboratory. Grade only. Prerequisite: Art 36 or Art 36A and Art 36B.*

Exploration and application of creative photo methods: lighting, printing and camera techniques, including the view camera. Photographs of various subjects as encountered in professional situations are produced. Portrait assignments in both formal and informal situations. (CSU)

### **ART 60B Commercial Photography II**

*3 units/2 hours lecture, 4 hours laboratory. Grade only. Prerequisite: Art 60A or equivalent training experience. Recommended: Solid photo skills.*

Use of special techniques in applied commercial photography. Producing photographs that fill specific needs or requirements of business and industry. (CSU)

### ART 61.1 Color Photography

(Formerly ART 61A) 1.5-3 units/up to 2 hours lecture, 1 hour laboratory, 4 hours by arrangement. Grade only.

Prerequisite: Art 36 or equivalent training and experience. Recommended: Basic photo skills.

Workshop including color theory and usage; the exposure and development of color transparency and negative films and the making of color prints. Includes demonstrations, lecture, color photo assignments and lab work. (CSU)

### ART 61.2 Color Photography

(Formerly ART 61B) 2 units/3 hours by arrangement. Grade only. Prerequisite: Completion of ART 37; OR prior qualification for ART 61.2 (or ART 61B). Recommended: Basic photo skills.

Two-part workshop including color theory and usage; the exposure and development of color transparency and negative films and the making of color prints. Includes demonstrations, lecture, color photo assignments and lab work. (CSU)

### ART 62 Alternative Photography Processes

(Formerly ART 38) 1-3 units/up to 2 hours lecture, 4 hours by arrangement. Grade only. Prerequisite: Art 36 OR Art 36A and Art 36B.

The exploration and use of various creative techniques in the production of photo based imagery. Both black and white and color, including the use of non traditional materials, will be utilized to explore symbolism, abstract images, controls and experimental techniques. (CSU)

### ART 71A Beginning Jewelry Making

(Formerly ART 32A) 3 units/2 hours lecture, 4 hours laboratory. CR/NC option. Recommended: Art 3 or 5 or 7A. Basic crafts interest.

Basic methods in metal fabrication applied to jewelry making. Includes use and maintenance of hand tools, soldering, metal forming, forging, applique and casting. Projects and emphasis may vary with each individual. (CSU)  
CAN ART 26

### ART 71B Intermediate Jewelry

(Formerly ART 32B) 3 units/2 hours lecture, 4 hours laboratory. CR/NC option. Prerequisite: Art 71A (formerly Art 32A).

Intermediate work in jewelry design. Continued methods of discovering individual expression, use of new material. (CSU)

### ART 71C Advanced Jewelry

(Formerly ART 32C) 3 units/2 hours lecture, 4 hours laboratory. CR/NC option. Prerequisite: Art 71B (formerly Art 32B).

Advanced studies in methods of jewelry design. Individual expression, use of new material. (CSU)  
May be taken for a total of 6 units.

### ART 72 Bronze Casting

(Formerly ART 35) 1 unit/6 hours laboratory for 6 weeks. CR/NC option. Recommended: Art 33A or 71A (formerly Art 32A). Basic interest in form.

Methods of waxworking, originating a form, and casting techniques. Topics include completing wax designs through the spruing, investing, burn-out pouring the metal, de-spruing and finishing processes. (CSU)

### ART 73 Functional 3D Design

1.5-3 units/up to 2 hours lecture, 4 hours laboratory. CR/NC option. Recommended: Art 5 or a basic interest in art.

A studio design course focusing on 3D models and prototypes. Preparation for students in architecture and interior design, mechanical engineering and industrial products, furniture and lighting. Involves working with hand and power tools in a variety of materials. Focus is on three dimensional visualization, presentation, creative use of materials and the model as working sketch. (CSU)  
May be taken for a total of 6 units.

### ART 75 Advanced Sculpture

(Formerly ART 33C) 1-3 units/up to 2 hours lecture, 4 hours laboratory. CR/NC option. Prerequisite: Art 33B

Advanced sculpture with emphasis on personal work related to past two semesters. Problems of the professional sculptor related to architectural presentation, use of industrial layout and pattern making techniques and model making. An introduction to inert gas welding for ferris and non ferris metals. Environmental installations and related vents. (CSU)

### ART 76 Figure Sculpture

3 units/2 hours lecture, 4 hours laboratory. CR/NC option. Recommended: Basic interest in art.

Modeling the figure using clay, plasticine and other materials. Casting figurative pieces in more permanent, gypsum materials using piece molds. (CSU)

May be taken for a total of 6 units.

### ART 80A Computer Animation I

(Formerly ART 80) 1-3 units/up to 2 hours lecture, 4 hours laboratory. CR/NC option. Prerequisite: Art 18.1 (formerly Art 18A, Art 18, Art 70) or equivalent preparation.

Recommended: ART 18.1 (formerly Art 18A, Art 18, Art 70). A studio course focusing on the creation of animation using existing animation programs for three microcomputers. An introduction to the fourth dimension of time for visual artists. Fundamental concepts of sequencing, modulation, motion control and sound. (CSU)

May be taken for a total of 9 units.

### ART 80B Computer Animation II

1-3 units/up to 2 hours lecture, 4 hours laboratory. CR/NC option. Prerequisite: Art 80A (formerly Art 80) or equivalent preparation. Recommended: ART 80A (formerly Art 80).

A studio course focusing on the creation of Multimedia Presentations using animation programs for microcomputers, sound peripherals and videotape. A continuation of Art 80A. Introduction to more complex color and 3D modelling hardware and software, sound sampling devices and videotape output hardware. (CSU)

May be taken for a total of 9 units.

### ART 82 Digital Photography

(Formerly ART 390.72) 1-3 units/up to 2 hours lecture, 4 hours laboratory. CR/NC option. Recommended: Familiarity with the Macintosh Computer.

The exploration and analysis of digital imaging techniques as applied to the art of photography. Traditional and new electronic photographic methods are studied as a vehicle to understand the

implication of this new media from concept to execution. Emphasis is placed on the creative process while exploring electronic image making as an effective mode of communication used by photographers, artists and designers today. (CSU)  
May be taken for a total of 6 units.

### ART 84 Introduction to Computer Illustration

(Formerly ART 390.70) 1-3 units/up to 2 hours lecture, 4 hours laboratory. CR/NC option. Recommended: Art 18.1 (formerly Art 18A, Art 18, Art 70) or familiarity with the Macintosh computer.

An introductory course in computer illustration. Postscript, high resolution graphics and type will be produced using Aldus Freehand on the Macintosh computer. Students should already be familiar with the Macintosh computer and digitizing scanners. (CSU)

May be taken for a total of 6 units.

### ART 390 Selected Topics in Art

0.5-3 units/up to 3 hours lecture. CR/NC option.

Consists of individual courses which deal with specific topics within the field of art. Courses are intended to prepare students to enroll in more advanced courses requiring a higher level of technical competency. Topics will enable students to expand their aesthetic appreciation of art in addition to the further development of creative skills.

May be repeated with different topics.

## Astronomy

### ASTRON 2 Stellar Astronomy with Laboratory

4 units/3 hours lecture, 3 hours laboratory. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Not open to students who have completed Astronomy 3. The techniques used to gather basic astronomical data. The observed properties of stars, stellar evolution, the interstellar medium, star clusters and galaxies. Laboratory includes astronomical spectroscopy, photometry, observations of binaries and variables, galaxy classification and stellar triangulation. (CSU/UC)

AA/AS area C; CSU areas B1, B3; IGETC area 5A

### ASTRON 3 Stellar Astronomy

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Not open to students who have completed Astronomy 2. A non-mathematical description of the universe beyond the solar system. Observed properties of stars, stellar evolution, interstellar medium, stars clusters, variable stars, the Milky Way, other galaxies, relativity, cosmology and life in the universe. (CSU/UC)

AA/AS area C; CSU area B1; IGETC area 5A

### **ASTRON 3L Stellar Astronomy Laboratory**

*1 unit/3 hours laboratory. CR/NC option. Prerequisite: Completion of or concurrent enrollment in ASTRON 3.* Stellar astronomy laboratory involves the analysis and reduction of basic astronomical data concerning stars, nebulae, and galaxies. Using photos, spectra, as well as direct planetarium observations, the student will arrive at conclusions concerning fundamental properties of the sidereal universe. (CSU/UC)

*CSU areas B1, B3; IGETC area 5A  
May be taken for a total of 1 unit.*

### **ASTRON 4 Astronomy of the Solar System**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.* A descriptive, non-mathematical introduction to the solar system. Particular emphasis to the sun, moon, and planets. Covers planetary satellite systems, planetary ring systems, asteroids, meteorites, comets, meteor showers, planetary motion, Greek astronomy, the Copernican revolution, and the origin of the solar system. (CSU/UC)

*AA/AS area C; CSU area B1; IGETC area 5A*

### **ASTRON 4L Solar Astronomy Laboratory**

*1 unit/3 hours laboratory. CR/NC option. Prerequisite: Completion of or concurrent enrollment in ASTRON 4.* Solar astronomy laboratory involves the analysis and reduction of basic astronomical data concerning planets, satellites, comets and other solar system phenomena. Using photos, spectra, as well as direct planetarium observations, the student will arrive at conclusions concerning fundamental properties of the solar system. (CSU/UC)

*CSU areas B1, B3; IGETC area 5A  
May be taken for a total of 1 unit.*

### **ASTRON 5 Solar Astronomy with Laboratory**

*4 units/3 hours lecture, 3 hours laboratory. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.* The techniques used to gather basic solar astronomically observed properties of the sun, the moon, the planets, the satellites of planets, comets and minor planets. The laboratory includes star charts, diurnal and annual motion, coordinate systems, lunar and solar photography, solar spectroscopy, planetary motions and diameters. (CSU/UC)

*AA/AS area C; CSU areas B1, B3; IGETC area 5A*

### **ASTRON 11 Current Topics in Astronomy**

*3 units/3 hours lecture. Grade only. Prerequisite: Completion of Astron 2 or 3. Recommended: Eligibility for Engl 100A or equivalent.* A "second year" course for students who have taken a basic astronomy course and wish to go into more theoretical depth on certain topics. Topics covered change from year to year and are chosen from those which are of current astronomical interest and on which new data or theories are available. No mathematical background is presumed. (CSU/UC)

### **ASTRON 12 Astronomy Observational Lab**

*1 unit/3 hours laboratory. CR/NC option. Prerequisite: Completion of or concurrent enrollment in Astron 2 or 3 or 4 or 5. Recommended: Eligibility for Engl 100A or equivalent.* Observational laboratory involves use of small aperture telescopes and binoculars, star charts,

constellation identification, celestial coordinate systems, solar and sidereal time system, short exposure and deep-sky astrophotography. (CSU/UC)  
*CSU areas B1, B3; IGETC area 5A  
May be taken for a total of 3 times.*

## **Automotive Technology**

### **AUTO 51 Automotive Engines**

*7 units/5 hours lecture, 7 hours laboratory. Grade only. Recommended: Auto 54 or 53 or 52.* Lecture, demonstration and practical lab experience in the study of the operation, troubleshooting, and overhaul of most current types of automobile engines. Emphasis on the proper use of tools and equipment. Formerly Auto 51 and Auto 51L. (CSU)  
*May be taken for a total of 14 units.*

### **AUTO 52 Automotive Engine Performance and Pollution Control**

*8 units/6 hours lecture, 6 hours laboratory. Grade only. Recommended: Completion of or current enrollment in Auto 56.* Lecture, demonstration and practical lab experience in the study of the operation, troubleshooting and repair of the ignition, fuel and pollution control systems of most automobiles. Emphasis on the proper use of tools and diagnostic equipment. Formerly Auto 52 and Auto 52L. (CSU)  
*May be taken for a total of 16 units.*

### **AUTO 53 Automotive Power Flow, Transmissions & Drive Axles**

*6 units/4 hours lecture, 7 hours laboratory. Grade only. Recommended: Auto 350 (formerly AUTO 50) & AUTO 350L (formerly AUTO 50L) or high school auto.* Lecture, demonstration, and practical lab experience in the study of the operation, repair, and troubleshooting of most automotive transmissions, drive axles, and transaxles. Emphasis on the proper use of tools and equipment. Formerly Auto 53 and 53L. (CSU)  
*May be taken for a total of 12 units within 4 semesters.*

### **AUTO 54 Automotive Brakes, Steering and Suspension**

*7 units/5 hours lecture, 7 hours laboratory. Grade only. Recommended: Auto 350 (formerly AUTO 50) & AUTO 350L (formerly AUTO 50L) or high school auto.* Lecture, demonstration, and practical lab experience in the study of the operation, troubleshooting, and repair of brakes, steering and suspension systems of most automobiles. Emphasis on the proper use of tools and equipment. Formerly Auto 54 and Auto 54L. (CSU)  
*May be taken for a total of 14 units.*

### **AUTO 55 Automotive Fuel Systems**

*3 units/2 hours lecture, 4 hours laboratory. Grade only.* History and development of auto fuel systems. Basic repair and adjustment of standard and electronic feedback carburetors and electronic fuel injection systems. (CSU)

### **AUTO 56 Automotive Electrical System**

*4 units/3 hours lecture, 3 hours laboratory. Grade only. Recommended: H.S. Auto or Auto 350 (formerly AUTO 50) & AUTO 350L (formerly AUTO 50L).* Fundamentals of automotive electrical and electronic systems including service and repair of starting, charging, and other chassis electrical systems. Introduction to computer controlled systems. (CSU)  
*May be taken for a total of 8 units within 4 semesters.*

### **AUTO 98 Special Studies in Auto Mechanics**

*1 unit/3 hours by arrangement. Grade only.* Seminars or individual conferences by arrangement to provide for independent study and enriched academic experience. (CSU)  
*Independent study including 49 and 98 courses - 6 unit total.*

### **AUTO 99 Occupational Work Experience Education**

*0.5-8 units/up to 40 hours by arrangement. Grade only.* Occupational Work Experience is supervised employment extending classroom learning at an on-the-job learning station relating to the student's educational or occupational goal. May be repeated for a total of sixteen (16) units, four (04) units maximum per semester (Repeat Code 25 for Parallel Plan). Must be enrolled in 7 units including Work Experience units (for summer school - Work Experience and one other course). Alternate Plan - designed to offer students opportunities to attend college full-time one semester and work full-time the following semester. Job experiences must relate directly to the student's educational goals. Up to eight (08) units may be earned in one semester. Students may not be enrolled in more than one other course or transfer from alternate to parallel or vice-versa without completing 7 units between plans. (Repeat Code 16) (CSU)  
*May be taken for a total of 16 units.*

### **AUTO 99I Occupational Work Experience-Intern Program**

*1-8 units/up to 40 hours by arrangement. Grade only.* Occupational Work Experience Internship is supervised employment extending classroom learning at an on-the-job learning station relating to the student's educational or occupational goal. May be repeated for a total of sixteen (16) units, four (04) units maximum per semester (Repeat Code 25 for all Parallel Plan). Must be enrolled in 7 units including Work Experience units (for summer school - Work Experience and one other course). Alternate Plan - designed to offer students opportunities to attend college full-time one semester and work full-time the following semester. Job experience must relate directly to the student's educational goals. Up to eight (08) units may be earned in one semester. Students may not be enrolled in more than one other course or transfer from Alternate to Parallel or vice-versa without completing 7 units between plans. (CSU)  
*May be taken for a total of 16 units.*

### AUTO 302 Auto Transmissions

(Formerly AUTO 202) 1.5 units/1 hour lecture, 2 hours laboratory. CR/NC option. Prerequisite: High school 2+2, Auto 350 (formerly AUTO 50) or employment as an Auto Technician. Recommended: Engl 100A or equivalent. Principles, theories, diagnosis and repair of standard, overdrive, and automatic transmissions. May be taken for a total of 3 units.

### AUTO 304 Automotive Fuel Systems

(Formerly AUTO 204) 3 units/3 hours lecture. Grade only. Prerequisite: Auto 399.4 or Auto 52/52L or employment as an Auto Technician. Recommended: Auto 399.4 or Auto 52/52L or employment as an Auto Tech. Operation & service of automotive fuel systems including basic and computer controlled carburetors & mechanical and electronic fuel injection systems. Fulfills the fuel system prerequisite for the 80-hour clean air car course. May be taken for a total of 6 units within 4 semesters.

### AUTO 305 Automotive Air Conditioning & Heating Systems Service

(Formerly AUTO 205) 1.5 units/3 hours lecture for 8 weeks. CR/NC option. Prerequisite: HS 2 + 2 Auto or Auto 350 or employment as an Auto Technician. Recommended: HS Auto or Auto 350 (formerly AUTO 50) & AUTO 350L (formerly AUTO 50L) or employment as an Auto Technician. Eligibility for Engl 100A or equivalent. Theory, service, and repair of many types of automotive air conditioning & heating systems; care & use of tools & equipment. May be taken for a total of 4 units within 4 semesters.

### AUTO 306 Automotive Chassis & Brakes

(Formerly AUTO 206) 3 units/3 hours lecture. Grade only. Recommended: HS Auto or Auto 350 (formerly AUTO 50) & AUTO 350L (formerly AUTO 50L) or employment as an Auto Technician. Lecture, demo and study of the complete auto chassis with emphasis on brakes, suspension and steering. May be taken for a total of 6 units within 4 semesters.

### AUTO 307 Automotive Electrical Systems

3 units/3 hours lecture. CR/NC option. Prerequisite: Preq: HS 2+2 Auto or employment as an auto technician. Recommended: HS AUTO or AUTO 350 (formerly AUTO 50) & AUTO 350L (formerly AUTO 50L) or as an Auto Technician. Recommended: eligibility for ENGL 100A or equivalent. Fundamentals of automotive electrical & electronic systems include operation and repair of starting, charging & other chassis electrical systems. Introduction to computer-controlled systems. Fulfills the automotive electrical system prerequisite for the 80-hour clean air car course. May be taken for a total of 6 units within 4 semesters.

### AUTO 350 Automotive Fundamentals

(Formerly AUTO 50) 2 units/2 hours lecture. CR/NC option. Theory of operation, routine maintenance, and basic repairs as commonly performed by an automotive repair person. May be taken for a total of 4 units within 4 semesters.

### AUTO 350L Automotive Fundamentals Lab

(Formerly AUTO 50L) 2 units/1 hour lecture, 3 hours laboratory. CR/NC option. Prerequisite: Auto 350 (formerly Auto 50) or equiv. Corequisite: Auto 350. Knowledge of the use of basic hand tools, shop safety, and an overview of repair and maintenance. May be taken for a total of 4 units within 4 semesters.

### AUTO 399 Selected Topics in Auto Tech

0.5-2 units/up to 1 hour lecture, 2 hours laboratory. CR/NC option. Variety of topics offered in a short time intensive format, focusing on technological development in the auto industry. May be repeated with different topics.

## Behavioral Science

### BEHSC 49 Special Studies in Behavioral Sciences

1-3 units/up to 9 hours by arrangement. Grade only. Prerequisite: Application to department. Recommended: Eligibility for Engl 100A or equivalent. Seminars or individual conferences by arrangement to provide for independent study and enriched academic experience. (CSU/UC) Independent study including 49 and 98 courses - 6 unit total.

## Biology

### BIO 2A Fundamentals of Biology

(Formerly BIO 1.2) 5 units/3 hours lecture, 6 hours laboratory. Grade only. Prerequisite: Advanced Placement (AP) High School Biology with a score of 3-4 or Bio 10 with a grade of "C" or better and Chem 1A or equivalent. Recommended: Engl 1A completed or in progress. Intended for majors in the biological sciences, pre-medical or related pre-professional programs. Phylogeny of animals with emphasis on development, morphology, physiology and behavior. Principles of evolution and population genetics. Methods of science and biostatistics. Field trips taken. (Formerly Biology 1.2) (CSU/UC) AA/AS area C; CSU areas B2, B3; IGETC area 5B; CAN BIOL 4; BIO 2A + BIO 2B + BIO 3 = CAN BIOL SEQ A

### BIO 2B Fundamentals of Biology

(Formerly BIO 1.1) 5 units/3 hours lecture, 6 hours laboratory. Grade only. Prerequisite: Bio 2A (formerly Bio 2, Bio 1B) or equivalent completed with grade of "C" or better. Recommended: Engl 1A completed or in progress. Intended for major in biological sciences, pre-medical or related pre-professional programs. Phylogeny of bacteria, protists, fungi and plants with emphasis on the development, morphology and physiology of higher plants. Mendelian and chromosomal genetics; principles of ecology; methods of science and biostatistics. Field trips taken. (Formerly Biology 1.1) (CSU/UC) AA/AS area C; CSU areas B2, B3; IGETC area 5B; CAN BIOL 6; BIO 2A + BIO 2B + BIO 3 = CAN BIOL SEQ A

### BIO 3 Fundamentals of Biology (Cell and Molecular)

(Formerly BIO 1.3) 5 units/4 hours lecture, 3 hours laboratory. Grade only. Prerequisite: Chem 1A or equivalent with grade of "C" or better. Recommended: Engl 1A. Intended for major in biological sciences, pre-medical or related pre-professional programs. Cell

structure and function, biochemistry, metabolism, molecular genetics, cell differentiation and development and their application to the study of selected cell types. (Formerly Biology 1.3) (CSU/UC) AA/AS area C; CSU areas B2, B3; IGETC area 5B; CAN BIOL 2; BIO 2A + BIO 2B + BIO 3 = CAN BIOL SEQ A

### BIO 10 Introduction to Principles of Biology

4 units/3 hours lecture, 3 hours laboratory. CR/NC option. Recommended: Engl 100A or 100B completed or in progress. Basic course in biology including concepts of cellular biology, chemistry of life, cellular and organismic reproduction, organismic physiology, genetics, evolution, ecology and the methods of science; for students not majoring in biological sciences. (CSU/UC) AA/AS area C; CSU areas B2, B3; IGETC area 5B

### BIO 12 Basic Concepts of Ecology

3 units/3 hours lecture. CR/NC option. Recommended: Completion of or concurrent enrollment in ENGL 100A, and completion of or concurrent enrollment in ENGL 100B. Basic principles of ecology, including ecosystem and population biology and their application to problems of renewable resource conservation and management. (CSU/UC) AA/AS area C; CSU area B2; IGETC area 5B

### BIO 13 Human Biology

3 units/3 hours lecture. CR/NC option. Recommended: Engl 100A or 100B completed or in progress. Primarily for students not majoring in biological sciences, presenting selected topics from biology dealing specifically with man. Major areas from which topics may be chosen include evolution, genetics, sexuality and reproduction, nutrition, exercise, disease, and environmental issues that affect the human condition. Emphasis on topics selected for study may vary from one semester to another. Not an anatomy and physiology course. (CSU/UC) AA/AS area C; CSU area B2; IGETC area 5B

### BIO 15 The Future of Rainforests

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv. A broad overview of the biodiversity and ecology of tropical rainforests, their distribution, causes and effects of their destruction and the analysis of conservation strategies. Case studies from different countries are presented to examine the integration of conservation solutions and human well-being to the site-specific circumstances of history, culture, poverty, land use, politics and economics. (CSU/UC) AA/AS area C; CSU area E

### BIO 20 Human Genetics

3 units/3 hours lecture. CR/NC option. Mechanisms of heredity, with applications to human populations, including medical genetics. (CSU/UC) AA/AS area C; CSU area B2; IGETC area 5B

## BIO 25 Marine Biology

4 units/3 hours lecture, 3 hours laboratory. CR/NC option. Introductory to biological oceanography, natural history, taxonomy and ecology of major plant and animal groups of the world's oceans with emphasis on the Pacific Coast of North America. (CSU/UC) AA/AS area C; CSU areas B2, B3; IGETC area 5B

## BIO 48 Selected Topics in Biology

3 units/3 hours lecture. CR/NC option. In-depth study of selected topics of current interest in the biological sciences. (CSU/UC) May be repeated with different topics.

## BIO 49 Special Studies in Biology

1-3 units/up to 3 hours laboratory, 6 hours by arrangement. Grade only. Prerequisite: Application to department. Seminars and individual conferences by arrangement to provide for independent study and enriched academic experience. (CSU/UC) Independent study including 49 and 98 courses - 6 unit total.

## BIO 50 The Natural History of Birds of North America

4 units/3 hours lecture, 3 hours laboratory. CR/NC option. Introductory course in field ornithology. Topics of discussion include evolution, ecology, behavior, distribution and identification of North American birds with a strong emphasis on the field experience. (CSU)

## BIO 60 Biology of Marine Mammals

(Formerly BIO 30) 4 units/3 hours lecture, 3 hours laboratory. CR/NC option. Introduction to the biology, natural history, evolution, behavior, anatomy, physiology and population ecology of the marine mammals, including whales, dolphins, pinnipeds, otters, manatees and dugongs. (CSU) AA/AS area C; CSU areas B2, B3

## BIO 71.10 Sonoma County Woodlands

(Formerly BIO 81.10) 1 unit/8 hours lecture, 32 hours by arrangement for 1 week. CR/NC option. Recommended: Eligibility for English 100A or equiv. Flora and ecology of the forests and woodlands of Sonoma County. (CSU) May be taken for a total of 2 times.

## BIO 80 Field Biology

3 units/2 hours lecture, 3 hours laboratory. CR/NC option. Identification and life history of local wild plants and animals. Collecting and working with living specimens. Field trips taken. On field trip days, class will go beyond scheduled time by one or two hours. (CSU) AA/AS area C; CSU areas B2, B3

## BIO 81 Natural History/Selected Topics

1-3 units/up to 6 hours lecture, 34 hours by arrangement for 3 weeks. CR/NC option. Flora, fauna, communities, ecosystems and biomes of selected geographical regions in the world. Field oriented course involving moderately demanding hiking. (CSU) May be repeated with different topics.

## BIO 82.1 Natural History of the Fall Birds of Northern California

1.5-2 units/up to 1 hour lecture, 6 hours laboratory for 16 weeks. CR/NC option. Recommended: Eligibility for English 100A or equiv. A study of the behavior, ecology, and identification of fall birds in the northern California region. Most class meetings will be held in the field. (CSU) May be taken for a total of 2 times.

## BIO 82.2 Natural History of Spring Birds of Northern California

1.5-2 units/up to 1 hour lecture, 6 hours laboratory for 16 weeks. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent. A study of the behavior, ecology, and identification of spring birds in the northern California region. Most class meetings will be held in the field. (CSU) May be taken for a total of 2 times.

## Botany

### BOTANY 10 Plant Biology

4 units/3 hours lecture, 3 hours laboratory. CR/NC option. Recommended: Completion of or concurrent enrollment in Engl 1A and completion of or concurrent enrollment in Engl 100B. A general education course in plant biology emphasizing the structure and function of seed plants. Includes genetics, ecology, evolution, reproduction and diversity of plant life forms. (CSU/UC) AA/AS area C; CSU areas B2, B3; IGETC area 5B

### BOTANY 60 Field Botany

(Formerly BOTANY 30A) 4 units/3 hours lecture, 3 hours laboratory. CR/NC option. Recommended: Completion of or concurrent enrollment in Engl 100B. Survey of the vegetation and flora of Northern California. Includes the identification and ecology of component species and methods of vegetation and floristic study. Field trips required. (CSU) AA/AS area C; CSU areas B2, B3

## Business Administration

### Banking and Financial Services

### BFS 299 Selected Topics in Banking

(Formerly BNK 299) 2 units/1 hour lecture. CR/NC option. A variety of Banking/Finance topics, offered in a short, time-intensive format, focusing on different issues in each course, each semester. May be repeated with different topics.

## Business Administration

### BAD 1 Financial Accounting

4 units/4 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent. Completion of BAD 10 (formerly BAD 50). This course introduces the student to the role of accounting in processing and reporting the effects of economic transactions. It examines financial accounting from both the user and preparer perspectives. It teaches how information is processed and reported by the accounting information system as well as how the reports are used by investors and creditors in making decisions. The economic transactions are also analyzed by type of business activity: operating, investing, or financing and their impact on cash flows and profitability for both service and merchandising concerns. The ability to perform basic spreadsheet functions is highly recommended. (CSU/UC) CAN BUS 2; BAD 1 + BAD 2 = CAN BUS SEQ A

### BAD 2 Managerial Accounting

4 units/4 hours lecture. CR/NC option. Prerequisite: BAD 1. Recommended: Knowledge of spreadsheet software. This course focuses on the use of accounting information by managers in making internal decisions relating to product/service costing, pricing, cost analysis and control, operational and capital budgeting and responsibility reporting. Students use decision making techniques and models which assist managers in planning and controlling operations. (CSU/UC) CAN BUS 4; BAD 1 + BAD 2 = CAN BUS SEQ A

### BAD 10 American Business in Its Global Context

(Formerly BAD 50) 3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent. American business as an institution and organization considered in its natural, social, political-legal, technological, competitive, and global economic environments. An overview of the principal functions undertaken by the business firm, including: business goals and strategy; financial management and institutions; organization structure and management; marketing; computing technologies, telecommunications, and information sciences; social, legal and regulatory responsibilities; described within the emerging global business context. (CSU/UC) AA/AS area D; CSU area D

### BAD 18 The Legal Environment of Business

3 units/3 hours lecture. Grade only. Recommended: Eligibility for English 100A or equiv. The environmental, social, ethical and political factors which influence the development and operation of the American legal system; law of contracts and sales emphasizing California law and the Uniform Commercial Code. Case methods utilized. Intended as the lower division course for students planning to transfer to a four-year institution. (CSU/UC) CAN BUS 12



**BAD 51 Business and Society**

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

An introduction to business emphasizing ideas and issues. A developmental survey of business behavior in terms of its changing social, political and economic environments. (CSU)

AA/AS area D; CSU area D

**BAD 52 Human Relations**

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Human relations at work. Communication patterns and techniques, interpersonal relations, clarification of values and attitudes, discrimination, sexual stereotypes, roles, behavior, health, stress, decision making, adjustment to personal and professional life. (CSU)

AA/AS area B; CSU area E

**BAD 53 Introduction to Solving Business Problems with Spreadsheets**

1.5 units/2 hours lecture, 3.5 hours by arrangement for 8 weeks. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

This course provides students with a broad, practical applications approach to solving business problems, using a computer spreadsheet. Topics covered include applications in the functional areas of Finance and Accounting, Supervisory Management, and Sales & Marketing. Hands on practice with real world business problems; course does not require computer experience with a spreadsheet program. (CSU)

**BAD 54 Microcomputer Applications in Accounting**

3 units/2 hours lecture, 3 hours laboratory. Grade only. Prerequisite: Completion of or concurrent enrollment in BAD 1.

Designing and utilizing an integrated computerized accounting and report generating system. Includes simulation of an accounting cycle in a computerized environment, computerized payroll procedures, and use of spreadsheets as a business decision-making tool. (CSU)

**BAD 55 Intermediate Accounting**

3 units/3 hours lecture. CR/NC option. Prerequisite: BAD 2 with a grade of "C" or better.

Intermediate accounting with theory and practical applications including the accounting process; income measurement; balance sheet preparation; cash flow and the valuation of receivables, inventories, plant, equipment and intangible assets. (CSU)

**BAD 56 Fund Accounting**

3 units/3 hours lecture. CR/NC option. Prerequisite: Completion of BAD 1 with a grade "C" or better.

Accounting for nonprofit organizations: accounting theory and techniques for governmental units. (CSU)

**BAD 57 Cost Accounting**

3 units/3 hours lecture. CR/NC option. Prerequisite: BAD 2 with a grade of "C" or better.

Cost accounting including job, process, activity-

based costing, and standard costing. Evaluative techniques using cost data to effectively manage organizational costs. (CSU)

**BAD 58 Selected Topics in Business Administration**

0.5-1 unit/up to 16 hours lecture for 1 week. CR/NC only. A variety of Business Administration topics offered in a short, time-intensive format, focusing on different issues in each course each semester. (CSU)

**BAD 59 Federal Income Tax Law**

3 units/3 hours lecture. CR/NC option. Prerequisite: BAD 1 with a "C" or better.

Current Federal Revenue Act as applied to individuals. Includes filing of returns, income items and adjustments, itemized deductions, capital, and other gains and losses. (CSU)

May be taken for a total of 6 units.

**BAD 61 Modern Business Law II**

3 units/3 hours lecture. CR/NC option.

Elements of law for everyday use. Emphasis on the law of agency, partnership, corporations, real and personal property, insurance and will in accordance with California law and the Uniform Commercial Code. Second semester course for occupational students majoring in marketing, management, bookkeeping, banking and legal secretarial programs. Also open to transfer students who have completed BAD 18. (CSU)

**BAD 63 International Business**

3 units/3 hours lecture. Grade only.

Introduction to the essentials of international business and the environmental forces that impact on the managerial decision process. Course examines the physical, financial, political, legal, competitive, labor, marketing, economic and sociocultural constraints and opportunities of foreign market analysis and trade management. (CSU)

**BAD 64 Computerized Tax Accounting**

(Formerly BAD 58.14) 2 units/2 hours lecture for 16 weeks. CR/NC option. Prerequisite: Completion of BAD 1 with a grade of "C" or better. Completion of or concurrent enrollment in BAD 59.

Use of computerized tax application software to prepare federal individual income tax returns. (Form 1040 and schedules.) (CSU)

**BAD 65 Law for the Consumer**

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv.

A study of fundamental legal rights and remedies from basic contracting, to protecting yourself on the job, on the road, and in the marketplace, with minimal risk and maximum benefit. (CSU)

**BAD 66 Workplace Diversity**

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv.

This is a survey course that analyzes diversity and the American workplace. The advent of various legislation, the impact of discriminatory behavior, and strategies for creating a cooperative and

productive workplace will be among the topics discussed. The course will also research the social, political, and economic impact of historical labor practices on African Americans, Asian Americans, Chicano/Latino Americans, Indigenous Peoples of the Americas, Americans of Middle Eastern origin, and various Caucasian cultures. The course will provide insight into the interaction of the different cultures as well as insight into gender and persons with disabilities. (CSU)

AA/AS area G

**BAD 67 Financial Planning & Investment**

3 units/3 hours lecture. CR/NC option.

Personal and business investment alternatives and means of financing them. Methods of planning and management of personal finances given projected levels of income and expenditure. Influence of economic conditions and tax rates on investment alternatives. (CSU)

**BAD 68 Advanced Investments and Taxation**

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

A thorough analysis of investments and the features of those investments as they relate to applicable tax laws. Each session will concentrate on a specific area of investments and how current and proposed tax codes affect each investment. (CSU)

May be taken for a total of 6 units.

**BAD 70 Doing Business on the Internet**

1.5 units/3 hours lecture for 8 weeks. CR/NC option.

An examination of the current state of business and marketing practices on the internet. Students will use the campus computer lab environment and the campus internet host to explore business resources on the internet itself. Learn about entrepreneurial opportunities on the internet; internet business applications, including a discussion of benefits, costs and risks. Resources explored will include World Wide Web and gopher services, as well as electronic mailing lists and Usenet newsgroups. (CSU)

May be repeated with different topics.

**BAD 80 Job Search & Interviewing Utilizing Today's Technology**

1 unit/8 hours lecture for 2 weeks. CR/NC only.

Participants will learn how to utilize today's technology to find jobs that meet their career interests. Learn how to prepare and transfer a resume electronically and to interview with confidence. (CSU)

**BAD 98 Special Studies in Business Administration**

1-3 units/up to 3 hours by arrangement. Grade only. Prerequisite: Application to department. Additional prerequisites or corequisites may apply.

Seminars or individual conferences by arrangement to provide for independent study and enriched academic experience. (CSU)

Independent study including 49 and 98 courses - 6 unit total.

### **BAD 99 Occupational Work Experience Education**

*0.5-8 units/up to 36 hours by arrangement. Grade only.* Occupational Work Experience is supervised employment extending classroom learning at an on-the-job learning station relating to the student's educational or occupational goal. Students gain this experience by enrollment in the parallel or alternate plan. (CSU)

*May be taken for a total of 16 units.*

### **BAD 99I Occupational Work Experience-Intern Program**

*1-8 units/up to 40 hours by arrangement. Grade only.* Occupational Work Experience Internship is supervised employment extending classroom learning at an on-the-job learning station relating to the student's educational or occupational goal. May be repeated for a total of sixteen (16) units, four (04) units maximum per semester (Repeat Code 25 for all Parallel Plan). Must be enrolled in 7 units including Work Experience units (for summer school - Work Experience and one other course). Alternate Plan - designed to offer students opportunities to attend college full-time one semester and work full-time the following semester. Job experience must relate directly to the student's educational goals. Up to eight (08) units may be earned in one semester. Students may not be enrolled in more than one other course or transfer from alternate to parallel or vice-versa without completing 7 units between plans. (CSU)

*May be taken for a total of 16 units.*

## **Business Management**

### **BMG 50 Introduction to Supervision and Management**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.* This course serves as the foundation of your management career in dealing with today's changing work environment. Techniques and principles to help those desiring to make the transition to supervision, as well as new supervisors and managers who wish to update their skills. An introduction to the management functions of planning, organizing, directing, and controlling. Development of problem-solving, communications and human relations techniques. (CSU)

### **BMG 52 Written Communication in Organizations**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.* Writing for effective communication in organizations with an emphasis on letters, memos, reports, and the employment package. Development of decision making skills needed to write clear, well organized correspondence. (CSU)

### **BMG 53 Oral Communication in Organizations**

*3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent.* Training for effective speaking in the organizational setting: conference leadership, small group

leadership, conducting meetings, individual oral presentations. Special attention to listening skills and non-verbal communication. Group discussion leadership and individual presentations are required in the course. (CSU)

*AAAS area B*

### **BMG 54 Quantitative Skills/Math**

*3 units/3 hours lecture. Grade only. Recommended: Successful completion of standard 1st year HS algebra course.* Quantitative methods and their uses for solving organizational problems. Development of skills in mathematics, quantitative analytical tools, statistics, and graphical presentation of data in a managerial context. (CSU)

### **BMG 55 Accounting for Business Decisions**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.* Introduction to accounting concepts required of supervisory management personnel. The interpretation of financial reports, budgets, profit center data, and other control information used by supervisors. Concepts of cost accounting and budget preparation are emphasized. (CSU)

### **BMG 61 Skills for Managers**

*1.5 units/3 hours lecture for 8 weeks. CR/NC option. Recommended: Eligibility for English 100A or equiv.* This course serves as the first course in the Supervisory Management Certificate Program and the foundation for your management career in dealing with today's changing work environment. This course provides skills and tools for supervisors and managers who wish to refine their professional skills. Topics include: your management role, getting started, time management, focusing on results, getting results, and what it takes to be an effective manager. (CSU)

### **BMG 62 Organizational Behavior**

*3 units/3 hours lecture. CR/NC option. Recommended: BMG 50, eligibility for Engl 100A or equivalent.* Understanding, predicting, and influencing individual and group behavior in organizations. Topics include perception, values and attitudes, motivation concepts and applications, group behavior and decision making, leadership, power and politics, conflict management, human resources policies and practices, work stress, and organizational change and development. (CSU)

### **BMG 62.1 Effective One-on-One Communication**

*1 unit/8 hours lecture for 2 weeks. CR/NC option. Recommended: Eligibility for English 100A or equiv.* The ability to communicate your ideas and to understand the communication of others is the most important skill that a manager needs to meet the needs of the employees and the organization. This course gives the manager a working knowledge of how to communicate one-on-one effectively to solve problems and get tasks accomplished. It will also help the manager to communicate ideas clearly with people who are doing business with your organization. (CSU)

### **BMG 62.2 The Management of Meetings**

*0.5 unit/8 hours lecture for 1 week. CR/NC option. Recommended: Eligibility for English 100A or equiv.* Participants will learn how to assess the need for meetings and identify options to holding a meeting. The pre-meeting phase of planning, logistics, and agenda preparation will be covered. The meeting phase will include agenda contracting, norm setting, goal identification, and leadership facilitation skills. The post-meeting phase includes meeting evaluations providing follow-up and assessing results. (CSU)

### **BMG 62.3 Building Effective Work Groups**

*1 unit/3 hours lecture for 6 weeks. CR/NC option. Recommended: Eligibility for English 100A or equiv.* A manager must be fully aware of the importance of teamwork in an organization because effective work groups are an essential component of work life. The focus of this course is on building managerial skills that directly relate to the success and productivity of work groups for specific situations. The course will also provide the manager with an understanding of the unique characteristics of individuals working together for a common goal. (CSU)

### **BMG 63 Organization Effectiveness**

*3 units/3 hours lecture. CR/NC option. Recommended: BMG 50, BMG 62; eligibility for Engl 100A or equivalent.* Developing individuals, work groups and whole organizations for organizational effectiveness. Emphasis on the sequence, process and facilitation of individual and organizational change and growth: group processes and dynamics; employee counseling and training; conflict resolution; role of the change agent; development of quality circles. (CSU)

### **BMG 63.1 Motivation and Empowering Employees**

*1.5 units/3 hours lecture for 8 weeks. CR/NC option. Recommended: Eligibility for English 100A or equiv.* A manager realizes the pivotal part that motivation plays in getting employees to accomplish their work. Providing a motivational environment that addresses the needs of the employees is not an easy task. This course enables the manager to understand the dynamics of motivation, how to empower employees, and how to successfully delegate a task or set of tasks. (CSU)

### **BMG 63.2 How to Be an Effective Leader**

*1 unit/3 hours lecture for 6 weeks. CR/NC option. Recommended: Eligibility for English 100A or equiv.* Effective leadership skills are critical in today's organizations. Leadership involves providing your employees with a vision of where the organization and your work unit are heading, giving them the necessary direction to fulfill the vision, and the support to accomplish their daily tasks. This course provides you with the necessary understanding and skills to be an effective leader. (CSU)

### **BMG 63.3 Managing with Ethics**

*0.5 unit/3 hours lecture for 3 weeks. CR/NC option. Recommended: Eligibility for English 100A or equiv.*  
Ethics is an important aspect in the daily work life of a manager. Unethical management behavior substantially reduces the positive working relationships with employees and others within the work environment. Unethical behavior by employees can cost your company dearly. This course will help the manager establish ethical standards within their work environment and serve as a model for ethical behavior. (CSU)

### **BMG 64.1 Effective Interviewing**

*0.5 unit/8 hours lecture for 1 week. CR/NC option. Recommended: Eligibility for English 100A or equiv.*  
Every supervisor knows how important it is to have the right employee in the right job. Hiring great people is the most important task any supervisor undertakes. Learn and practice the latest interviewing techniques. These techniques will greatly reduce your exposure to litigation and poor performers. (CSU)

### **BMG 64.2 A Supervisor's Basic Human Resource Responsibilities**

*1 unit/3 hours lecture for 6 weeks. CR/NC option. Recommended: Eligibility for English 100A or equiv.*  
All professionals are responsible for basic human resource activities. This course introduces students to the basic issues of compensation, benefits, OSHA and employee rights. Most employees look to their supervisor for an explanation as to how their pay rate was determined what their benefits mean, and how they can use their benefits effectively. When a supervisor is unable to answer these simple questions some employees begin to distrust their boss. Every professional is responsible for knowing how the basic human resource system functions. This course provides the foundation for these issues. (CSU)

### **BMG 64.3 Managing Employee Performance**

*1.5 units/3 hours lecture for 8 weeks. CR/NC option. Recommended: Eligibility for English 100A or equiv.*  
Federal, state and local laws have made supervising employees much more complex. Employees now have more employment protection than at any other time in history and will continue to receive even more protection. It is required that all supervisors know and follow these laws. This course will explain the purpose of these laws and how to effectively manage employee's performance in today's changing environment. (CSU)

### **BMG 66 Planning, Budgeting & Control**

*3 units/3 hours lecture. Grade only. Prerequisite: BMG 50 & BMG 54 or equivalent.*  
A quantitative approach to decision-making processes and management functions within organizations. Analytical frameworks and tools for problem-solving emphasized through class problems and exercises. Special attention to current "hard science" techniques utilized in planning, budgeting and control systems. (CSU)

### **BMG 66.1 Decision Making in Organizations**

*1 unit/3 hours lecture for 6 weeks. CR/NC option. Recommended: Eligibility for English 100A or equiv.*  
Objective decision making is a personal skill required of all managers as they attempt to solve problems and take advantage of opportunities. In this course students will learn tools and techniques that will help them become better decision makers. They will also learn how to analyze the decision making environment and to enhance their effectiveness through effective decision implementation and control. (CSU)

### **BMG 66.2 Organizational Planning and Controlling**

*1 unit/8 hours lecture for 2 weeks. CR/NC option. Recommended: Eligibility for English 100A or equiv.*  
Planning is often called the most critical management function as it provides the context and parameters for all other management functions and decisions. Controlling is the process through which we assess the validity of our plans and the effectiveness of our implementation activities. In this course students will learn to understand the strategic management process, create strategic, tactical, and operational plans, and develop appropriate controls to help ensure their success. (CSU)

### **BMG 66.3 Financial Basics for the Non-Accountant**

*1 unit/3 hours lecture for 6 weeks. CR/NC option. Recommended: Eligibility for English 100A or equiv.*  
Geared for the non-accountant, this course is designed to take the mystery out of financial data and creates a foundation for understanding company finances. Students will learn to understand and interpret financial information; where it comes from and how to use it. Topics include financial analysis tools, ratios, indicators, the creation and control of budgets, and ethical consequences of financial decision making. (CSU)

### **BMG 67.1 Managing Change**

*0.5 unit/3 hours lecture for 3 weeks. CR/NC option. Recommended: Eligibility for English 100A or equiv.*  
Change is the one constant factor that managers face daily. As a manager it is critical that you and your employees recognize the importance and necessity of dealing positively with change in an environment that demands new products and services constantly. This course provides the manager with the knowledge and skills to create a work environment that has the ability to be proactive and bring about change effectively. (CSU)

### **BMG 67.2 Preventing, Managing and Resolving Conflict**

*1 unit/3 hours lecture for 6 weeks. CR/NC option. Recommended: Eligibility for English 100A or equiv.*  
Participants learn the principles and techniques of preventing, managing and resolving a conflict. The historical and cultural context of a specific situation is developed. Specific approaches and techniques include: (1) diagnosing conflict cause, (2) analyzing positions of all parties, (3) identifying

options for managing or resolving, (4) developing a specific managing or resolution strategy, (5) negotiating between parties, (6) reaching and writing the agreement. Implementing and following up on the agreement to provide for positive future relations and unforeseen contingencies will be covered. (CSU)

### **BMG 67.3 The Mediation of Conflict**

*0.5 unit/3 hours lecture for 3 weeks. CR/NC option. Recommended: Eligibility for English 100A or equiv.*  
Mediation of disputes by a third party mediator requires understanding of the mediation process and the mediator's role. Mediation will be presented from a manager's perspective. The providing of a context based on organizational mission and goals will be explored. Students will learn how to acquire information from disputants and design a mediation plan. Students will be able to explain the mediation process, establish ground rules, and learn a basic mediation process using basic mediation techniques. On concluding the mediation process, students will learn closure techniques. (CSU)

### **BMG 68 Supervisory/Mgt. Review and Comprehensive Exam**

*0.5 unit/8 hours lecture for 1 week. Grade only. Prerequisite: Completion with a "C" or better or concurrent enrollment in the following courses: BMG 52, 53, 54, 61, 62.1, 62.2, 62.3, 63.1, 63.2, 63.3, 64.1, 64.2, 64.3, 66.1, 66.2, 66.3, 67.1, 67.2, 67.3, BAD 52, BAD 53. Recommended: Eligibility for Engl 100A or equivalent.*  
This course is a review of the competencies learned in the Supervisory Management Certificate coursework, and a comprehensive exam of those materials. (CSU)

### **BMG 78 Personal Skills in Supervisory Management**

*(Formerly BMG 58) 0.5-3 units/up to 3 hours lecture. CR/NC option.*  
Series of courses designed to provide supervisory management students with special skills in dealing with current trends and topics in today's complex organizations. Divided into variable units. (CSU)  
*May be repeated with different topics.*

### **BMG 80 Small Business Management**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*  
Small business and its role in the American free enterprise system. Survey of problems and procedures found in establishing and operating a small business; locating, starting, organizing, purchasing & controlling. (CSU)

### **BMG 85.1 Pre-Business Fundamentals**

*(Formerly BMG 85A) 1 unit/3 hours lecture for 6 weeks. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*  
This course attempts to assist students in making the decision to enter the field of small business. Personal requirements for success. What are the characteristics of successful entrepreneurs? Survival factors to consider—what makes one business succeed while another fails? Introduction to the need for planning and initial financial considerations. (CSU)

### **BMG 85.2 Procedures for Starting a Small Business**

*(Formerly BMG 85B) 1 unit/3 hours lecture for 6 weeks. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*

This course attempts to help the student in making the right decisions prior to committing oneself to opening a small business. Should you buy an existing business or start from scratch? Is franchising a viable alternative? What form of ownership is best for your business? Consideration of local licensing and zoning laws. Insurance and potential risks. The lease; some preliminary considerations. Image development. (CSU)

### **BMG 85.3 Business Records & Cash Flow**

*(Formerly BMG 85C) 1 unit/3 hours lecture for 6 weeks. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*

This course introduces the record keeping needs of a small business. Internal and external planning and control. Inventory control, cash control, budgeting, and records needed for tax reporting, cash flow and break-even analysis, choosing or designing an adequate record keeping system. (CSU)

### **BMG 85.4 Small Business Location & Layout**

*(Formerly BMG 85D) 1 unit/3 hours lecture for 6 weeks. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*

Selection of a site for the small business based upon market analysis; spatial layout based upon efficiency and service; the lease; security concerns. (CSU)

### **BMG 85.5 The Business Plan**

*(Formerly BMG 85E) 1 unit/3 hours lecture for 6 weeks. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*

This course covers the development of a business plan and explains why a well-developed business plan is very important to the success of a new small business venture. The plan can be an invaluable management tool and is crucial when looking for financial aid. The plan must cover all areas of the business. (CSU)

### **BMG 85.6 Small Business Promotion, Advertising, Sales**

*(Formerly BMG 85F) 1 unit/3 hours lecture for 6 weeks. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*

This course discusses why promoting a firm's products and services is a major factor in the success of a small business venture. How do you go about promoting your small business? Your customers and potential customers must know who you are and where you are. You must develop a marketing program that will sell your products and services. (CSU)

### **BMG 85.7 The Role of the Manager in Small Business**

*(Formerly BMG 85G) 1 unit/3 hours lecture for 6 weeks. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*

This course discusses the unique role the owner manager of a small business plays in its success. As

manager he or she must understand the basic functions of management and apply them to the small business situation. This calls for some unique and creative thinking on the part of the small business operator. (CSU)

### **BMG 85.8 Taxes and the Small Business**

*(Formerly BMG 85H) 1 unit/3 hours lecture for 6 weeks. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*

This course attempts to make the small business owner aware of taxes and the taxing agencies. There are a number of tax reductions available and the owner should know how to take advantage of these tax savings. The form of business ownership, expenses, depreciation, retirement options, and other business activities will affect taxes. (CSU)

### **BMG 85.9 Small Business Personnel Practices**

*1 unit/16 hours lecture for 1 week. CR/NC option.*

Recruitment, employment law, record keeping, payroll, personnel policies and employee benefits for the small business. (CSU)

### **BMG 85.10 Ethical Issues For Small Business**

*(Formerly BMG 88.10) 0.5 unit/8 hours lecture for 1 week. CR/NC option.*

Investigate the ethical issues surrounding current business practices. Examine the reasons certain business practices have been adopted by companies in the United States. (CSU)

### **BMG 85.12 Small Business Entrepreneurship**

*(Formerly BMG 88.8) 0.5 unit/8 hours lecture for 1 week. CR/NC option.*

This course will explore the personal and technical skills necessary to become a successful entrepreneur. Learn how to analyze the requirements for success and how to assess risks and rewards. Examine legal considerations and entrepreneurial resources. Review action plans for various businesses. (CSU)

### **BMG 88 Selected Topics in Small Business Management**

*0.5 unit/8 hours lecture for 1 week. CR/NC only. Prerequisite: Will vary according to the topic and objectives of each individual course. Recommended: Will vary according to the topic and objectives of each individual course.*

A variety of small business management topics offered in a short, time-intensive format, focusing on different issues in each course, each semester. (CSU) *May be repeated with different topics.*

### **BMG 90.1 Management and Coordination of Electronic Office Systems**

*1 unit/3 hours lecture for 6 weeks. CR/NC only.*

The Office Manager coordinates the electronic office systems with the organizational direction. Operational effectiveness often hinges on the compatibility of electronic office systems including the computer, computer software, printer, modem, telephone, and fax. Purchasing and leasing options are considered, as well as technical support and staff training are also considered. (CSU)

### **BMG 90.2 Management of Contracts and Office Operation**

*1.5 units/8 hours lecture for 3 weeks. CR/NC only.*

The Office Manager's responsibilities often include securing contracts, service agreements, and insurance for office facilities, equipment, service providers, janitorial services, and building security. These considerations will be assessed according to the needs and direction of the organization. The effectiveness of the office workspace layout will be analyzed. (CSU)

### **BMG 399 Selected Topics**

*3 units/5 hours lecture for 6 weeks. CR/NC option.*

*Prerequisite: Will vary according to the topic and objectives of each individual course. Recommended: Will vary according to the topic and objectives of each individual course.*

A variety of topics offered in a short, time-intensive format focusing on current business management problems. Each class carries a specific title relating to the subject matter to be covered.

*May be repeated with different topics.*

## **Business Marketing**

### **BMK 50 Marketing**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*

Nature and functions of marketing; broad survey of flow of goods, types and functions of marketing institution, classes of goods, trade channels and social and economic implications. (CSU)

### **BMK 51 Principles of Selling**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*

Not open to students who have completed Business Marketing 52B or 52C. Principles and methods of personal selling; preparation of selling, the selling process and introduction to sales management. Behavioral aspects of selling: sociological and psychological theories of consumer motivation, behavior and perception. Includes lectures, discussions, demonstrations and practice in sales presentations. (CSU)

### **BMK 52A Sales Fundamentals**

*1 unit/8 hours lecture for 2 weeks. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*

Principles and methods of personal selling; behavioral aspects including theories of consumer motivation. (CSU)

### **BMK 52B Sales Strategy**

*1 unit/8 hours lecture for 2 weeks. CR/NC option. Prerequisite: BMK 52A or equivalent. Recommended: Eligibility for Engl 100A or equivalent.*

A problem-solving approach to dealing with selected sales topics; prospecting, approach, presentation, close. Extensive use of cases and situational analysis. Includes introduction to sales management. (CSU)

### **BMK 52C Sales Process**

*1 unit/8 hours lecture for 2 weeks. CR/NC option. Prerequisite: BMK 52A or equivalent. Recommended: Eligibility for Engl 100A or equivalent.*  
Sales Process provides training in techniques and mechanics of field salesmanship; including sales presentations. (CSU)

### **BMK 52D Retail Selling**

*1 unit/8 hours lecture for 2 weeks. CR/NC option. Prerequisite: BMK 52A or equivalent experience. Recommended: Eligibility for Engl 100A or equivalent.*  
Specific sales activities are studied in depth: greeting customers, presenting merchandise, handling objections, closing the sale, suggesting additional merchandise and selling big ticket items. The salesperson's crucial role in preventing stock shrinkage. (CSU)

### **BMK 54 Advertising**

*3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent.*  
Principles and techniques of advertising as applied to national media. Psychology of advertising, consumer behavior, market research, preparation of copy, selection of media, testing effectiveness and organization for efficient use by management. (CSU)

### **BMK 58 Selected Topics in Marketing**

*1 unit/8 hours lecture for 2 weeks. CR/NC only. Prerequisite: Will vary according to each topic. Recommended: Will vary according to each topic.*  
A variety of Business Marketing topics offered in a short, time-intensive format, focusing on different issues in each course each semester. (CSU)

### **BMK 60 Retail Marketing**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*  
Survey of independent, chain and department store merchandising operations and management. Analysis of problems concerning store location and layout, organization, buying, pricing, sales promotion, inventory planning and control and merchandising policies. Core course in the Retail Merchandising Management Certificate program. (CSU)

### **BMK 64 Retail Advertising**

*3 units/3 hours lecture. CR/NC option.*  
Principles and techniques of advertising as applied to national media. Psychology of advertising, consumer behavior, market research, preparation of copy selection of media, testing effectiveness and organization for efficient use by management. (CSU)

### **BMK 66 Merchandise Display**

*3 units/2 hours lecture, 3 hours by arrangement. Grade only. Recommended: Eligibility for Engl 100A or equivalent. BMK 50 or 60.*  
Principles of merchandise display emphasizing planning, design and construction: theme determination, merchandise and prop selection, balance and arrangement, lighting, color selection and coordination, copywriting, sign design, layout, display management and budgeting. Introduction to store interior display and store layout. Includes the

creation and construction of window display by students. Course implementation by observation and critical analysis of display work and interior store layout in regional retailing firms. (CSU)

### **BMK 70 Direct Marketing**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*  
How to design and operate a direct marketing business. Topics include use of mailing lists, print media, writing copy, catalogs and database management; creation and development of student's own marketing plan. (CSU)

### **BMK 72 New Product Development**

*(Formerly BMK 58.26) 1 unit/8 hours lecture for 2 weeks. CR/NC option.*  
New product planning from idea generation to evaluation to product or service realization. Issues of intellectual property rights including patents, trademarks, and copyrights are considered as well as licensing and industry collaboration. This is especially useful for entrepreneurs and inventors. (CSU)

## **Hospitality**

### **HOSP 50 Introduction to Tourism/Sonoma County**

*(Formerly BMG 67) 1 unit/8 hours lecture for 2 weeks. CR/NC only.*  
Sonoma County is known throughout the world for its wines. Learn how to continue to enhance the tourism activity for the county and your business or employer. This course will give you an overview of the variety of tourism in Sonoma County and how you as an employee play a critical role in the enjoyment level of our visitors. (CSU)

### **HOSP 51 Customer Service**

*1 unit/3 hours lecture for 6 weeks. CR/NC option.*  
Basic principles of working with people in the beverage, restaurant and hotel industries. Customer service techniques. On-site observations. (Formerly BMK 58.17). (CSU)

### **HOSP 60 Introduction to Hotel Operations**

*(Formerly BMG 78.115) 1 unit/8 hours lecture for 2 weeks. CR/NC only.*  
This course is an overview into the operations of Hotels. Discussions/topics include reviewing each function of a hotel and how all the functions interface with each other. Hotel jargon, terms, policies, and procedures will be discussed. (CSU)

### **HOSP 61 Front Desk Representative Training**

*3 units/24 hours lecture for 2 weeks. CR/NC option.*  
The focus of this training is to develop the skills of non-hospitality students and provide them with the understanding and the actual skills to handle all aspects of the front desk at a hotel/motel, activities center or recreation facility where guests will be assigned to a guest room one or multiple days. (CSU)

### **HOSP 63 Overview - Hotel Management**

*3 units/3 hours lecture. CR/NC option.*  
This course will provide an overview of hotel operations. Each department will be covered, giving students a chance to explore possible future areas of concentration. Much of the course will explore "managing the process" by which hotel operations are managed and marketed. (CSU)

### **HOSP 78 Selected Topics in Hospitality**

*0.5-3 units/up to 3 hours lecture. CR/NC option.*  
A variety of selected topics designed to provide current training, special skills, and an exploration of current trends in the hospitality industry. (CSU)  
*May be repeated with different topics.*

## **Human Resources**

### **HR 60 Human Resource Management**

*(Formerly BMG 64) 3 units/3 hours lecture. CR/NC option.*  
What a supervisor needs to know about personnel administration: Federal and state regulations (EEO, OSHA, ERISA, etc.) labor relations, wage and salary administration, employee benefits and services and other personnel matters the supervisor must understand. An opportunity to build skills in handling grievances, disciplining, discharging, interviewing and performance appraisals. (CSU)

#### **HR 65.1 The Hiring Process**

*(Formerly BMG 65.1) 1 unit/8 hours lecture for 2 weeks. CR/NC only.*  
The most common factors that all successful organizations have are their ability to hire the talent they need to keep their company ahead of the competition. This process of finding and obtaining good people is quite complex. This course will provide participants with extensive background and practice in completing the hiring process successfully. (CSU)

#### **HR 65.2 Fundamentals of Salary Administration**

*(Formerly BMG 65.2) 1 unit/8 hours lecture for 2 weeks. CR/NC only.*  
Participant will learn the impact of salaries on recruiting and retention of employees. How to determine market rate and read salary surveys. Fundamentals of payroll administration including wage & hour laws, exempt vs. non-exempt employment status and how to calculate base pay, overtime pay, vacation and sick leave pay, and final pay will be presented. (CSU)

#### **HR 65.3 Human Resources Recordkeeping**

*(Formerly BMG 65.3) 0.5 unit/8 hours lecture for 1 week. CR/NC only.*  
Employers must have documentation that supports all Human Resource areas. The laws and courts have made recordkeeping both an asset and a liability to employers. Participants will learn the techniques for legal document storage and retention. (CSU)

#### **HR 65.4 Administrating Leaves of Absence**

*(Formerly BMG 65.4) 0.5 unit/8 hours lecture for 1 week. CR/NC only.*

As human resource personnel we must comply with the numerous employee leaves created by Federal and State Agencies. In addition, most employers provide additional leaves. Participants will learn about how to coordinate and administer the mandated leaves as well as the additional leaves offered by the employer. (CSU)

#### **HR 65.5 Benefits Administration**

*(Formerly BMG 65.5) 1 unit/8 hours lecture for 2 weeks. CR/NC only.*

The administration of benefits covers a wide range of constantly changing areas. This course discusses in detail the most common benefits employers offer and the process and techniques necessary to ensure the benefits are properly and legally administered. Topics include medical, vision, life insurance, accidental death and dismemberment, worker's compensation, unemployment, COBRA, stock options, 401K, 403B and retiree benefits. (CSU)

#### **HR 65.6 Fundamentals of Human Resources Law**

*(Formerly BMG 65.6) 1 unit/8 hours lecture for 2 weeks. CR/NC only.*

Human Resource laws change rapidly. Employer mistakes and the current legal system make application of employment law a large liability. Current Human Resource laws and their application will be discussed. Participants will discover the resources available to keep current in Human Resource laws. (CSU)

#### **HR 65.10 Human Resource Administration Cert. Overview and Exam**

*(Formerly BMG 65.10) 0.5 unit/8 hours lecture for 1 week. CR/NC only. Prerequisite: Completion with a 'C' or better or concurrent enrollment in BMG 52 and HR 60 (formerly BMG 64) and HR 65.1 (formerly BMG 65.1) and HR 65.2 (formerly BMG 65.2) and HR 65.3 (formerly BMG 65.3) and HR 65.4 (formerly BMG 65.4) and HR 65.5 (formerly BMG 65.5) and HR 65.6 (formerly BMG 65.6) and BAD 52 and BAD 53.*

This course allows the Human Resource Administration certificate candidates to review all the information provided in the certificate program and utilize the resources in a comprehensive exam. (CSU)

#### **HR 73 Communicating to Prevent Violence in the Workplace**

*0.5 unit/8 hours lecture for 1 week. CR/NC only.*

Ensuring a workplace that is free from the threat of violence or harassment is vital to employee safety and productivity. The focus of this course is on understanding life and work factors that may contribute to personal agitation, exploring policies and practices and interventions that reduce the likelihood or impact of violence, identifying behaviors and cues that represent a possible precursor to violence, and how to effectively communicate with those who are in the process of becoming violent. An application plan for the workplace will be developed by each student. (Formerly HR 78.4). (CSU)

#### **HR 78 Special Topics in Human Resources**

*0.5-3 units/up to 3 hours lecture. CR/NC option.*

A series of courses designed to provide current and potential human resource administration training in special skills and current trends in human resources. (CSU)

*May be repeated with different topics.*

### **Real Estate**

#### **RE 80A Real Estate Principles**

*3 units/3 hours lecture. CR/NC option.*

Examination of the basic fundamentals of real estate law; industry terminology and general principles necessary for sitting for State exam. Required prior to obtaining a test date; applies toward State's educational requirements for the broker's examination. (CSU)

#### **RE 80C Real Estate Practice**

*3 units/3 hours lecture. Grade only.*

Day to day operations in real estate roles and brokerage including listing, prospecting, advertising, financing, sales techniques, escrow and ethics. Applies towards State's educational requirements for the broker's examination. (CSU)

#### **RE 80D Legal Aspects of Real Estate**

*3 units/3 hours lecture. Grade only.*

California real estate law, including rights incident to property ownership and management, agency, contracts and application to real estate transfer. Conveyancing, probate proceedings, trust deeds, foreclosure and recent legislation governing real estate transactions. Applies toward State's educational requirements for the broker's examination. (CSU)

#### **RE 80E Real Estate Finance**

*3 units/3 hours lecture. Grade only.*

Analysis of real estate financing, including lending policies and problems in financing transactions in residential apartments, commercial and special purpose properties. Methods of financing properties emphasized. Applies toward State's educational requirements for the broker's examination. (CSU)

#### **RE 80F Residential Real Estate Appraisal**

*3 units/3 hours lecture. Grade only. Recommended: RE 80C, 80E.*

Different approaches, methods and techniques used to determine the value of various types of property. Emphasis on residential and single unit property. Applies toward State's educational requirements for the broker's examination. (CSU)

#### **RE 80G Real Estate Economics**

*3 units/3 hours lecture. Grade only.*

Trends and factors which affect the value of real estate; the nature and classification of land economics; the development of property, construction and subdivision, economic values and real estate evaluation; real estate cycles, and business

fluctuations, residential market trends, real property and special purpose property trends. Applies toward State's educational requirements for the broker's examination. (CSU)

#### **RE 80H Real Estate Escrow**

*3 units/3 hours lecture. Grade only. Recommended: RE 80C.*

Fundamental principles and basic procedures involved in ordinary escrow transactions and title insurance coverage. Designed for real estate licenses and those desiring careers in title insurance and escrow fields. Applies toward State's educational requirements for the broker's examination. (CSU)

#### **RE 80J Commercial Real Estate Appraisal**

*(Formerly RE 282) 3 units/3 hours lecture. Grade only.*

Methods and techniques of estimating the value of properties other than single residences. Application of income approach to commercial, industrial and multiple residential properties. Applies toward State's educational requirements for the broker's examination. (CSU)

#### **RE 80K Advanced Real Estate Finance**

*(Formerly RE 284) 3 units/3 hours lecture. Grade only.*

*Prerequisite: RE 80E or equivalent. Recommended: RE 80C.* Review of real estate finance, concepts and economic factors that affect investors. Practical insights on how to understand and cope with inflation stagflation and buying, selling and owning tangible assets. Applies toward State's educational requirements for the broker's examination. (CSU)

#### **RE 80M Applied Real Estate Computations**

*3 units/3 hours lecture. Grade only. Prerequisite: RE 80A or possession of California Real Estate Sales License.*

Designed to develop a more complete understanding of the basic process of computations associated with problems in real estate and to prepare for further study in areas of appraisal, finance and finally the real estate license examination. (CSU)

#### **RE 80P Property Management in California**

*3 units/3 hours lecture. Grade only.*

Includes the principles and practices of managing income properties. Covers nature and types of property management, leases and contracts, collections, rent schedules, tenant selection and supervision, budgets, purchasing. Applies toward State's educational requirements for the broker's examination. (CSU)

#### **RE 88 Selected Topics in Real Estate**

*0.5-3 units/up to 16 hours lecture for 1 week. CR/NC only.*

*Prerequisite: May apply specifically to each topic.*

A variety of real estate topics offered in a short, time-intensive format, focusing on different issues in each course each semester. (CSU)

*May be repeated with different topics for a total of 6 units.*

## Business Office Technology

### Business Bookkeeping

#### **BBK 50 Computerized Bookkeeping and Accounting I**

*3 units/3 hours lecture, 1 hour laboratory. Grade only. Recommended: Completion of or concurrent enrollment in BGN 81.*

Students record business transactions in journals and ledgers, compute payroll, and prepare balance sheets and income statements using both a manual and computerized system. (CSU)

#### **BBK 51 Computerized Bookkeeping & Accounting II**

*3 units/3 hours lecture, 1 hour laboratory, 1 hour by arrangement. Grade only. Prerequisite: BBK 50 completed with a grade of "C" or better or equivalent.*

Students record business transactions for merchandising, partnership, and corporate firms. Also included are departmentalized and voucher accounting systems. Both manual and computerized systems will be used. (CSU)

#### **BBK 53.1 QuickBooks**

*(Formerly BBK 85.4) 1.5 units/2 hours lecture, 3 hours laboratory for 8 weeks. CR/NC option. Recommended: Basic ability to use a Windows-based computer.*

Recording and reporting typical transactions for a small business using Quickbooks software. (CSU)  
*May be repeated with different topics.*

#### **BBK 85 Selected Topics in Bookkeeping/Accounting**

*0.5-2.5 units/up to 2.5 hours lecture. CR/NC option. Prerequisite: As appropriate to each topic. Recommended: Eligibility for Engl 100A or equivalent.*

A variety of topics offered in short, time-intensive format focusing on different subjects. (CSU)  
*May be repeated with different topics.*

### Business General

#### **BGN 50.01A Self-Paced Computer Keyboarding (Typing) on the Macintosh**

*0.5-1 unit/up to 1.5 hours laboratory. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*  
For the general student, individualized instruction in computer keyboarding/touch typing on the Macintosh. Open-entry/open-exit course that allows students to work at their own pace. Student must meet with instructor one assigned hour each week. Additional work completed during open lab hours. Takes approximately 24 hours to complete. (CSU)  
*May be taken for a total of 1 unit.*

#### **BGN 50.11 Self-Paced 10-Key Numeric Keypad on the Macintosh**

*0.5 unit/1.5 hours laboratory. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*

For the general student, individualized instruction in using the 10-key numeric keypad by touch using the Macintosh. Open-entry/open-exit course that allows students to work at their own pace. Student must meet with instructor one assigned hour each week. Additional work completed during open lab hours. Takes approximately 24 hours to complete. (CSU)  
*May be taken for a total of 1 unit.*

#### **BGN 52.01 Self-Paced Editing Resources on the Macintosh**

*0.5-1 unit/up to 1.5 hours laboratory. CR/NC option. Prerequisite: BGN 50.01A or equivalent and knowledge of word processing on the Macintosh. Recommended: Eligibility for Engl 100A or equivalent.*

For the general student, individualized instruction on the Macintosh in using editing software resources that enhance various word processing software such as grammar and punctuation checkers, writing styles, thesaurus, and spellers. Open-entry/open-exit course that allows students to work at their own pace. Student must meet with instructor one assigned hour each week. Additional work completed during open lab hours. Takes approximately 24 hours to complete. (CSU)  
*May be taken for a total of 1 unit.*

#### **BGN 52.02 Self-Paced Editing Resources on IBM/DOS Equipment**

*0.5 unit/1.5 hours laboratory. CR/NC option. Prerequisite: BOT 169.1 (formerly BGN 50.02A) or equivalent and knowledge of word processing on DOS equipment (IBM or compatible). Recommended: Eligibility for Engl 100A or equivalent.*

For the general student, individualized instruction on DOS equipment (IBM or compatible) in using editing software resources that enhance various word processing software such as grammar and punctuation checkers, writing styles, thesaurus and spellers. Open-entry/open-exit course that allows students to work at their own pace. Student must meet with instructor one assigned hour each week. Additional work completed during open lab hours. Takes approximately 24 hours to complete. (CSU)  
*May be taken for a total of 1 unit.*

#### **BGN 52.12 Self-Paced DOS System Software**

*0.5 unit/24 hours laboratory for 1 week. CR/NC option. Recommended: Eligibility for English 100A or equiv.*

For the general student, individualized instruction on the MS/PC DOS system software for IBM computers and compatibles. Open entry/open exit course that allows students to work at their own pace. Students must meet with instructor one assigned hour each week. Additional work completed during open lab hours. Takes approximately 24 hours to complete. (CSU)  
*May be taken for a total of 1 unit.*

#### **BGN 53.01 Self-Paced Microsoft Word on the Macintosh**

*0.5 unit/1.5 hours laboratory. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent; knowledge of the keyboard and ability to type by touch.*

For the general student, individualized instruction on the Macintosh in formatting/editing papers and reports using Microsoft Word. Open-entry/open-exit course that allows students to work at their own pace. Student must meet with instructor one assigned hour each week. Additional work completed during open lab hours. Takes approximately 24 hours to complete. (CSU)

*May be taken for a total of 1 unit.*

#### **BGN 53.02 Self-Paced Microsoft Word on IBM/DOS Equipment**

*0.5 unit/1.5 hours laboratory. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent; BOT 169.1 (formerly BGN 50.02A) or equivalent.*

For the general student, individualized instruction on DOS equipment (IBM or compatible) in formatting/editing papers and reports using Microsoft Word. Open-entry/open-exit course that allows students to work at their own pace. Student must meet with instructor one assigned hour each week. Additional work completed during open lab hours. Takes approximately 24 hours to complete. (CSU)

*May be repeated with different topics.*

#### **BGN 53.12 Self-Paced WordStar on IBM/DOS Equipment**

*0.5-1 unit/up to 1.5 hours laboratory. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent; knowledge of the keyboard and ability to type by touch.*

Individualized instruction on DOS equipment (IBM or compatible) in formatting/editing papers and reports using WordStar. Open-entry/open-exit course that allows students to work at their own pace. Student must meet with instructor one assigned hour each week. Additional work completed during open lab hours. Takes approximately 24 hours to complete. (CSU)

*May be taken for a total of 1 unit.*

#### **BGN 53.22 Self-Paced WordPerfect on IBM/DOS Equipment**

*0.5 unit/1.5 hours laboratory. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent; BOT 169.1 (formerly BGN 50.02A) or equivalent.*

For the general student, individualized instruction on DOS equipment (IBM or compatible) in formatting/editing papers and reports using Word Perfect. Open-entry/open-exit course that allows students to work at their own pace. Student must meet with instructor one assigned hour each week. Additional work completed during open lab hours. Takes approximately 24 hours to complete. (CSU)  
*May be repeated with different topics.*

#### **BGN 71 Business English**

*3 units/3 hours lecture. Grade only. Recommended: Eligibility for English 100A or equiv.*

English fundamentals: sentence structure, grammar, punctuation, spelling, and vocabulary. Use of standard reference sources and proofreader's marks for editing business-related sentences, paragraphs, and documents. (CSU)

### **BGN 81 Business Math Skills**

*3 units/3 hours lecture. Grade only. Recommended: Eligibility for English 100A or equiv.*

Starting with a review of basic arithmetic and fractions, the course progresses to more advanced topics such as percents, payroll, selling and buying, and borrowing and lending. The course offers preparation for accounting, management, retailing, marketing, and office technology. (CSU)

### **BGN 81A Business & Financial Math 1**

*(Formerly BGN 80A) 1 unit/3 hours laboratory. Grade only. Recommended: Eligibility for English 100A or equivalent.*

Review of basic arithmetic, fractions, and percents. Part one of three parts. Open entry/open exit course that allows students to work at their own pace. (CSU)

### **BGN 81B Business and Financial Math 2**

*(Formerly BGN 80B) 1 unit/3 hours laboratory. Grade only. Prerequisite: BGN 81A (formerly BGN 80A). Recommended: Eligibility for Engl 100A or equivalent.*

Review of percentages and introduction to the mathematics of payroll, selling and buying. Open entry/open exit course that allows students to work at their own pace. (CSU)

### **BGN 81C Business and Financial Math 3**

*(Formerly BGN 80C) 1 unit/3 hours laboratory. Grade only. Prerequisite: BGN 81B (formerly BGN 80B). Recommended: Eligibility for Engl 100A or equivalent.*

An introduction to mathematics of borrowing and lending. When combined with BGN 81A and BGN 81B, this course offers preparation for accounting, management, retailing, marketing and office technology. Open entry/open exit course that allows students to work at their own pace. (CSU)

### **BGN 85 Electronic Calculator**

*0.5 unit/1.5 hours laboratory. CR/NC option. Recommended: Eligibility for English 100A or equiv.*

Training in the use of the electronic printing calculator. (CSU)

### **BGN 150.1 Self-Paced Computer Keyboard Skillbuilding on the Macintosh**

*0.5-2 units/up to 1.5 hours laboratory. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*

For the general student, individualized instruction in computer keyboard skill building for speed and accuracy using the Macintosh. Open-entry/open-exit course that allows students to work at their own pace. Student must meet with instructor one assigned hour each week. Additional work completed during open lab hours. Takes approximately 24 hours to complete.

*May be taken for a total of 2 units.*

### **BGN 150.2 Self-Paced Computer Keyboard Skillbuilding on IBM/DOS Equip**

*0.5-2 units/up to 1.5 hours laboratory. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*

For the general student, individualized instruction in computer keyboard skill building for speed and accuracy using DOS equipment (IBM or compatible). Open-entry/open-exit course that allows students to work at their own pace. Student must meet with instructor one assigned hour each week. Additional

work completed during open lab hours. Takes approximately 24 hours to complete.

*May be taken for a total of 2 units.*

### **BGN 183 Data Entry Applications**

*0.5 unit/1.5 hours by arrangement. CR/NC option. Recommended: Eligibility for English 100A or equiv.*

Application of various data entry input and hands-on practice and development of accuracy and speed in data entry applications. Self-paced course that allows students to work at their own pace.

*May be taken for a total of 2 units.*

### **BGN 350A Basic Keyboarding/Language Skills**

*1 unit/11 hours lecture, 16 hours laboratory for 1 week. CR/NC option. Recommended: Eligibility for Engl 355 or equivalent.*

Introduction and reinforcement of touch typing (keyboarding) skills, spacing rules, and basic grammar. Open-entry/open-exit course that allows students to work at their own pace. Student must meet with instructor three assigned hours each week. Additional work completed during open lab hours. Designed for students who are pursuing a certificate in the Business Office Technology Department and who are not ready to complete the college-level BOT 50A - Keyboarding course.

### **BGN 350B Keyboard Mastery/Language Skills**

*1 unit/11 hours lecture, 16 hours laboratory for 1 week. CR/NC option. Prerequisite: Completion of BGN 350A or equivalent; knowledge of keyboard and ability to type by touch. Recommended: Eligibility for Engl 355 or equivalent.*

Reinforcement of touch typing (keyboarding) skills, spacing rules, and basic grammar. Open-entry/open-exit course that allows students to work at their own pace. Student must meet with the instructor three assigned hours each week. Additional work completed during open lab hours.

### **BGN350.01A Computer Keyboarding for ESL Students**

*(Formerly BOT 299.3) 1-2 units/up to 3 hours laboratory. CR/NC option. Recommended: Eligibility for Engl 355 or equivalent.*

For the ESL student, individualized instruction in computer keyboarding and touch typing on the Macintosh.

*May be taken for a total of 2 units.*

### **BGN 353.1 Self-Paced Microsoft Word of the Macintosh for ESL Students**

*(Formerly BGN 353.01) 1-2 units/up to 3 hours laboratory. CR/NC option. Recommended: Eligibility for English 355 or equiv.*

For the ESL student, individualized instruction on the Macintosh in formatting/editing papers and reports using Microsoft Word.

*May be taken for a total of 2 units.*

### **BGN 370 Business English Fundamentals**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 355 or equivalent.*

Basic English fundamentals emphasizing the identification and usage of the eight parts of speech and types of sentences along with spelling, punctuation, and business vocabulary.

*May be taken for a total of 6 units.*

### **BGN 377 Selected Topics in Fundamentals of Word Processing**

*1 unit/16 hours lecture, 8 hours laboratory for 1 week. CR/NC option. Prerequisite: Completion of BGN 350A and B or the equivalent. Recommended: Eligibility for Engl 355 or equivalent.*

Development of basic word processing concepts and skills. Emphasis is placed on understanding fundamental terminology, the purpose of word processing, and hands-on training with word processing programs.

*May be repeated with different topics.*

### **BGN 380 Basic Business Mathematics**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 355.*

Basic math as applied to practical business solutions; including banking, discounts, sales, payroll, interest, and other business problems.

*May be taken for a total of 6 units.*

## **Business Office Technology**

### **BOT 50A Computer Keyboarding**

*1.5 units/2 hours lecture, 3 hours laboratory for 8 weeks. CR/NC option. Recommended: Eligibility for English 100A or equiv.*

Develop ability to keyboard by touch using proper keyboarding techniques and computerized skill-building software. Speed and accuracy development emphasized throughout the course. (CSU)

### **BOT 50B Keyboarding and Document Processing**

*1.5 units/2 hours lecture, 3 hours by arrangement for 8 weeks. CR/NC option. Prerequisite: Completion of or concurrent enrollment in BOT 153; or completion of BOT 50A or the equivalent.*

Format business letters, tables, reports, memorandums, and other business communication using a computer and word processing software. (CSU)

### **BOT 55 Document Production**

*3 units/2 hours lecture, 2 hours laboratory, 1 hour by arrangement. Grade only. Prerequisite: BOT 153, BOT 56A & BOT 56B Recommended: Eligibility for Engl 100A, CIS 101A & BOT 56.2 or equivalent.*

Creating, keying, and formatting traditional and technology related business documents/messages using current word processing software. Integration of workplace competencies and foundation skills in this course form a solid basis for the Business Office Technology Department Certificate/Degree programs. (CSU)



### **BOT 55A Document Processing I**

*1 unit/4 hours by arrangement. Grade only. Prerequisite: BOT 50B completed with a grade of "C" or better; or a minimum typing speed of 35 words a minute on a 5-minute timed writing with 5 or fewer errors. Recommended: Eligibility for Engl 100A or equivalent.*  
Development of speed and accuracy. Apply keyboarding skills using word processing software to format such documents as letters in various styles and envelopes, tables, and reports. Part one of three parts. Open entry/open exit course that allows students to work at their own pace. (CSU)

### **BOT 55B Document Processing II**

*1 unit/4 hours by arrangement. Grade only. Prerequisite: BOT 55A completed with a "C" or better.*  
Continued development of speed and accuracy. Apply keyboarding skills using word processing software to format two-page letters, letters with special features, minutes of meetings, procedures manual, legal documents, forms, and complex tables. Part two of three parts. Open entry/open exit course that allows students to work at their own pace. (CSU)

### **BOT 55C Document Processing III**

*1 unit/4 hours by arrangement. Grade only. Prerequisite: BOT 55B completed with a "C" or better.*  
Continued development of speed and accuracy. Apply keyboarding skills using word processing software to complete an advanced integrated office simulation. Part three of three parts. Open entry/open exit course that allows the students to work at their own pace. (CSU)

### **BOT 56A Workforce Issues for Professional Office Workers**

*3 units/3 hours lecture. Grade only. Recommended: Eligibility for English 100A or equiv.*  
Critical workforce issues including the evolution of the workplace environment, the worker's changing role and opportunities, and the development of 21st century workplace skills such as effective team membership, critical thinking, and individual responsibility. (CSU)

### **BOT 56B Employment Issues for Professional Office Workers**

*1 unit/1 hour lecture. Grade only. Corequisite: Concurrent enrollment in BOT 56A. Recommended: Eligibility for English 100A or equiv.*  
Development of a career/educational plan for obtaining necessary skills related to the office workers' changing role and opportunities in the 21st century. Students will begin the development of a career portfolio to which documentation and resources will be added as they work through certificate required courses. (CSU)

### **BOT 56C Survival Issues for Professional Office Workers**

*3 units/3 hours lecture. Grade only. Prerequisite: Completion of BOT 56A and BOT 56B. Recommended: BGN 81.*  
Evaluate income, expenses, and resources to effectively plan career strategies for self-sufficiency. (CSU)

### **BOT 56.2 Workplace Communication for Professional Office Workers**

*4 units/4 hours lecture, 2 hours by arrangement. Grade only. Prerequisite: Completion of BGN 71 with grade of "C" or better, and completion of BOT 56A with grade of "C" or better, and completion of BOT 56B with grade of "C" or better. Recommended: Completion of or concurrent enrollment in BOT 73.12A or equivalent.*  
Developing effective communication skills including written and oral business messages/documents. Other topic areas incorporated within this course are technology-related messages; i.e., telephone techniques, electronic mail, and other mail and delivery services. (CSU)

### **BOT 56.3 Office Communication & Interpersonal Skills**

*(Formerly BOT 56.2A) 2 units/2 hours lecture. Grade only. Prerequisite: Completion of or concurrent enrollment in BGN 71.*  
Course designed to help the office worker with interpersonal skills used in communicating on the job. Topics include listening skills; non-verbal and face-to-face communications; email, voice mail and fax communication; Internet research; intercultural and diversity communications; ethical & legal guidelines in communication; dealing with difficult people and conflict; and developing positive telephone communication skills. (CSU)

### **BOT 56.4 Business Communication and Technology**

*3 units/3 hours lecture. CR/NC option. Prerequisite: BGN 71 completed with a "C" or better grade. Recommended: Eligibility for Engl 100A or equivalent. BOT 73.12A or ability to use a word processing program.*  
Effective written communication is an essential skill in today's work force. Globalization of business & the increased use of technology have added additional challenges and complexities to communicating. Students will identify the communication process, discuss forces that influence business communication, and select the appropriate tools for communicating a written message. Throughout the course students will compose messages using various forms of technology such as email, list servers, fax, and real-time/live communication tools. (CSU)

### **BOT 58.1 Business Math Skills**

*3 units/3 hours lecture, 1 hour laboratory. Grade only. Prerequisite: Completion of or concurrent enrollment in BOT 58.3; OR prior qualification for BOT 58.1. Recommended: Eligibility for Engl 100A or equivalent.*  
Computational/math skills for the 21st century workforce emphasizing practical business applications including a review of basic arithmetic and fractions, the course progresses to more advanced topics such as percents, payroll, selling and buying, and borrowing and lending. Integration of workplace competencies and foundation skills in this course form a solid basis for the Business Office Technology Department Certificate/Degree Programs. (CSU)

### **BOT 58.1A Business Math Skills I**

*1 unit/3 hours by arrangement. Grade only. Recommended: Eligibility for English 100A or equiv.*  
Review of basic arithmetic, fractions, and percents. Part one of three parts. Open entry/open exit course that allows students to work at their own pace. (CSU)

### **BOT 58.1B Business Math Skills II**

*1 unit/3 hours by arrangement. Grade only. Prerequisite: Completion of or concurrent enrollment in BOT 58.1A; OR completion of BGN 81A (or BGN 80A).*  
Review of percentages and introduction to the mathematics of payroll, selling and buying. Part two of three parts. Open entry/open exit course that allows students to work at their own pace. (CSU)

### **BOT 58.1C Business Math Skills III**

*1 unit/3 hours by arrangement. Grade only. Prerequisite: Completion of or concurrent enrollment in BOT 58.1B; OR prior qualification for BOT 58.1C.*  
An introduction to mathematics of borrowing and lending. When combined with BOT 58.1A and BOT 58.1B, this course offers preparation for accounting, management, retailing, marketing, and office technology. Part three of three parts. Open entry/open exit course that allows students to work at their own pace. (CSU)

### **BOT 59.1 Applied Office Technology Skills**

*4 units/4 hours lecture, 2 hours by arrangement. Grade only. Prerequisite: BOT 55 AND BOT 56.2 (BOT 65.1) completed with a grade of "C" or better. Recommended: Eligibility for English 100A or equiv.*  
Acquire experience with and evaluate appropriate technological tools and environments (computer systems, integrated software, fax/modem, phone, workstations, work flow planning) to design business information processing systems. Integration of workplace competencies and foundation skills in this course form a solid basis for the Business Office Technology Department Certificate/Degree Programs. (CSU)

### **BOT 59.2 Business Records Skills**

*4 units/4 hours lecture, 2 hours by arrangement. Grade only. Prerequisite: BOT 73.10A and BOT 172 Recommended: Eligibility for English 100A or equiv.*  
Twenty-first century workforce skills designing and developing systems for organizing information and materials. Study and application of filing rules for manual and computerized records systems. Practical work covering alphabetic, numeric, geographic, and subject filing systems and procedures including selection of equipment and supplies. Includes instruction in the creation and use of computerized database software, covering topics such as maintenance, protection, and disposition of computerized records. Specialized functions such as CD-ROM, micrographics, off-site storage options, and records storage and legal issues will also be covered. Integration of workplace competencies and foundation skills in this course form a solid basis for the Business Office Technology Department Certificate/Degree Programs. (CSU)

### **BOT 59.2A Filing Rules and Procedures**

*2 units/2 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent.*

Study and application of filing rules for manual and computerized records systems. Practical work covering alphabetic, numeric, geographic, and subject filing systems and procedures including selection of equipment and supplies. (CSU)

### **BOT 59.2B Database and Records Management**

*2 units/2 hours lecture, 2 hours by arrangement. Grade only. Recommended: Eligibility for Engl 100A or equivalent.*

Instruction in the creation and use of computerized database software. Includes the creation, maintenance, protection, and disposition of computerized records. Specialized functions such as CD-ROM, micrographics, off-site storage options, and records storage legal issues will also be covered. (CSU)

### **BOT 59.3 Marketing Your Skills**

*(Formerly BOT 68) 3 units/3 hours lecture, 2 hours by arrangement. Grade only. Prerequisite: BGN 71 and BOT 73.10a completed with a "C" or better.*

Identify and market workforce skills and qualities for employment. Use technology to develop a network of contacts and portfolio of employment related documents including application, resume, and cover letters; develop and practice interviewing skills. Integration of workplace competencies and foundation skills in this course form a solid basis for the Business Office Technology Department Certificate/Degree Programs. (CSU)

### **BOT 59.4 International Business Practices for the Office Professional**

*(Formerly BOT 87.9) 3 units/3 hours lecture, 2 hours by arrangement. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent and completion of BOT 59.1.*

Designed to provide the professional office worker with an understanding of the global marketplace. Students will learn how to interact with foreign businesspeople and identify/compare cultural differences. Emphasis will be placed on business practices and procedures. Topics include: world geography, economy, cultures and behaviors, international communications, currencies and exchange, international travel, mail, and careers in international business. (CSU)

*May be repeated with different topics.*

### **BOT 59.5 Creating a Virtual Office**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*

There has been an increase in interest in using technology to work from home—telecommuting. Individuals may choose to work outside of their corporate/business office or may be entrepreneurs who wish to be self-employed. This course will explore issues that should be addressed when creating a virtual office. Topics will include managing your time, customizing your workplace, evaluating and buying technology, communicating with technology, and business ethics. The course is a requirement of the Business Office Technology Department's Virtual Assistant Certificate Program. (CSU)

### **BOT 59.6 Marketing Yourself as a Virtual Assistant**

*3 units/3 hours lecture. CR/NC option. Recommended: BOT 59.5 and BOT 73.12A. Familiarity with the Internet/Web.*

To collect together all of your learned skills & knowledge and to "package" them in a marketable manner in order to obtain the best possible virtual employment position. Students will identify and evaluate various employment marketing techniques such as networking face-to-face, conducting virtual interviews, belonging to professional organizations, developing flyers and brochures, developing a professional Internet web site, and using numerous Web-based resources. The course is a requirement of the Business Office Technology Department's Virtual Assistant Program. (CSU)

### **BOT 64 Explore Office Careers**

*0.5 unit/8 hours lecture for 1 week. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*

Exploration of office career opportunities, including types of careers, employment outlook in Sonoma County and Bay Area, salaries and fringe benefits, and educational and training requirements. Guest lecturers may include employers, personnel directors, and individuals in various office careers. (CSU)

### **BOT 65.4 Telephone Techniques**

*0.5 unit/8 hours lecture for 1 week. CR/NC option. Recommended: Eligibility for English 100A or equiv.*

Development and improvement of telephone skills. Learn how to communicate effectively, handle incoming calls, make outgoing calls, handle special calls, and use telephone messaging systems professionally. (CSU)

### **BOT 67A Employment Marketing Skills I**

*1 unit/2 hours lecture for 8 weeks. Grade only. Recommended: Eligibility for English 100A or equiv.*

Explore office career opportunities; review salaries and fringe benefits; identify educational training requirements; prepare personal inventory. (CSU)

### **BOT 67B Employment Marketing Skills for Office Occupations II**

*1 unit/2 hours lecture for 8 weeks. Grade only. Recommended: Eligibility for English 100A or equiv.*

Preparation of resume and employment applications; handling of pre-employment inquiries; develop interview techniques and follow-up; and identify and plan career advancement/promotion issues as related to office careers. (CSU)

### **BOT 73.10A Microsoft Office Suite for the Office Professional, Level I**

*1.5 units/2 hours lecture, 3 hours laboratory for 8 weeks. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*

Beginning course designed to provide an overview of Microsoft Word, Excel, Access & PowerPoint programs. Designed for the office professional or other serious personal computer user with little or no Windows experience. Emphasizes preparation of accurately formatted office documents. Formerly BOT 86.16. (CSU)

### **BOT 73.10B Microsoft Office Suite for the Office Professional Level 2**

*1.5 units/2 hours lecture, 3 hours laboratory for 8 weeks. CR/NC option. Recommended: BOT 73.10A or equivalent.*

Course designed to provide an overview of the integration of MS Word, Excel, Access & Powerpoint programs. Students must have knowledge of Word, Excel & Access before enrolling. Emphasizes preparation of accurately formatted office documents & integration of the MS Office Suite word processing, spreadsheet, database & presentation graphics programs. Formerly BOT 86.16A. (CSU)

### **BOT 73.12A Microsoft Word—Core Level for the Office Professional**

*1.5 units/2 hours lecture, 3 hours laboratory for 8 weeks. CR/NC option. Recommended: Completion of BOT 50A or knowledge of the keyboard and ability to type by touch. Eligibility for Engl 100A or equivalent.*

Designed for the office professional or other serious personal computer user. Emphasizes preparation of accurately formatted letters, memorandums, tabulated material, and short reports. Features include: character, paragraph and page formatting; headers and footers; styles and templates; outline; spelling, grammar and thesaurus tools; columns; tables; printing documents and envelopes; and managing files. Formerly BOT 77.8. (CSU)

### **BOT 73.12B MS Word—Expert Level for the Office Professional**

*1.5 units/2 hours lecture, 3 hours laboratory for 8 weeks. CR/NC option. Prerequisite: Completion of BOT 73.12A or the equivalent.*

Designed for the office professional who desires to increase productivity by using advanced features and formats. Includes: advanced formatting; footnotes & endnotes; workgroup editing; columns; calculating tabular information; forms; inserting graphics; macros; and mail merge. Formerly BOT 78.4. (CSU)

### **BOT 73.13A Microsoft Excel-Core Level for the Office Professional**

*1.5 units/2 hours lecture, 3 hours laboratory for 8 weeks. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*

Designed for the office professional or other serious personal computer user. Emphasizes creating, editing and formatting, Excel worksheets, workbooks, charts and applying ranges. Formerly BOT 86.62. (CSU)

### **BOT 73.13B Microsoft Excel - Expert Level for the Office Professional**

*1.5 units/2 hours lecture, 3 hours laboratory for 8 weeks. CR/NC option. Prerequisite: BOT 73.13A or equivalent*

Designed for the office professional who desires to increase productivity by using advanced spreadsheet features. Emphasizes advanced formatting, query features, macros, import and export, template usage, multiple workbooks, and workgroup functions. Formerly BOT 86.62. (CSU)

### **BOT 73.14A Microsoft Access for the Office Professional**

1.5 units/2 hours lecture, 3 hours laboratory for 8 weeks. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent. Completion of CIS 101B. Formerly BOT 86.63. (CSU)

### **BOT 73.14B MS Access Expert Level for the Office Professional**

(Formerly BOT 86.61) 1.5 units/2 hours lecture, 3 hours by arrangement for 8 weeks. CR/NC option. Recommended: Completion of or current enrollment in BOT 73.14A. Designed for the office professional or other serious personal computer user. Emphasizes customizing an existing database by creating conditional parameter queries, using conditional macros, popup forms, multi-page forms, and specialized reports. (CSU)

### **BOT 73.15A Microsoft PowerPoint for the Office Professional**

1.5 units/2 hours lecture, 3 hours laboratory for 8 weeks. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Designed for the office professional or other serious personal computer user. Emphasizes creation of slide presentations, adding visual elements, inserting data from other sources, customizing a presentation and delivering a presentation. (CSU)

### **BOT 73.15B MS PowerPoint Expert Level for the Office Professional**

(Formerly BOT 86.80) 1.5 units/2 hours lecture, 3 hours by arrangement for 8 weeks. CR/NC option. Prerequisite: Eligibility for or completion of BOT 73.15A Recommended: Completion of or current enrollment in BOT 73.15A

Designed for the office professional or other serious personal computer user. Emphasizes customizing PowerPoint presentations, creating logos, creating interactive presentations, animating text and objects, and saving PowerPoint presentations as Web pages. (CSU)

### **BOT 79 Selected Topics**

1.5 units/16 hours lecture, 24 hours laboratory for 1 week. CR/NC option. Prerequisite: Completion of BOT 78; OR prior qualification for BOT 79. Recommended: Eligibility for Engl 100A or equivalent.

Series of courses designed to provide advanced training in the use of a word processing program on a microcomputer; designed to further prepare students for today's electronic office by completing advanced applications. (CSU)

May be repeated with different topics.

### **BOT 84 Selected Topics in Office Technology Training**

0.5-3 units/up to 2 hours lecture, 3 hours laboratory. CR/NC option.

A variety of topics focusing on current office technology training. Each course carries a specific title relating to the subject matter to be covered. (CSU)

May be repeated with different topics.

### **BOT 85 Selected Topics in Legal Procedures**

0.5-3 units/up to 6 hours lecture for 8 weeks. CR/NC option. Recommended: Eligibility for English 100A or equiv.

A variety of legal training topics offered in a short,

time-intensive format focusing on different issues in each course. (CSU)

May be repeated with different topics.

### **BOT 86 Selected Topics in Computerized Office Procedures**

2 units/1 hour lecture, 3 hours laboratory for 8 weeks. CR/NC option. Prerequisite: As appropriate to each topic.

A variety of topics offered in a short, time-intensive format focusing on different hardware and/or software applications relative to the use of computers in completing office tasks. (CSU)

May be repeated with different topics.

### **BOT 87 Selected Topics in Office Skills/Techniques**

2.5 units/2.5 hours lecture. CR/NC option. Prerequisite: As appropriate to each topic. Recommended: Eligibility for Engl 100A or equivalent.

A variety of topics covered in a short, time-intensive format focusing on different subjects. (CSU)

May be repeated with different topics.

### **BOT 98 Special Studies in Office Technology**

1-3 units/up to 3 hours lecture, 8 hours by arrangement.

Grade only. Prerequisite: Application to Department.

Recommended: Eligibility for Engl 100A or equivalent.

Seminars or individual conferences by arrangement to provide for independent study and enriched academic experience. (CSU)

Independent study including 49 and 98 courses - 6 unit total.

### **BOT 99 Occupational Work Experience Education**

0.5-8 units/up to 36 hours by arrangement. Grade only.

Occupational Work Experience is supervised employment extending classroom learning at an on-the-job learning station relating to the student's educational or occupational goal. Students gain this experience by enrollment in the parallel or alternate plan. (CSU)

May be taken for a total of 16 units.

### **BOT 99I Occupational Work Experience-Intern Program**

1-8 units/up to 40 hours by arrangement. Grade only.

Occupational Work Experience Internship is supervised employment extending classroom learning at an on-the-job learning station relating to the student's educational or occupational goal. May be repeated for a total of sixteen (16) units, four (04) units maximum per semester (Repeat Code 25 for all Parallel Plans.) Must be enrolled in 7 units including Work Experience units (for summer school - Work Experience and one other course). Alternate Plan - designed to offer students opportunities to attend college full-time one semester and work full-time the following semester. Job experience must relate directly to the student's educational goals. Up to eight (08) units may be earned in one semester. Students may not be enrolled in more than one other course or transfer from Alternate to Parallel or vice-versa without completing 7 units between plans. (CSU)

May be taken for a total of 16 units.

### **BOT 153 Typing-Skill Building**

1.5 units/2 hours lecture, 3 hours laboratory for 8 weeks. CR/NC option. Recommended: Knowledge of the keyboard and ability to type by touch.

Using the Cortez Peters Championship Typewriting System, students will be introduced to the correct techniques and typewriting methods that will enable them to type perfectly. Emphasis is on accuracy first followed by speed development through the use of diagnostic/prescriptive/evaluative/motivational charting of all typewriting activities.

May be taken for a total of 12 units.

### **BOT 155 Teleservices Skills**

2 units/2 hours lecture. Grade only. Recommended:

Completion of BOT 56.3 (formerly BOT 56.2A).

Course designed to help the office worker with skills necessary for a teleservices position either using the telephone and/or answering and composing email. Topics include developing positive telephone communication skills, determining methods of defining customer needs and helping solve problems, handling difficult and/or special customers, and developing strategies to handle complaints.

### **BOT 161.1 Introduction to Computers for Office Professionals**

0.5 unit/8 hours lecture for 1 week. CR/NC only.

Introduction to overview of personal computers (PCs) designed for office professionals or other serious PC users with little or no experience. Emphasizes components of PCs, operating system environment, general operation, setting up a work area, ergonomic issues and getting started with applications. (Formerly BOT 86.42).

May be taken for a total of 4 units.

### **BOT 161.2 Introduction to Windows**

0.5 unit/8 hours lecture for 1 week. CR/NC only.

Introductory course designed to present beginning concepts of Windows. Students will get started in Windows, work with desktop, use online help, use My Computer and Windows Explorer, work with folders, files, and shortcuts, use control panel and other accessories, use Internet Explorer, and use Web integration with active desktop. (Formerly BOT 86.72).

May be taken for a total of 4 units.

### **BOT 162.1A Intro to MS Word for Win, Level I, for Office Professional**

0.5 unit/8 hours lecture for 1 week. CR/NC only.

Students get started with Word; create, save, print, and edit documents; move and copy text; use automatic text features; enhance the appearance of documents by formatting text, paragraphs, and documents; find and replace text; and use proofing tools to correct spelling and grammar errors. Formerly BOT 86.20.

May be taken for a total of 4 units.

### **BOT 162.1B Intro to MS Word, Level II, for Office Professionals**

*0.5 unit/8 hours lecture for 1 week. CR/NC only.*

*Recommended: Completion of BOT 162.1A or equivalent knowledge.*

Students will use templates; create letters, envelopes, and labels; use styles, outlines, headers and footers; create and format tables; work with columns; and use graphic elements in documents. (Formerly BOT 86.20A).

*May be taken for a total of 4 units.*

### **BOT 162.1C Intro to MS Word Level 3 for Office Professionals**

*0.5 unit/8 hours lecture for 1 week. CR/NC only.*

*Recommended: Completion of BOT 162.1B or equivalent knowledge.*

Students will create mailing labels and lists using data documents created in Word, create and modify form templates, create help messages and macros, and create and use online forms. Formerly BOT 86.20B.

*May be taken for a total of 4 units.*

### **BOT 162.1D Intro to Microsoft Word Level 4 for Office Professionals**

*0.5 unit/8 hours lecture for 1 week. CR/NC only.*

*Recommended: Completion of BOT 162.1C or equivalent knowledge.*

Students will customize default settings and use various toolbars in Word; import worksheets; use charts; create Tables of Figures, footnotes, endnotes, Indexes, and Tables of Contents; use hyperlinks for bookmarks and cross-references; and work with master documents. (Formerly BOT 86.20C).

*May be taken for a total of 4 units.*

### **BOT 162.3A Intro to Microsoft Excel, Level 1, for Office Professionals**

*0.5 unit/8 hours lecture for 1 week. CR/NC only.*

In this introductory Excel class students get started with Excel; create, modify, print, and format worksheets; work with basic formulas and functions; use multiple worksheets; enhance worksheets; use styles and AutoFormats; and work with charts. (Formerly BOT 86.27)

*May be taken for a total of 4 units.*

### **BOT 162.3B Intro to Microsoft Excel Level 2 for Office Professional**

*0.5 unit/8 hours lecture for 1 week. CR/NC only.*

*Recommended: Completion of BOT 162.3A.*

Students will format cells, create formulas, apply outlines, work with zero and negative values, work with multiple worksheets and workbooks, protect data, freeze worksheet panes, import and export data, and automate work by using templates, macros, and custom lists. (Formerly BOT 86.27A)

*May be taken for a total of 4 units.*

### **BOT 162.3C Intro to MS Excel Level 3 for Office Professionals**

*0.5 unit/8 hours lecture for 1 week. CR/NC only.*

*Recommended: Completion of BOT 162.3B or equivalent knowledge.*

Excel Level 3 students work with databases, sort databases, use database functions and filters, use

automated features, use and modify pivot tables, audit worksheets, work with scenarios, and create reports. (Formerly BOT 86.27B).

*May be taken for a total of 4 units.*

### **BOT 162.3D Intro to Microsoft Excel Level 4 for Office Professional**

*0.5 unit/8 hours lecture for 1 week. CR/NC only.*

*Recommended: Completion of BOT 162.3C or equivalent knowledge.*

Students customize Excel workspace by setting options, customizing toolbars & startup options; create/edit templates; use AutoFormats in worksheets; create, edit, run macros; create worksheet buttons; display dialog boxes and message boxes in macros; debug macros using breakpoints, stop statements & stepping. (Formerly BOT 86.27C)

*May be taken for a total of 4 units.*

### **BOT 162.4A Intro to Microsoft Access, Level 1, for Windows**

*0.5 unit/8 hours lecture for 1 week. CR/NC only.*

*Recommended: Windows.*

Students will create databases and tables, work with records, create queries, create forms and reports, and enhance forms and reports. (Formerly BOT 86.28)

*May be taken for a total of 4 units.*

### **BOT 162.4B Intro to MS Access Level 2 for Office Professionals**

*0.5 unit/8 hours lecture for 1 week. CR/NC only.*

*Recommended: Completion of BOT 162.4A or equivalent knowledge.*

Students will continue from Access 1. Students will create relational databases, work with related tables, use subforms, maintain data integrity, use advanced form and report features, use advanced queries, and work with charts. (Formerly BOT 86.28A).

*May be taken for a total of 4 units.*

### **BOT 162.4C Introduction to MS Access Level 3 for Office Professionals**

*(Formerly BOT 86.28B) 0.5 unit/8 hours lecture for 1 week. CR/NC only. Recommended: Completion of BOT 162.4A and 162.4B.*

Course designed for students who have completed Access Levels 1 and 2. Use advanced tools such as performance analyzer and subform controls; create macros, dialog boxes, and switchboards; establish security; and use database splitter and linked table manager.

*May be taken for a total of 4 units.*

### **BOT 162.5A Intro to PowerPoint Level 1 for Office Professionals**

*0.5 unit/8 hours lecture for 1 week. CR/NC only.*

Students will develop a basic slide presentation on PowerPoint; create slides containing formatted text, customized bullets, graphic objects, and ClipArt; print handouts of presentation; work with proofing tools; and run a finished presentation. (Formerly BOT 86.30).

*May be taken for a total of 4 units.*

### **BOT 162.5B Intro to MS PowerPoint Level 2 for Office Professionals**

*0.5 unit/8 hours lecture for 1 week. CR/NC only.*

*Recommended: Completion of BOT 162.5B or equivalent knowledge.*

Students will create, modify, and rearrange slides in Outline view; add charts, tables, and organization charts; add multimedia elements such as sound, video clips, and scanned images; select color schemes and templates; add animated text, objects, and charts; link slides; prepare a custom slide show; and save presentation for other uses. (Formerly BOT 86.30A).

*May be taken for a total of 4 units.*

### **BOT 162.6 Integrating MS Office: Word, PowerPoint, Access, & Excel**

*0.5 unit/8 hours lecture for 1 week. CR/NC only. Prerequisite: Windows and two MS Office software applications.*

In integration of MS Office students will explore & customize the office Shortcut Bar, start an Office document, find & open an Office document, customize the Office Assistant, explore Command bars, use OfficeArt & WordArt, link & embed objects, create hyperlinks, use the Office Binder, and share data among all Office applications. (Formerly BOT 86.51).

*May be taken for a total of 4 units.*

### **BOT 162.7 Microsoft Outlook Level 1**

*0.5 unit/8 hours lecture for 1 week. CR/NC only. Prerequisite: Windows 98.*

In Microsoft Outlook, Level 1, students get started with Outlook; work with the Address Book; use Contacts, Inbox, Journal, Notes, and Tasks; use Calendar to track appointments, events and manage meetings and use Outlook with other applications. (Formerly BOT 86.70)

*May be taken for a total of 4 units.*

### **BOT 162.8 Quicken for Windows for Office Professionals**

*0.5 unit/8 hours lecture for 1 week. CR/NC only.*

Students will use Quicken to learn the basic operations for tracking day-to-day transactions, schedule future payments and deposits, analyze investments, record assets and liabilities, and balance a checkbook. (Formerly BOT 86.53)

*May be taken for a total of 4 units.*

### **BOT 162.9A QuickBooks**

*(Formerly BOT 162.9) 0.5 unit/8 hours lecture for 1 week.*

*CR/NC only. Recommended: Prior knowledge of bookkeeping.*

Students will use QuickBooks to create a QuickBooks company, work with lists and bill customers, manage accounts payable and work with payroll, and create reports and perform file maintenance. (Formerly BOT 86.59)

*May be repeated with different topics.*

### **BOT 162.10 Introduction to Microsoft Project Level 1**

*(Formerly BOT 87.21) 0.5 unit/8 hours lecture for 1 week. CR/NC only.*

Introduction to Microsoft Project for the office professional. Topics include defining a project, entering basic information into a project, entering tasks, and entering resources.

*May be taken for a total of 4 units.*

### **BOT 165.2 Introduction to the Internet**

*0.5 unit/8 hours lecture for 1 week. CR/NC only.*

Introductory course designed to provide an overview of the Internet using a browser. Designed for the office professional or other serious personal computer user. Emphasizes an introduction to the Internet network, browser features, navigating the Web, and identifying useful sites for office professionals. (Formerly BOT 86.39)

*May be taken for a total of 4 units.*

### **BOT 165.3 Introduction to Electronic Mail**

*0.5 unit/8 hours lecture for 1 week. CR/NC only.*

Intro course designed to provide instruction on the basics of electronic mail and an overview of email features. Emphasizes Internet access and addresses, sending, and receiving email messages, and managing email folders. Recommend Windows and mouse experience. (Formerly BOT 86.64).

*May be taken for a total of 4 units.*

### **BOT 165.4 Creating a Web Page Using Microsoft Word**

*(Formerly BOT 86.66) 0.5 unit/8 hours lecture for 1 week. CR/NC only.*

Course designed to create a web page using Microsoft Word software. Designed for the office professional or other serious personal computer user. Emphasizes the layout and design of a web page using Word software.

*May be taken for a total of 4 units.*

### **BOT 165.5 Scanning Pictures and Graphics**

*(Formerly BOT 86.65) 0.5 unit/8 hours lecture for 1 week. CR/NC option.*

Course designed to demonstrate the scanning of pictures and graphics and inserting into a Word document and PowerPoint presentation. Designed for the office professional or other serious personal computer user. Emphasizes using the scanner to convert pictures and graphics into computer images.

*May be taken for a total of 4 units.*

### **BOT 169.1 Self-paced Computer Keyboarding**

*(Formerly BGN 50.02A) 0.5 unit/1.5 hours laboratory. CR/NC option.*

Individualized instruction to acquire computer keyboarding/touch typing skill.

*May be taken for a total of 1 unit.*

### **BOT 169.3 Self-Paced 10-Key Numeric Keypad on IBM/DOS Equipment**

*(Formerly BGN 50.12) 0.3 unit/1 hour laboratory for 15 weeks. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*

For the general student, individualized instruction in using the 10-key numeric keypad by touch using

DOS equipment (IBM or compatible). Open-entry/open-exit course that allows students to work at their own pace. Student must meet with instructor one assigned hour each week. Additional work completed during open lab hours. Takes approximately 15 hours to complete.

*May be taken for a total of 1 unit.*

### **BOT 170 Selected Topics in Office Technologies**

*0.5 unit/8 hours lecture for 1 week. CR/NC only.*

*Recommended: As appropriate to each topic.*

A variety of topics offered in a short, time-intensive format focusing on different hardware and/or software applications relative to the use of computers in completing office tasks.

*May be repeated with different topics.*

### **BOT 171 Self-paced Windows**

*(Formerly BOT 299.63) 0.5 unit/1.5 hours laboratory for 16 weeks. CR/NC option.*

For the general student, individualized instruction in Windows applications.

*May be taken for a total of 2 units.*

### **BOT 172 Basic Filing**

*(Formerly BOT 372) 0.5 unit/1.5 hours laboratory for 16 weeks. CR/NC option.*

Presentation of the basic indexing rules for names of individuals, business names, other organizations, and special names. Specific exercises applying the indexing rules to alphabetic, subject, geographic, and numerical filing systems using office supplies.

### **BOT 172.5 Self-Paced Microsoft Publisher**

*(Formerly BOT 299.65) 0.5 unit/1.5 hours laboratory. CR/NC option. Recommended: Ability to use a mouse and knowledge of the keyboard.*

Self-paced instruction using Microsoft Publisher. Designed for the general user with little or no desktop publishing experience. Topics include the creation of cards, newsletters, invitations, flyers, menus, business cards and letterhead.

*May be taken for a total of 2 units.*

### **BOT 173.1A Self-paced Microsoft Word Level 1**

*(Formerly BOT 299.47) 0.5 unit/1.5 hours laboratory. CR/NC option.*

Individualized instruction using Microsoft Word software program. Beginning level course designed for the general user. Topics include creating, saving and editing a document, and formatting text.

*May be taken for a total of 2 units.*

### **BOT 173.1B Self-paced Word Level 2**

*(Formerly BOT 299.56) 0.5 unit/1.5 hours laboratory. CR/NC option. Recommended: BOT 173.1A (formerly BOT 299.47) or equivalent knowledge.*

Self-paced instruction using Microsoft Word. Topics include: formatting, styles, table features, long documents, templates, columns and macros.

*May be taken for a total of 2 units.*

### **BOT 173.2A MExcelPaced Excel Level 1**

*(Formerly BOT 299.33) 0.5 unit/1.5 hours laboratory. CR/NC option.*

Individualized instruction using Excel software program. Beginning level course designed for the general user. Topics include definition and use of a

spreadsheet, creating a spreadsheet, entering values and calculating formulas.

*May be taken for a total of 2 units.*

### **BOT 173.2B MS Eelf-Paced Excel Level 2**

*(Formerly BOT 299.57) 0.5 unit/1.5 hours laboratory. CR/NC option. Recommended: BOT 173.1B (formerly BOT 299.56) or equivalent knowledge.*

Self-paced instruction using Excel. Level 2 course designed for user with knowledge of creating a spreadsheet. Topics include: multiple sheet workbooks, charts and maps, formulas and functions, summary reports.

*May be taken for a total of 2 units.*

### **BOT 173.3A Self-Paced MS Access Level 1**

*(Formerly BOT 299.38) 0.5 unit/1.5 hours laboratory. CR/NC option.*

Self-paced instruction using Access database software program. Beginning level course designed for the general user. Topics include definition of database, planning and structure, creating a table, sorting and queries.

*May be taken for a total of 2 units.*

### **BOT 173.3B Self-Paced MS Access Level 2**

*(Formerly BOT 299.59) 0.5 unit/1.5 hours laboratory. CR/NC option. Recommended: BOT 173.3A (formerly BOT 299.38) or equivalent knowledge.*

Self-paced instruction using Microsoft Access. Topics include: Managing data using smaller, related tables; adding features to forms; specialized reports; using Access macros; using Access on the Web and linking to other documents.

*May be taken for a total of 2 units.*

### **BOT 173.4A Self-Paced PowerPoint Level 1**

*(Formerly BOT 299.37) 0.5 unit/1.5 hours laboratory. CR/NC option.*

Self-paced instruction using PowerPoint presentation software. Beginning level course designed for the general user. Topics include: opening and designing a slide show, editing slides, adding graphics and viewing.

*May be taken for a total of 2 units.*

### **BOT 173.4B Self-Paced MS PowerPoint Level 2**

*(Formerly BOT 299.58) 0.5 unit/1.5 hours laboratory. CR/NC option. Recommended: BOT 173.4A (formerly BOT 299.37) or equivalent knowledge.*

Self-paced instruction using Microsoft PowerPoint. Topics include text and layout, sharing information between Microsoft Office programs, inserting pictures, videos and sound, drawing techniques, adding charts, interactive slide shows, preparing presentations for the Web.

*May be taken for a total of 2 units.*

### **BOT 174.3 Organize Your Office Filing Systems**

*(Formerly BOT 86.55) 0.5 unit/8 hours lecture for 1 week. CR/NC option.*

Update and review of basic filing rules and document management solution for office professionals including classification of records, records information management organizations, government laws and regulations, equipment and supplies for records management, basic filing rules, retention methods, and recycling.

*May be taken for a total of 2 units.*

### **BOT 175 Self-Paced Introduction to World Wide Web Using Netscape**

*(Formerly BOT 299.36) 0.5 unit/1.5 hours laboratory. CR/NC option.*

Self-paced instruction using Netscape to navigate/surf the World Wide Web. Beginning level course designed for the general user. Topics include: toolbars, menus, searches, saving and printing.

*May be taken for a total of 2 units.*

### **BOT 277 Selected Topics in WordPerfect**

*0.5-3 units/up to 2 hours lecture, 1 hour laboratory for 8 weeks. CR/NC only. Recommended: Basic knowledge of WordPerfect.*

Designed to provide those using WordPerfect with in-depth training on various functions such as using reveal codes, list files, merge, macros, sort, styles, headers/footers, columns, etc.

*May be repeated with different topics.*

### **BOT 285 Selected Topics in Legal Secretarial Training**

*0.5-2 units/up to 4 hours lecture for 8 weeks. CR/NC option. Recommended: Eligibility for Engl 100B or equivalent.*

A variety of legal secretarial training topics offered in a short, time-intensive format focusing on different issues in each course.

*May be repeated with different topics.*

### **BOT 299 Selected Topics in Business Office Technology**

*2 units/2 hours lecture. CR/NC option. Prerequisite: As appropriate to each topic. Recommended: Eligibility for Engl 100B or equivalent.*

A variety of topics offered in a short, time-intensive format focusing on different subjects.

*May be repeated with different topics.*

### **BOT 310.1 Basic PC Computers**

*0.5 unit/8 hours lecture for 1 week. CR/NC only.*

Introductory course designed to provide an overview of the use of personal computers. Designed for senior citizens with little or no Windows experience.

Emphasizes components of a computer, operating system environment, general operation, setting up a work area, ergonomic issues, and getting started with applications. (Formerly BOT 299.52)

*May be taken for a total of 4 units.*

### **BOT 310.2 Basic Windows**

*0.5 unit/8 hours lecture for 1 week. CR/NC only.*

Introductory course at a basic level designed to provide an overview of MS Windows operating system. Designed for senior citizens with little or no Windows experience. Emphasizes Windows basics such as the use of the mouse, control panel, and Windows accessories. (Formerly BOT 299.64)

*May be taken for a total of 4 units.*

### **BOT 310.3 Basic Internet**

*0.5 unit/8 hours lecture for 1 week. CR/NC only.*

Introductory course designed to provide an overview of the Internet using a browser. Designed for senior citizens with little or no Windows experience.

Emphasizes an introduction to the Internet network, browser features, navigating the web, and identifying useful sites. (Formerly BOT 299.53)

*May be taken for a total of 4 units.*

### **BOT 310.4 Basic Microsoft Works for Windows**

*0.5 unit/8 hours lecture for 1 week. CR/NC only.*

Introductory course designed to provide an overview of MS Works for Windows. Designed for senior citizens with little or no Windows experience.

Emphasizes using MS Works which includes the word processor, spreadsheet, and database, as well as several supporting accessories. (Formerly BOT 299.51)

*May be taken for a total of 4 units.*

### **BOT 310.5 Basic Microsoft Word**

*0.5 unit/8 hours lecture for 1 week. CR/NC only.*

Introductory course at a basic level designed to provide an overview of MS Word—a word processing program. Designed for senior citizens with little or no Windows experience. Emphasizes using MS Word to produce memos and letters. (Formerly BOT 299.49)

*May be taken for a total of 4 units.*

### **BOT 310.6 Introduction To Quicken for Windows**

*0.5 unit/8 hours lecture for 1 week. CR/NC only.*

Introductory course designed to provide an overview of Quicken for Windows. Designed for senior citizens with little or no Quicken experience. Emphasizes using Quicken to set up accounts, record transactions, work with registers, and reconcile accounts. (Formerly BOT 299.54)

*May be taken for a total of 4 units.*

### **BOT 310.7 Basic Scanning**

*(Formerly BOT 299.67) 0.5 unit/8 hours lecture for 1 week. CR/NC only. Recommended: Eligibility for or completion of BOT 310.2.*

Introductory course designed to provide an overview of scanning. Designed for senior citizens with Windows experience. Emphasizes using the scanner to convert pictures, graphics, and text into computer images.

*May be taken for a total of 2 units.*

### **BOT 310.8 Basic Desktop Publishing**

*(Formerly BOT 299.61) 0.5 unit/8 hours lecture for 1 week. CR/NC only.*

Introductory course designed to provide an overview of integrating fonts, graphics, and text. Designed for senior citizens with little or no desktop publishing experience. Emphasizes using fonts, graphics, and scanned images to create greetings, flyers, and newsletters.

*May be taken for a total of 2 units.*

### **BOT 310.9 Basic Electronic Mail**

*(Formerly BOT 299.62) 0.5 unit/8 hours lecture for 1 week. CR/NC only. Recommended: Completion of BOT 310.2.*

Introductory course designed to provide an overview of electronic mail. Designed for senior citizens with little or no e-mail experience. Emphasizes using, sending, receiving, reading, printing, and organizing messages; creating and using an address book; and sending attachments.

*May be repeated with different topics.*

### **BOT 311 Selected Topics in Basic Office Technologies**

*0.5 unit/8 hours lecture for 1 week. CR/NC only.*

A variety of topics offered in a short time-intensive format focusing on different hardware and/or

software applications relative to the use of computers in completing tasks. Intended for senior citizens and others who prefer to take courses at a slower pace than degree applicable courses.

*May be repeated with different topics.*

### **BOT 399 Selected Topics in Pre-Business Office Technology**

*0.5-3 units/up to 3 hours lecture. CR/NC option. Prerequisite: As appropriate to each topic.*

A variety of topics offered in an appropriate format for remedial-level students. Topics may include office procedures, business terminology, word processing, and office communication skills to meet current industry needs.

*May be repeated with different topics.*

## Chemistry

### **CHEM 1A General Chemistry**

*5 units/4 hours lecture, 3 hours laboratory. Grade only.*

*Prerequisite: Chem 51 (formerly Chem 110) or placement on the Chemistry Diagnostic Test. Math 155 or two years of high school algebra or equivalent.*

An introduction to the fundamental facts and principles of chemistry including atomic structure, nomenclature, bonding, stoichiometry, oxidation-reduction reactions, properties of ideal and real gases, kinetic-molecular theory, properties of solutions, liquids and solids, phase equilibria, colligative properties, acid-base reactions, molecular geometry and chemical bonding theories. (CSU/UC) AA/AS area C; CSU areas B1, B3; IGETC area 5A; CAN CHEM 2; CHEM 1A + CHEM 1B = CAN CHEM SEQ A

### **CHEM 1B General Chemistry**

*5 units/4 hours lecture, 3 hours laboratory. Grade only.*

*Prerequisite: Chem 1A or equivalent with a grade of "C" or better.*

Continuation of Chemistry 1A. Topics include acid-base and oxidation-reduction reactions, kinetics, chemical equilibrium (gaseous, acid-base, solubility, complex-ion), first, second and third laws of thermodynamics, electrochemistry, nuclear chemistry, descriptive chemistry of the elements, coordination compounds and organic chemistry. (CSU/UC)

*AA/AS area C; CSU areas B1, B3; IGETC area 5A; CAN CHEM 4; CHEM 1A + CHEM 1B = CAN CHEM SEQ A*

### **CHEM 4A General Chemistry with Quantitative Analysis**

*5 units/3 hours lecture, 6 hours laboratory. Grade only.*

*Prerequisite: Completion of Chem 51 (formerly Chem 110) or placement on the Chemistry Diagnostic Test and completion of Math 155 or high school intermediate algebra.*

Intensive one-year program based upon the concepts of physical inorganic and analytical chemistry; laboratory includes quantitative and instrumental analysis. Subject matter of Chemistry 5 (Quantitative Analysis) is included in this sequence. Required for chemistry, chemical engineering, preprofessional and most physical and life science majors. C/B1 & B3 (CSU/UC)

*AA/AS area C; CSU areas B1, B3; IGETC area 5A*

#### **CHEM 4B General Chemistry with Quantitative Analysis**

5 units/3 hours lecture, 6 hours laboratory. Grade only. Prerequisite: Completion of CHEM 4A. Intensive one-year program based upon the concepts of physical inorganic and analytical chemistry; laboratory includes quantitative and instrumental analysis. Subject matter of Chemistry 5 (Quantitative Analysis) is included in this sequence. Required for chemistry, chemical engineering, preprofessional and most physical and life science majors. Chem 4A=C/B1 & B3; Chem 4B=-/B1 & B3 (CSU/UC) AA/AS area C; CSU areas B1, B3; IGETC area 5A

#### **CHEM 5 Quantitative Analysis**

4 units/2 hours lecture, 6 hours laboratory. Grade only. Prerequisite: Chem 1B. Principles and methods of analytical chemistry including gravimetric and volumetric techniques and introduction to instrumental analysis involving potentiometry, spectrophotometry and chromatography. Emphasis on quantitative reasoning, written and verbal communication skills and development of precise laboratory techniques. The sequence Chem 1A-1B-5 must be completed for entrance into Chem 12A if the student has not completed Chem 4A-4B. (CSU/UC) CAN CHEM 12

#### **CHEM 8 Introductory Organic Chemistry**

5 units/4 hours lecture, 3 hours laboratory. Grade only. Prerequisite: Chem 1A. An introduction to the principles, nomenclature, structure and reaction mechanisms of Organic Chemistry. (CSU/UC) CSU areas B1, B3; IGETC area 5A

#### **CHEM 10 Chemistry and Today's Society**

3 units/3 hours lecture. CR/NC option. Recommended: No science background is necessary. Since extensive reading and writing assignments are required, students must qualify for entry into Engl 1A. An investigation of the role that chemical concepts play in our modern world. Special emphasis will be given to topics of current interest, including toxic waste disposal and pollution, food additives, drugs, geochemistry, the chemical industry and energy sources. (CSU/UC) AA/AS area C; CSU area B1

#### **CHEM 12A Organic**

5 units/3 hours lecture, 6 hours laboratory. Grade only. Prerequisite: Chem 4B or Chem 5. For students majoring in chemistry, biochemistry, chemical engineering, or a closely related field such as molecular and cell biology. The first semester of an intensive one-year program based upon modern theoretical concepts of organic chemistry. All aspects of fundamental organic chemistry are studied, including nomenclature, chemical and physical properties, reactions and synthesis. The study includes theoretical aspects, reaction mechanisms, and multistep synthesis. The laboratory includes methods of purifying solids and liquids, determination of physical properties of organic compounds, isolation of natural products, synthetic reactions, chromatographic separations, and

structure determination using infrared and nuclear magnetic resonance spectroscopy, and gas chromatography/mass spectrometry. Chem 12A-12B is equivalent to Chem 112A-112B at University of California, Berkeley or Chem 128A, 128B, 128C, 129A, 129B, 129C at University of California, Davis. Transfer students are expected to complete this sequence prior to their junior year. (CSU/UC)

#### **CHEM 12B Organic**

5 units/3 hours lecture, 6 hours laboratory. Grade only. Prerequisite: Chem 12A. The second semester of an intensive one-year program based upon modern theoretical concepts of organic chemistry. All aspects of fundamental organic chemistry are studied, including nomenclature, chemical and physical properties, reactions and synthesis. The study includes theoretical aspects, reaction mechanisms, and multistep synthesis. The laboratory includes methods of purifying solids and liquids, determination of physical properties of organic compounds, isolation of natural products, synthetic reactions, chromatographic separations, and structure determination using infrared and nuclear magnetic resonance spectroscopy and gas chromatography/mass spectrometry. Chem 12A-12B is equivalent to Chem 112A-112B at University of California, Berkeley or Chem 128A, 128B, 128C, 129A, 129B, 129C at University of California, Davis. Transfer students are expected to complete this sequence prior to their junior year. (CSU/UC)

#### **CHEM 49 Special Studies in Chemistry**

1-3 units/up to 9 hours by arrangement. Grade only. Prerequisite: Completion of CHEM 4B; OR completion of CHEM 5. Recommended: Preliminary application (written description of project objectives and methods, selection of faculty supervisor, list of required equipment and supplies) must be submitted to department chairperson one semester in advance. Literature, laboratory or field research by arrangement to provide for independent study. (CSU/UC) Independent study including 49 and 98 courses - 6 unit total.

#### **CHEM 51 Preparation for General Chemistry**

(Formerly CHEM 110) 3 units/3 hours lecture. CR/NC option. Prerequisite: Math 155 or equivalent. An introduction to the language, principles, and problem-solving techniques of chemistry. Designed for science and pre-professional students who lack the preparation for either Chem 1A/1B or Chem 4A/4B. (Students should check the math prerequisite for either Chem 1A or 4A, depending on future enrollment plans.) (CSU)

#### **CHEM 60 Chemistry for the Allied Health Sciences**

5 units/4 hours lecture, 3 hours laboratory. CR/NC option. Recommended: MATH 150A. General aspects of general, organic, and biological chemistry. (CSU) AA/AS area C

#### **CHEM 100 Basic Chemistry Skills**

2 units/3 hours lecture for 12 weeks. CR/NC option. Introductory course designed to develop necessary study skills to increase chances of success in general chemistry. Basic learning skills, basic mathematical operations and basic chemical concepts are covered.

#### **CHEM 301A Chemical Calculations for Chem 1A**

(Formerly CHEM 101) 1 unit/1 hour lecture. CR/NC only. Prerequisite: Completion of Chem 51 (formerly Chem 110) or one year of high school chemistry or equivalent. Corequisite: Concurrent enrollment in Chem 1A. Recommended: Eligibility for English 1A or equiv. Designed to assist students in successfully completing Chemistry 1A and 1B. Emphasizes the development of basic skills to increase the performance level and confidence of the student. Includes math review, development of chemical vocabulary, enhancement of computational skills, study habits, test-taking skills, report writing, graphing and statistical analysis of data. May be taken for a total of 2 units.

#### **CHEM 310 Computer Applications in General Chemistry**

1 unit/1 hour lecture. CR/NC option. Primarily designed to assist students in successfully completing the laboratory portion of general chemistry courses. Emphasizes the development of basic skills using word processing, graphing and spreadsheet computer programs for writing laboratory reports. No previous knowledge of computers is necessary. May be taken for a total of 2 units.

## Child Development

#### **CHILD 10 Developmental Stages of Childhood**

(Formerly CHLD 50) 3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent. Overview of developmental stages of the child from the prenatal period through childhood and early adolescence including physical, emotional, social, and intellectual development with varied cultural contexts. Developmental theories and current research are explored and applied. Observations required. (CSU/UC) AA/AS area D; CSU area D; IGETC area 4; CAN FCS 14

#### **CHILD 51 Introduction to Early Childhood Education**

3 units/3 hours lecture. Grade only. Recommended: Eligibility for English 100A or equiv. Analysis of historical and contemporary models of early childhood education: philosophy, goals, teachers' role, curriculum, facilities and equipment; relationships with children and teachers' guidance of them. (CSU)

### **CHILD 53 The Child with Special Needs in the Community**

*3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent.*  
Overview of common disabilities of children and the impact on families. Educational issues, techniques, and methods of management. Review of resources and services in the community. Requires 10 hours community observation. (CSU)

### **CHILD 55.1 Art for the Young Child**

*(Formerly CHIL 55A) 2 units/2 hours lecture. CR/NC option. Recommended: Child 10 (formerly Child 50) or Child 110.1 and Child 110.2 & Child 90.4 (formerly Child 59).*  
Introduction of the developmental stages of art and exploration of appropriate activities for young children using various art media. Will address curricular needs of children 0-8. (CSU)

### **CHILD 55.2 Explorations and Discoveries**

*(Formerly CHIL 55B) 2 units/2 hours lecture. CR/NC option. Recommended: Child 10 (formerly Child 50) or Child 110.1 & Child 110.2, and Child 90.4 (formerly Child 59).*  
A course designed to enable students to use the constructive nature of children's learning and children's natural curiosity to find out about themselves and their world. Students will actively explore, experience and develop math and science concepts suitable for young children. (CSU)

### **CHILD 55.4 Music & Movement for Children**

*(Formerly CHIL 54) 2 units/3 hours lecture for 12 weeks. CR/NC option. Recommended: Child 10 (formerly Child 50) or Child 110.1 and 110.2, and Child 90.4 (formerly Child 59).*  
Methods and materials for involving children in songs, movement, fingerplay, dance, and rhythm. (CSU)

### **CHILD 55.5 Children's Literature and Language Arts Instruction**

*2 units/3 hours lecture for 12 weeks. CR/NC option. Recommended: Child 10 (formerly Child 50) or Child 110.1 and Child 110.2, and Child 90.4 (formerly Child 59).*  
This course provides an overview of literature published for children and demonstrates how literature can function as a base for the language arts program for young children. (CSU)

### **CHILD 60 Early Childhood Methods I**

*3 units/3 hours lecture. Grade only. Prerequisite: Completion of CHIL 10 (or CHIL 50), and completion of CHIL 51, and concurrent enrollment in CHIL 60.2 (or CHIL 60L); OR completion of CHIL 110.1, and completion of CHIL 110.2, and completion of CHIL 51. Recommended: Completion of or concurrent enrollment in CHIL 90.4.*  
Theory and methods of working with infants, toddlers, and preschool children in a childcare or nursery school setting. (CSU)

### **CHILD 60.1 Beginning Early Childhood Practicum**

*1 unit/3 hours laboratory. Grade only. Prerequisite: Child 10 (formerly Child 50) or Child 110.1 and 110.2.*  
A beginning level practicum to introduce students to guiding and interacting appropriately with young children (0-5 yrs.) in SRJC's Children's Center. (CSU)

### **CHILD 60.2 Intermediate Early Childhood Practicum**

*(Formerly CHIL 60L) 3-5 units/up to 15 hours laboratory. Grade only. Prerequisite: Completion of CHIL 10 (or CHIL 50), and completion of CHIL 51; OR completion of CHIL 51, and completion of CHIL 110.1, and completion of CHIL 110.2. Recommended: Concurrent or previous enrollment in Child 90.4 (formerly Child 59).*  
Supervised work with young children at Santa Rosa Junior College Child Development Centers. Partial off-campus practicum is available upon request from instructor. (CSU)

### **CHILD 60.3 Child Development Field Experience**

*1.5-5 units/up to 15 hours by arrangement. Grade only. Prerequisite: Completion of CHIL 60, and completion of CHIL 60.2 (or CHIL 60L); OR concurrent enrollment in CHIL 69. Recommended: Eligibility for Engl 100A and for those pursuing a School Age Child Care Certificate, concurrent enrollment in Child 110.3 and Child 113.*  
The focus of this course is on improving teaching methods and skills for students working with infants, toddlers, pre-school and school-age children in licensed children's programs in the community. It is also designed to serve students interested in working with children with special needs. (CSU)  
*May be taken for a total of 10 units within 2 semesters.*

### **CHILD 61 Early Childhood Methods II**

*2 units/2 hours lecture. Grade only. Prerequisite: Child 60 & 60L. Corequisite: Concurrent enrollment in Child 61L.*  
Advanced methods and skills for working with infants, toddlers, and preschool children in group settings. (CSU)

### **CHILD 61L Early Childhood Method II Lab**

*3-5 units/up to 15 hours by arrangement. Grade only.*  
Supervised work with young children in community childcare centers, nursery schools, and home childcare placements. (CSU)

### **CHILD 68 Issues in Diversity**

*3 units/3 hours lecture. CR/NC option. Recommended: Completion of Child 10 (formerly Child 50) & eligibility for Engl 100A or completion of Child 110.1 and Child 110.2 and eligibility for Engl 100A.*  
This course is designed for students to compare and analyze the dynamic interactions of race, culture, gender and class as they relate to the education of children from diverse populations. Students will recognize and contrast cultural and historical perspectives of various cultural groups to increase understanding, knowledge, attitudes and skills for educating children in a pluralistic society. Students will learn to recognize and confront barriers that interfere with their ability to work effectively with a diverse population of children and families. (CSU)  
*AA/AS areas D, G*

### **CHILD 69 Introduction to Early Intervention**

*2 units/2 hours lecture. Grade only. Corequisite: Current enrollment in Child 60.3 for 2 units. Recommended: Eligibility for English 100A or equiv.*  
This course is an overview and an introduction to high risk and disabled infants and toddlers, birth to age three as well as treatments, strategies and techniques used to serve children and families in the field of Early Intervention. The course is designed to

support the training needs of educators, parents and care providers who will serve this population. The course will cover parent/professional relationships, the normal grief process associated with the birth of a child with a disability, identification and assessment, community resources and developmental curriculum. (CSU)

### **CHILD 76 Selected Topics in Child Development**

*0.5-3 units/up to 3 hours lecture. CR/NC option.*  
Selected topics of interest including a variety of topics focusing on educational theory, methods, and materials for early childhood professionals. (CSU)  
*May be repeated with different topics.*

### **CHILD 79.1 Management of ECE Program**

*(Formerly CHIL 205.1) 3 units/3 hours lecture. Grade only. Prerequisite: 12 units of ECE. Recommended: Prior work experience in Early Childhood Education programs.*  
Course addresses: management systems within an ECE program, including regulations, fiscal management, policy development, program planning and evaluation and development of new ECE programs with analysis of quality criterion. Examine other program components including program and personnel management and public relations. (CSU)

### **CHILD 79.2 Leadership Skills for Early Childhood Administrators**

*(Formerly CHIL 205.2) 3 units/3 hours lecture. Grade only. Prerequisite: 12 units of ECE. Recommended: Prior work experience in Early Childhood Education Programs.*  
Course addresses administration of an ECE program with an emphasis on personnel management and working with parents. Use of community resources and other public relations issues. Examine other program components to include program quality criterion, fiscal issues and ECE program regulations. (CSU)

### **CHILD 79.3 Administering Programs for Children under Three**

*(Formerly CHIL 78) 1 unit/8 hours lecture for 2 weeks. Grade only. Recommended: Engl 100A and Child 111A (formerly Child 111).*  
Course explores and identifies issues and practices specific to early childhood programs for infants and toddlers. Topics may include communication, staff training and cultural sensitivity. (CSU)

### **CHILD 79.4 Adult Supervision and Mentoring**

*(Formerly CHIL 207) 2 units/2 hours lecture. CR/NC option. Recommended: Possession of appropriate Child Development Teacher Permit.*  
Methods and principles of supervising other teachers in early childhood classrooms. Emphasis on the role of experienced classroom teachers who function as mentors to new teachers while simultaneously addressing the needs of children, parents and other staff. (CSU)



### **CHILD 85.1 Creative Indoor Environments for Young Children**

*1 unit/8 hours lecture for 2 weeks. CR/NC option.*

This course offers an overview of appropriate and creative indoor learning environments for young children, infants through pre-school. Planning and assessment methods for designing center and home environments will be explored and applied. Environmental factors that enhance learning and prosocial behaviors will be a focus. (CSU)

### **CHILD 85.2 Creative Outdoor Environments for Young Children**

*1 unit/8 hours lecture for 2 weeks. CR/NC option.*

This course offers an overview of appropriate and creative outdoor learning environments for young children, infants through pre-school. Planning and assessment methods for designing center and home environments will be explored and applied. Environmental factors that enhance learning and prosocial behaviors will be a focus. (CSU)

### **CHILD 85.3 Guidance & Discipline Techniques in the Preschool Setting**

*1 unit/8 hours lecture for 2 weeks. CR/NC option. Limits on enrollment: For individuals and professionals working in a child care setting.*

This course will review positive and age appropriate approaches for teachers working in early childhood settings for guiding the behavior of children aged 2-5. The course addresses improving guidance practices, the use of language, and strategies and practices to more effectively and positively influence children's behavior in group settings. (CSU)

### **CHILD 85.4 Guidance & Discipline Techniques in the School Age Setting**

*1 unit/8 hours lecture for 2 weeks. CR/NC option. Limits on enrollment: For individuals and professionals working in a child care setting.*

This course will review positive and age appropriate approaches for teachers working in school age settings for guiding children's behavior. The course addresses improving guidance practices, the use of language, and strategies and practices to more effectively and positively influence children's behavior in group settings. (CSU)

### **CHILD 90.1 Child, Family, Community Interrelationships**

*(Formerly CHILD 52) 3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent.*

Patterns of family, living in society; varying roles and interactions of family members; community factors affecting the child and the family; community agencies as resources for the child and the family. (CSU)

*AA/AS area D; CSU area E*

### **CHILD 90.3 Health and Safety for the Young Child**

*2 units/2 hours lecture. Grade only. Recommended: Eligibility for Engl 100A.*

This course is designed to provide knowledge of health and safety issues to child care providers in group settings for young children. The course meets state regulations for 15 hours of training including pediatric First Aid & CPR. (CSU)

### **CHILD 90.4 Introduction to Curriculum**

*(Formerly CHILD 59) 3 units/3 hours lecture. Grade only. Prerequisite: Child 10 (formerly Child 50) or 3 units of Child 110 and Child 51. Recommended: Presently working with children.*

An introduction to planning age-appropriate curriculum for young children, including how to use the environment as a foundation for curriculum and how to plan and implement ongoing curriculum and activities based on a framework. This course emphasizes design and implementation of curriculum. Access to a supervised group of children is required. (CSU)

### **CHILD 98 Special Studies in Child Development**

*1-3 units/up to 9 hours by arrangement. Grade only. Prerequisite: Child 10 (formerly Child 50) or 3 units of Child 110, Child 51. Recommended: Eligibility for Engl 100A or equivalent.*

Seminars or individual conferences by arrangement to provide for independent study and enriched academic experiences. (CSU)  
*Independent study including 49 and 98 courses - 6 unit total.*

### **CHILD110.1 Developmental Trends in Infancy and Toddlerhood**

*1.5 units/3 hours lecture for 8 weeks. CR/NC option. Recommended: Eligibility for Engl 100A.*

Ages and stages of the infant, one-year old, and two-year old; physical, intellectual, social, and emotional growth. Emphasis on practical application of principles and adult role in supporting optimal growth.

### **CHILD110.2 Developmental Trends in the Child Age 3-5 Yrs**

*1.5 units/3 hours lecture for 8 weeks. CR/NC option. Recommended: Eligibility for Engl 100A.*

Ages and stages of 3, 4, & 5-year-old child including physical, intellectual, social, and emotional growth. Emphasis on practical application of principles and adult role in supporting optimal growth. Recommended for childcare personnel, teachers, parents, hospital play aides, recreation workers, home visitors, and social service aides. Observation required.

### **CHILD110.3 School Age Child Development**

*3 units/3 hours lecture. Grade only. Corequisite: Concurrent enrollment in Child 60.3 (When registering for this course, you must enroll in Child 110.3 first, then in Child 60.3.) Recommended: Eligibility for Engl 100A or equivalent.*

Stages of development of the 5 to 14-year-old child including physical, cognitive, social and emotional growth. Emphasis on application of methods to support optimal growth. Recommended for people working in programs serving school age children.

### **CHILD110.4 Developmental Trends in Adolescents**

*1.5 units/3 hours lecture for 8 weeks. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*

Developmental trends of the adolescent child; physical, intellectual, emotional, and social. Discussion of the role of peers and family. Special problems and issues as they relate to the teen years.

### **CHILD 111A Group Care for Children under Three**

*(Formerly CHILD 111) 3 units/3 hours lecture. CR/NC option.*

Course includes how caregiver's actions and interactions impact on curriculum in infant-toddler programs and family day care homes. Caregivers will understand how children's development and sensitivity to family culture influence group care. Includes how to evaluate, choose materials and arrange environments to meet each child's individual and family needs. Communication with parents and fellow staff members will be included.

### **CHILD 111B Group Care for Children under Three**

*2 units/2 hours lecture. CR/NC option. Prerequisite: CHILD 111A (formerly Child 111).*

This course examines developmentally and culturally appropriate practice in infant toddler programs and family day care homes. Caregivers will plan and carry out curriculum for typical and atypical infants and toddlers in groups. Includes learning environments, parent conferences, assessment, and community resources.

### **CHILD 113 School Age Curriculum**

*3 units/3 hours lecture. Grade only. Corequisite: Concurrent enrollment in Child 60.3 (When registering for this course you must enroll in Child 113 first, then in Child 60.3.) Recommended: Child 10 (formerly Child 50) or 110.3.*

Focuses on developing environments and activities for children age 5-14 involved in before and after school programs. Emphasis is on planning developmentally and culturally appropriate curriculum. Recommended for people working in programs serving school age children.

### **CHILD207.1 Mentor Teacher Seminar**

*(Formerly CHILD362.61) 0.5 unit/2 hours lecture for 4 weeks. CR/NC option. Prerequisite: Selection as an early childhood Mentor Teacher.*

Selected early childhood teachers attend monthly seminars to explore issues related to their role as supervisors of students completing early childhood field experiences. Emphasis will be on the mentor's role as an advocate and change agent in the community. The seminar will be individualized to meet the needs of each mentor.  
*May be taken for a total of 6 units.*

### **CHILD 220 Positive Discipline**

*(Formerly CHILD362.20) 2 units/2 hours lecture. CR/NC option.*

Positive approaches to class and family cooperation. The goals of behavior, misbehavior, use of logical consequences, encouragement, communication, and problem solving techniques.

### **CHILD 237 Issues in Parenting**

*1 unit/1 hour lecture. CR/NC option.*

Positive approaches to parenting. Includes social and emotional characteristics of young children as well as the use of communication, encouragement, logical consequences and problem solving techniques.  
*May be taken for a total of 3 units.*

### **CHILD 243 Current Issues in ECE**

0.5 unit/8 hours lecture for 1 week. CR/NC only. Explore current issues in early childhood education including administrative and curricular trends and practices for programs serving children birth through age eight. May be taken for a total of 4 units in any combination.

### **CHILD 253 Pediatric First Aid and CPR**

1 unit/8 hours lecture for 2 weeks. CR/NC option. Pediatric First Aid and CPR, including health and safety issues for young children.

### **CHILD 254 Working with Parents**

(Formerly CHLD362.51) 1 unit/2 hours lecture for 8 weeks. CR/NC option. Investigation of issues, techniques and resources for establishing a good working relationship between child care providers and parents.

### **CHILD 299 Selected Topics in Administration and Supervision of ECE**

0.5-2 units/up to 2 hours lecture. CR/NC option. Prerequisite: Child 205 course or 12 units in ECE. Recommended: Prior work experience in an Early Childhood Education program. In-depth examination of (selected topic) as it relates to administration and supervision of Early Childhood Education programs, emphasizing skill acquisition as well as lecture and discussion of critical issues.

### **CHILD 345 Storytelling**

(Formerly CHLD 245) 2 units/3 hours lecture for 12 weeks. CR/NC option. Selection and preparation of stories for telling. Emphasis on developing knowledge, confidence, and skill in using storytelling with children. May be taken for a total of 4 units.

### **CHILD 362 Selected Topics in Early Childhood Education**

0.5-2 units/up to 8 hours lecture for 1 week. CR/NC only. Prerequisite: Set when topic is offered. A variety of topics focusing on current theories, methods, and materials in Early Childhood Education. May be taken for a total of 4 units in any combination.

### **CHLD 90.2 Observation and Assessment of Young Children**

(Formerly CHLD 90.2) 3 units/3 hours lecture. Grade only. Prerequisite: Completion of Child 10 (formerly Child 50) or at least 1.5 units of Child 110 series. Observation methods focusing on major areas of child development such as emotional, social, creative, physical and cognitive. Extensive observation in this course aids students in the ability to learn and utilize assessment strategies and develop curricula to support children's growth. (CSU)

### **CHLD 190.1 Home, School & Community Relations**

3 units/3 hours lecture. Grade only. Explores interactions between children, their families and their communities. Focuses on current issues of interest, with practical application, for parents,

teachers and community workers. Meets state licensing requirements for the "Child, Family, Community" course.

### **CHLD 207 The Mentoring Teacher**

2 units/2 hours lecture. CR/NC option. Recommended: Possession of appropriate Child Development Teacher Permit. Methods and principles of supervising other teachers in early childhood classrooms. Emphasis on the role of experienced classroom teachers who function as mentors to new teachers while simultaneously addressing the needs of children, parents and other staff.

### **CHLD 262.6 Business Aspects of Operating a Family Child Care Home**

1.5 units/3 hours lecture for 8 weeks. CR/NC only. An online course covering successful operation of a family day care home. Focuses on business aspects, skills for effective management and professional growth.

## Chinese

### **CHIN 50A Conversation for Beginners**

3 units/3 hours lecture, 1 hour by arrangement. CR/NC option. Prerequisite: Not open to native speakers of Mandarin Chinese. Not open to students with two years of high school Chinese or one year of college Chinese with a grade of "A" or "B" within the past three years. Recommended: Eligibility for English 100A or equiv.

A beginning oral communication course of the Mandarin dialect designed to improve those listening and speaking skills needed for survival at school, on the job and in the community. Students participate in a variety of pronunciation, listening and conversational activities to improve their oral/aural competency. (CSU)

### **CHIN 50B Conversation for Beginners-Part II**

3 units/3 hours lecture. CR/NC option. Prerequisite: Completion of Chin 50A or equivalent. Not open to native speakers of Chinese. Not open to students with two years of high school Chinese or one year of college Chinese with a grade of "A" or "B" within the past three years. Recommended: Eligibility for English 100A or equivalent.

A high-beginning/low intermediate oral communication course designed to improve those listening and speaking skills needed for cross-cultural understanding in social, academic and work-related situations. (CSU) May be taken for a total of 6 units.

### **CHIN 58 High Intermediate Conversation**

2 units/2 hours lecture. CR/NC option. Recommended: Completion of Chin 50B or equiv. A high-intermediate oral communication course designed to improve those listening and speaking skills needed for successful interaction in social, academic or work-related situations. Emphasis on finding, getting, and keeping a job in the U.S. and communicating more effectively in social and academic contexts. (CSU) May be taken for a total of 18 units.

### **CHIN 98 Special Studies in Chinese**

1-3 units/up to 3 hours laboratory, 4 hours by arrangement. Grade only. Prerequisite: Application to department. Recommended: Eligibility for Engl 100A or equivalent. Seminars or individual conferences by arrangement to provide for independent study and enriched academic experience. (CSU) Independent study including 49 and 98 courses - 6 unit total.

## Civil & Surveying Technology

### **CEST 50A Plane Surveying**

(Formerly CET 50A) 4 units/3 hours lecture, 3 hours laboratory. Grade only. Prerequisite: Completion of or concurrent enrollment in APTECH 90A (or CET 90A); OR completion of MATH 155 or higher (VI); OR completion of or concurrent enrollment in MATH 155. Theory and practice of plane surveying, including measurement of distance and angles, use and care of instruments, error analysis, field problems and office computations. (CSU)

### **CEST 50B Plane Surveying**

(Formerly CET 50B) 4 units/3 hours lecture, 3 hours laboratory. Grade only. Prerequisite: CEST 50A (formerly CET 50A) or equivalent with grade of "C" or better. Theory and practice of plane surveying, including measurement of distance and angles, use and care of instruments, error analysis, field problems and office computations. (CSU)

### **CEST 51 Map Drafting Techniques**

(Formerly CET 51) 3 units/2 hours lecture, 3 hours laboratory. Grade only. Prerequisite: CEST 50A (formerly CET 50) or equivalent with grade of "C" or better. Map drafting techniques; use and care of drafting instruments and equipment; working on various drafting media with emphasis on reproduction quality. Field note reduction and computations. (CSU)

### **CEST 52 Photogrammetry**

(Formerly CET 52) 3 units/3 hours lecture. Grade only. Prerequisite: CEST 50B (formerly CET 50B) or equivalent with grade of "C" or better. Introduction to the principles and techniques of photogrammetry with applications in surveying and engineering. (CSU)

### **CEST 53 Route Surveying & Design**

(Formerly CET 53) 4 units/3 hours lecture, 3 hours laboratory. Grade only. Prerequisite: CEST 50B (formerly CET 50B) and CEST 51 (formerly CET 51) or their equivalents with grades of "C" or better. Route surveying methods and design. Geometric design and construction staking of transportation routes. Use and care of electronic surveying equipment, computers, data collectors, and introduction to photogrammetry, and global positioning systems. (CSU)

### **CEST 54 Applications of Electronic Surveying Measurements**

(Formerly CET 54) 2 units/3 hours lecture, 3 hours laboratory for 8 weeks. Grade only. Prerequisite: CEST 50B (formerly CET 50B) or equivalent with "C" or better. Principles and applications of electronic surveying measurements, calibration and use of total stations, data collectors and global positioning systems for horizontal and vertical control, land surveys, topographic surveys and construction layout. (CSU)

### **CEST 55 Principles and Applications of Control & Astronomic Surveys**

(Formerly CET 55) 2 units/3 hours lecture, 3 hours laboratory for 8 weeks. Grade only. Prerequisite: CEST 50B (formerly CET 50B) or equivalent with a "C" or better. Principles and applications of control surveys, state plane coordinate systems and global positioning systems, including methods of astronomical observations, G.P.S. technology and observations, calculations and computations relating to control survey networks. (CSU)

### **CEST 59A Boundary Control & Legal Principles**

(Formerly CET 59A) 3 units/3 hours lecture. Grade only. Prerequisite: Completion of CEST 50B (formerly CET 50B) with a grade of "C" or better or demonstrated knowledge of survey principles and practices with portfolio. Introduction to concepts of property line location including legal principles, history and current practices and procedures. Designed for those in the fields of surveying, engineering, title insurance or real estate. (CSU)

### **CEST 59B Boundary Control & Legal Principles**

(Formerly CET 59B) 3 units/3 hours lecture. Grade only. Prerequisite: CEST 59A (formerly CET 59A) with grade of "C" or better. Introduction to concepts of property line location including legal principles, history and current practices and procedures. Designed for those in the fields of surveying, engineering, title insurance or real estate. (CSU)

### **CEST 60 Applied Mechanics**

(Formerly CET 60) 3 units/3 hours lecture. Grade only. Prerequisite: APTECH 90B (formerly CET 90B) or equivalent with grade of "C" or better. Principles of mechanics and strength of materials without formal use of calculus. Principles of forces and the effects of forces on structures. (CSU)

### **CEST 61 Introduction to Structural Design**

(Formerly CET 61) 3 units/3 hours lecture. Grade only. Prerequisite: CEST 60 (formerly CET 60) or equivalent with grades of "C" or better. Fundamental design principles of beams, columns, connections, trusses and floor systems. Materials addressed include steel, timber, and reinforced concrete. (CSU)

### **CEST 62 Soils & Materials Testing**

(Formerly CET 62) 3 units/2 hours lecture, 3 hours laboratory. Grade only. Prerequisite: Completion of APTECH 90B (or CET 90B); OR prior qualification for CEST 62 (or CET 62); OR completion of MATH 27 (or MATH 57). Characteristics and properties of engineering and construction materials and standard means of testing soils and building materials. (CSU)

### **CEST 63 Subdivision Planning**

(Formerly CET 63) 3 units/2 hours lecture, 3 hours laboratory. Grade only. Prerequisite: CEST 53 (formerly CET 53) and CEST 81 (formerly CONS 81) with grades of "C" or better or equivalent. Purpose and objectives of subdivision regulations with emphasis on preparation of tentative and final subdivision maps, development of improvement plans and construction and surveying techniques. (CSU)

### **CEST 81 Engineering Construction Design/Drafting**

(Formerly CONS 81) 3 units/2 hours lecture, 3 hours laboratory. Grade only. Prerequisite: CEST 50B (formerly CET 50B) and CEST 51 (formerly CET 51) with grade of "C" or better or equivalent. Design and drafting techniques as applied to engineering drawings: highways, detail sheets, site and grading plans, underground utilities and structures, concrete and structural detailing. (CSU)

### **CEST 85 Civil Engineering Computer-Aided Design/Drafting**

(Formerly CET 85) 3 units/2 hours lecture, 3 hours laboratory, 2 hours by arrangement. Grade only. Prerequisite: AP TECH 57 and CEST 50B (formerly CET 50B) with grade of "C" or better or equivalent. Computer-aided design/drafting for the civil engineering technician. The Softdesk civil software program will be utilized. Areas covered include: input of boundary, contours, field data, creation of DTM model topography, design of a road plan and profile, building layout, design utilities, and titles and notes. (CSU)  
May be taken for a total of 3 times.

### **CEST 86 Advanced Civil Engineering Computer-Aided Design**

3 units/2 hours lecture, 3 hours laboratory. Grade only. Prerequisite: CEST 85 (formerly CET 85) with a grade of "C" or better or equivalent. Advanced computer-aided design for civil engineering technicians. The Softdesk civil engineering software program will be utilized. Advanced civil engineering design topics will be covered in the course using the Advanced Design, Digital Terrain Modeling, Earthworks and Survey modules. Advanced design techniques in digital terrain modeling, surface editing, alignment editing, plan, profile, cross sections, earthwork computations and site planning and design. (CSU)  
May be taken for a total of 3 times.

### **CEST 99I Occupational Work Experience-Intern Program**

1-8 units/up to 40 hours by arrangement. Grade only. Occupational Work Experience Internship is supervised employment extending classroom learning at an on-the-job learning station relating to the student's educational or occupational goal. May be repeated for a total of sixteen (16) units, four (04) units maximum per semester (Repeat Code 25 for all Parallel Plan). Must be enrolled in 7 units including Work Experience units (for summer school - Work Experience and one other course). Alternate Plan - designed to offer students opportunities to attend

college full-time one semester and work full-time the following semester. Job experience must relate directly to the student's educational goals. Up to eight (08) units may be earned in one semester. Students may not be enrolled in more than one other course or transfer from Alternate to Parallel or vice-versa without completing 7 units between plans. (CSU)

May be taken for a total of 16 units.

### **CEST 399 Selected Topics in Civil & Surveying Technology**

(Formerly CET 399) 0.5-2 units/up to 2 hours lecture. CR/NC only. Recommended: Civil/Surveying or related experience. A series of short courses, each dealing with a specific topic of relevance to Civil & Surveying Technology. May be repeated with different topics. Civil & Surveying Technology

### **CET 98 Special Studies in Civil Engineering Technology**

1-3 units/up to 9 hours by arrangement. Grade only. Prerequisite: Application to department Corequisite: Enrollment in Civil Engineering Technology courses. Seminars or individual conferences by arrangement to provide for independent study and enriched academic experience. (CSU)  
Independent study including 49 and 98 courses - 6 unit total.

## College Skills

### **CSKL 300 Basic Skills**

1 unit/48 hours laboratory for 1 week. CR/NC only. This course is designed to prepare the under-prepared student for college level work. Skill areas to be covered include reading, writing, math, test taking, critical thinking and study skills. Intensive instruction in both the classroom and the lab setting, with extensive use of computers. (Coursework is individualized to students' needs, and is offered in several modular open entry/open exit formats throughout the semester.)  
May be taken for a total of 8 units.

### **CSKL 300J Basic Skills**

1 unit/48 hours laboratory for 1 week. CR/NC only. This course is designed to prepare the under-prepared student for college level work. Skill areas to be covered include reading, math, test taking, critical thinking and study skills. Intensive instruction in both the classroom and the lab setting, with extensive use of computers. (Coursework is individualized to students' needs, and is offered in several modular open entry/open exit formats throughout the semester.)  
May be taken for a total of 8 units.

### **CSKL 300.1 Whole Number & Decimal Skills**

*0.5 unit/24 hours laboratory for 1 week. CR/NC only. This self-paced arithmetic course is designed to prepare the under-prepared student for introductory college math courses. Skill areas to be covered include the addition, subtraction, multiplication, and division of whole numbers and decimals. Computational skills will be applied in solving word problems. All work will be completed in a lab setting where instruction and computer-assisted study are available. The students will meet with the instructor at least three (3) times during this course. May be taken for a total of 2 times.*

### **CSKL 300.2 Fraction Skills**

*0.5 unit/24 hours laboratory for 1 week. CR/NC only. Recommended: Completion of CSKL 300.1 or equivalent possession of whole number and decimal skills. This self-paced arithmetic course is designed to prepare the under-prepared student for introductory college math courses. Skill areas to be covered include the addition, subtraction, multiplication, and division of fractions and mixed numbers, and conversions between fractions and decimals. Computational skills will be applied to word-problem solving. All work will be completed in a lab setting where instruction and computer-assisted study are available. The students will meet with the instructor at least 3 times during this course. May be taken for a total of 2 times.*

### **CSKL 300.3 Proportions and Percent Skills**

*0.5 unit/24 hours laboratory for 1 week. CR/NC only. Recommended: Completion of CSKL 300.1 and 300.2 or equivalent possession of whole number, decimal, and fractional skills. This self-paced arithmetic course is designed to prepare the under-prepared student for introductory college math courses. Skill areas to be covered include the conversions of percents/decimals/ fractions, and the solving of proportion and percent proportion problems. Proportion and conversion skills will be applied to word-problem solving. All work will be completed in a lab setting where instruction and computer-assisted study are available. The students will meet with the instructor at least 3 times during this course. May be taken for a total of 2 times.*

### **CSKL 300.4 Prealgebra Skills**

*0.5 unit/24 hours laboratory for 1 week. CR/NC only. Recommended: Completion of CSKL 300.3 or equivalent possession of whole number, decimal, fractional, and percent skills. This self-paced pre-algebra course is designed to prepare the under-prepared student for introductory college math courses. Skill areas to be covered include the addition, subtraction, multiplication, and division of real numbers. Introduction to exponents, the order of operations, simplifying and evaluating algebraic expressions, and solving basic algebraic equations. Equation solving skills will be applied to word problems. All work will be completed in a lab setting where instruction and computer-assisted study are available. The students will meet with the instructor at least 3 times during this course. May be taken for a total of 2 times.*

### **CSKL 300.5 Basic Geometry Skills**

*0.5 unit/24 hours laboratory for 1 week. CR/NC only. Recommended: Completion of CSKL 300.4 or equivalent possession of whole number, decimal, fractional, and basic algebra skills. This self-paced basic geometry course is designed to prepare the under-prepared student for introductory college math courses. Skill areas to be covered include solving for angles and sides of basic geometric figures, and calculating the perimeter, area, and volume of various shapes by utilizing geometric formulas. Introduction to a basic geometry vocabulary. Work will be done in both the English and metric systems of measurement. Skills will be applied to word problems. All work will be completed in a lab setting where instruction and computer-assisted study are available. The students will meet with the instructor at least 3 times during this course. May be taken for a total of 2 times.*

### **CSKL 301 Skills Assessment**

*2 units/2 hours lecture. CR/NC only. Obtaining a profile of pre-collegiate level students' strengths and weaknesses in the areas of language, math and study skills. Course will focus on developing skills necessary for success in college classes.*

### **CSKL 302 Introduction to Reading Across the Curriculum**

*(Formerly INTDIS 302) 3.5 units/3 hours lecture, 2 hours by arrangement. CR/NC option. Instruction in basic academic skills to prepare students for collegiate level coursework and to develop skills which are equivalent to those of graduating high school seniors. This course is especially appropriate for students who have previously had academic difficulties. Emphasis is on preparing students for success in Associate Degree applicable coursework through the study of broad and applied knowledge in social studies, science, reading and writing. May be taken for a total of 2 times.*

### **CSKL 303 College Preparatory Skills for Health Sciences**

*(Formerly INTDIS 303) 1-3 units/up to 3 hours lecture, 1 hour laboratory. CR/NC option. Recommended: Concurrent enrollment in CSKL 373A. Instruction in basic academic skills designed for pre-Health Sciences students planning to enter selected programs offered by Santa Rosa Junior College, including the Vocational Nursing, the Dental Assistant, Psychiatric Technician, Medical Secretary/ Receptionist, Radiologic Technology, Nurse Assistant/Home Health Aide, and Administrative Medical Assistant programs. Prepares students for success in Health Sciences coursework through the study of Health Sciences specific reading and writing, study skills, critical thinking and other concepts necessary to function effectively in Health Care fields. May be taken for a total of 2 times.*

### **CSKL 304.1 Basic Spelling and Vocabulary**

*(Formerly CSKL 304) 1.5 units/3 hours lecture, 1 hour by arrangement for 8 weeks. CR/NC option. Instruction in basic spelling and vocabulary skills to prepare students for college level coursework. This course is especially appropriate for students who have spelling and vocabulary difficulties. Includes instruction in computer-assisted lab. May be taken for a total of 3 units.*

### **CSKL 304.2 Applying Spelling and Vocabulary**

*1.5 units/3 hours lecture, 1 hour by arrangement for 8 weeks. CR/NC option. Application of basic spelling rules and college level vocabulary through writing activities, with emphasis on word choice, roots, proofreading and word processing, including use of computer spelling tools. May be taken for a total of 3 units.*

### **CSKL 305 College Preparatory Skills for Industrial Trade-Tech**

*1-3 units/up to 3 hours lecture, 3 hours laboratory. CR/NC option. Instruction in basic academic skills designed for Industrial/Trade Tech students enrolled in occupational programs offered by Santa Rosa Junior College, including Automotive Technology, Diesel/ Equipment Technology, Machine Tool Technology, and Welding programs. Prepares students for success in Industrial/Trade Tech coursework through the study of applied and technical reading, writing, study skills, critical thinking, and other skills necessary to benefit from trade-tech instruction. Includes instruction in a computer-assisted lab. May be taken for a total of 2 times.*

### **CSKL 306 Basic Grammar and Writing Skills**

*3.5 units/3 hours lecture, 2 hours by arrangement. CR/NC option. Instruction in basic grammar and mechanics of writing to develop skills necessary for success in precollegiate and collegiate level courses and in the workplace. This course is especially appropriate for students who have writing difficulties at the sentence and paragraph level. May be taken for a total of 2 times.*

### **CSKL 307 Basic Composition Skills**

*3.5 units/3 hours lecture, 2 hours by arrangement. CR/NC option. Recommended: Completion of CSKL 306. Instruction in basic composition writing to develop skills necessary for success in precollegiate and collegiate level courses and in the workplace. This course is appropriate for precollegiate students who have difficulties in generating and organizing ideas and in writing coherent essays and other compositions. May be taken for a total of 2 times.*

**CSKL 320 College Skills-Test Taking Strategies**

1-3 units/up to 3 hours lecture. CR/NC option.

Instruction and practice in test taking strategies, test anxiety management (developing a positive attitude, relaxation techniques), memory techniques, critical thinking skills, expository writing and study skills essential to test preparation (note taking, organization, time management, reading comprehension).

May be taken for a total of 4 units.

**CSKL 333 Introduction to Reading Skills**

(Formerly LENGL 333) 3.5 units/3 hours lecture, 2 hours by arrangement. CR/NC only.

Reading skill development course for persons needing stronger visual and auditory perceptual readiness skills, development of word attack and identification skills and general comprehension abilities.

May be taken for a total of 6 units.

**CSKL 334 Visualizing/Verbalizing for Reading Comprehension**

3 units/3 hours lecture. CR/NC option.

Use of hemispheric processing to improve reading comprehension and recall. The technique of "Visualizing and Verbalizing for Language Comprehension and Thinking" will be the primary teaching method. This course is appropriate for all students who have decoding skills but deficits in comprehension and recall of information.

May be taken for a total of 6 units.

**CSKL 350 College Skills-Test Taking Strategies**

1-3 units/up to 3 hours lecture. CR/NC option.

Instruction in test taking measures and strategies with emphasis on helping students overcome test anxieties. Focus on college success by preparing students for college test taking.

May be taken for a total of 4 units.

**CSKL 350E Beginning Reading**

(Formerly ENGL 350) 3.5 units/3 hours lecture, 2 hours laboratory. CR/NC option. Prerequisite: Qualifying English Placement Test score. Recommended: Completion of CSKL 333 (formerly LENGL 333, LENGL 133) or equivalent.

Development of basic reading skills. This course will help prepare students for higher level English classes.

May be repeated for a total of 7 units.

**CSKL 360 How to Take an On-Line Class**

(Formerly CSKL 399.1) 0.5 unit/8 hours by arrangement for 3 weeks. CR/NC option.

For students who would like to take courses through the Internet but are not confident with all the processes. Application exercises are used to teach skills in major online components, including basic computer knowledge, computer-related terms, e-mail communication, Internet use, and online functions. Attendance at a 2-hour orientation on campus is recommended.

May be taken for a total of 1 unit.

**CSKL 370 General Arithmetic**

(Formerly ACS 370) 3 units/3 hours lecture. CR/NC option. Recommended: For students who score 22 or less on the APS Math Computation Test. Basic arithmetic skills of addition, subtraction, multiplication and division of whole numbers.

Addition, subtraction, multiplication and division as applied to integers, fractions, decimal fractions, use of calculators, areas and volumes of common figures, metric system. Course content: decimal system of enumeration; whole numbers; fractions; percentage, ratio, proportion; measurement; metric system.

**CSKL 371 General Arithmetic**

(Formerly ACS 371) 3.5 units/3 hours lecture, 2 hours by arrangement. CR/NC option. Recommended: Basic arithmetic skills of addition, subtraction, multiplication and division of whole numbers. Recommended for students who score less than 22 on the APS Math Computation Test.

Addition, subtraction, multiplication and division operations as applied to whole numbers, fractions, decimal fractions, percentage, use of calculators, measurement using English and metric system. Problem-solving, estimation, using graphs, charts and tables. Dealing with data. Regularly scheduled computer-assisted lab assignments to reinforce the lecture.

May be taken for a total of 2 times.

**CSKL 372 Pre-Algebra**

3.5 units/3 hours lecture, 2 hours by arrangement. CR/NC option. Prerequisite: Completion of CSKL 370 (formerly ACS 370, Math 170) or 371 (formerly ACS 371) or 381 or 373A or DRD 382 (formerly LMATH 381) with a grade of "C" or better; or an APS Computational Math score of 23-35.

Review and advanced skills development of number system combined with advanced operations of addition, subtraction, multiplication and division as applied to whole numbers, fractions and decimals. Fundamental ideas of algebra beginning with properties of real numbers, followed by basic operations of addition, subtraction, multiplication and division of real numbers. Introduction to powers and roots of real numbers. Scientific notation and prefixed notations conversion involving common English and metric system of linear, area and volumetric units. Arithmetic and algebraic methods of solving common figures involving perimeter, area and volume. Evaluations of algebraic expressions. Introduction to the solution of first degree linear equations. Regularly scheduled computer-assisted lab assignments to reinforce or supplement lecture topics.

May be taken for a total of 2 times.

**CSKL 373A General Arithmetic for Health Sciences**

3.5 units/3 hours lecture, 2 hours by arrangement. CR/NC option. Recommended: For students who score 22 or less on the APS Math Computational Test. Recommend concurrent enrollment in CSKL 303 (formerly INTDIS 303).

An arithmetic class designed for pre-Health Sciences students to enter selected programs offered by Santa Rosa Junior College. This class develops understanding of addition, subtraction, multiplication and division of whole numbers, fractions, decimals, percents, ratio and proportion, simple equations, and introduces the metric measurement system in the context of Health Sciences applications. Individualized help and computer-assisted lab assignments to reinforce/supplement lecture topics.

May be taken for a total of 2 times.

**CSKL 374 Skills for Medication Administration**

(Formerly CSKL 373B) 2 units/3.5 hours lecture, 1.5 hours laboratory for 8 weeks. Grade only. Recommended: Completion of CSKL 373A or CSKL 371 (formerly ACS 371) if APS math computational test score is below 35.

Instruction in advanced arithmetic skills designed for pre-Health Science students planning to enter selected programs offered by Santa Rosa Junior College. Prepares students for success through advanced skills development of operations with fractions, decimals and percents. A study of the metric, household and apothecary systems and learning of the ratio/proportion, equation and formula methods of converting. Introduces and develops advanced skills in calculating drug dosages in preparation for safe administration of medications in the health field.

**CSKL 381 General Arithmetic for Tech Prep**

4 units/3 hours lecture, 2 hours laboratory, 1 hour by arrangement. CR/NC option. Recommended: Basic arithmetic skills of addition, subtraction, multiplication and division of whole numbers. Recommended for students with a score of 22 or less on the APS Math Computation Test.

Addition, subtraction, multiplication and division operations as applied to whole numbers, fractions, decimal fractions, percentage, use of calculators, measurement using English and metric system. Problem-solving, estimation, using graphs, charts and tables. Dealing with data. Regularly scheduled hands-on problem solving laboratory experiments and computer-assisted lab assignments to reinforce the lecture. This course is part of the Applied Academics component of the Tech Prep Program, but may be taken by any student who wishes to learn in a cooperative, participatory environment oriented toward technical applications.

May be taken for a total of 2 times.

### **CSKL 382 Pre-Algebra for Tech Prep**

4 units/3 hours lecture, 2 hours laboratory, 1 hour by arrangement. CR/NC option. Prerequisite: CSKL 370 (formerly ACS 370, Math 170), 371 (formerly ACS 371), 373A, 381 with a grade of "C" or better or APS Math Computational Test score of 23-35 and transcript showing equivalent course completed with a grade of "C" or better.

Review and advanced skills development of number system combined with advanced operations of addition, subtraction, multiplication and division as applied to whole numbers, fractions and decimals. Fundamental ideas of algebra beginning with properties of real numbers followed by basic operation of addition, subtraction, multiplication and division of real numbers. Introduction to powers and roots of real numbers. Scientific notation and prefixed notations conversion involving common English and metric system of linear, area and volumetric units. Arithmetic and algebraic methods of solving common geometric figures involving perimeter, area and volume. Evaluation and simplification of first degree linear equations. Regularly scheduled participatory lab and computer assisted lab assignments to reinforce or supplement lecture topics. This course is part of the Applied Academics component of the Tech Prep Program, but may be taken by any student who wishes to learn in a cooperative participatory environment oriented toward technical applications.

May be taken for a total of 2 times.

### **CSKL 399 Selected Topics in College Skills**

0.5-3 units/up to 3 hours lecture. CR/NC option.

Selected courses in reading, writing, math, study skills, and elementary computer and on-line procedures for students wishing to improve their overall basic college level skills.

May be taken for a total of 12 units.

## **Communication Studies**

### **COMM 5 Group Discussion & Problem Solving**

(Formerly SPCH 5) 3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100A.

Experiential study of the dynamics of small groups, including group roles, leadership styles and conflict resolution strategies. (CSU/UC)

AA/AS area B; CSU area E; CAN SPCH 10

### **COMM 7 Intercultural Communication**

(Formerly SPCH 7) 3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv.

A survey course that compares the communication of the following groups within the larger context of United States culture: African, Asian, Chicano, Latino, European, Indigenous Peoples of the Americas, and Middle Eastern. The course will focus on the interaction between members of different cultures. When appropriate, the course will also examine how issues of sexual orientation, age, religion, disability, and deaf culture structure the communication of all people. Meets UC Berkeley American Cultures Requirement. (CSU/UC)

AA/AS areas D, G; CSU area D; IGETC area 4

### **COMM 10 Introduction to Communication Studies**

3 units/3 hours lecture. CR/NC option. Prerequisite: Completion of or concurrent enrollment in Engl 100A.

Instructor suggests the thesis that next only to force the most effective way to control a society is to control its means of communication. If instructor is right, you are victims of this fact. This lecture discussion class (you don't give speeches) studies contemporary subjects such as advertising, the impact of television, political propaganda, etc., against the background of Western communication tradition. (CSU/UC)

CSU area D; IGETC area 4

May be taken for a total of 3 units.

### **COMM 66 Interpersonal Communication**

(Formerly SPCH 66) 3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100A or equivalent.

Explores through theory & practice the ways people communicate one-on-one & in informal situations. Studies development of self-concept, self-disclosure, listening, language & conflict through verbal & nonverbal communication. Builds communication skills through experiential activities. (CSU)

AA/AS area B; CSU area E; CAN SPCH 8

#### **COMM 66.1 Overcoming Communication Obstacles in the Workplace**

0.5 unit/3 hours lecture for 3 weeks. CR/NC option. Recommended: Completion of Engl 100A or equivalent.

Explores through theory & practice the ways to overcome barriers to effective communication. Study of communication model, perception, self-esteem, semantics, gender patterns and diversity. (CSU)

AA/AS area B

#### **COMM 66.2 Improving Listening Skills**

0.5 unit/3 hours lecture for 3 weeks. CR/NC option. Recommended: Completion of Engl 100A or equivalent.

Explores through theory & practice the ways to improve listening skills. Study of communication model, overcoming barriers to effective listening, and active listening. (CSU)

AA/AS area B

#### **COMM 66.3 Improving Interpersonal Skills**

0.5 unit/3 hours lecture for 3 weeks. CR/NC option. Recommended: Completion of Engl 100A or equivalent.

Explores through theory and practice conversation skills and strategies used to keep relationships healthy. Study of different stages of relational development, self disclosure, personality types, how to handle criticism and intimacy. Effect of technology on communication. (CSU)

AA/AS area B

#### **COMM 66.4 Communicating Effectively Via Technology**

0.5 unit/3 hours lecture for 3 weeks. CR/NC option. Recommended: Completion of Engl 100A or equivalent.

Explores the theoretical and practical concerns of using email, teleconferencing, telephones, list serves, electronic discussion pages, and chat functions. Study of interpersonal communication theory, gender and communication, intercultural communication, and effect of technology on communication. (CSU)

AA/AS area B

### **COMM 66.5 Nonverbal Communication**

0.5 unit/3 hours lecture for 3 weeks. CR/NC option.

Recommended: Completion of Engl 100A or equivalent.

Explores nonverbal communication through theory and practice. Study of kinesics, proxemics, nonverbal communication, intercultural communication, gender and communication. (CSU)

AA/AS area B

### **COMM 66.6 Conflict Resolution**

0.5 unit/3 hours lecture for 3 weeks. CR/NC option.

Recommended: Completion of Engl 100A or equivalent.

Explores through theory and practice ways to resolve conflict. Study of conflict, myths of conflict, conflict management, and win-win negotiations. (CSU)

AA/AS area B

### **COMM 68 Selected Topics in Communication Studies**

0.5-3 units/up to 9 hours by arrangement. CR/NC option. Prerequisite: Eligibility for English 100A or equivalent.

Intensive study of a topic in Communication Studies of current interest, selected by the Communication Studies Department and presented by an instructor specializing in that area. The purpose is to stimulate serious thought by an in-depth analysis of a subject through lecture, seminar, discussion, research, media and performance. (CSU)

May be taken for a total of 8 units.

### **COMM 98 Special Studies in Communication Studies**

1-3 units/up to 3 hours lecture. Grade only. Prerequisite: Application to Department

Seminars or individual conferences by arrangement to provide for independent study and enriched academic experience. (CSU)

Independent study including 49 and 98 courses - 6 unit total.

## **Community Health Worker**

### **CHW 50 Introduction to Community Health Work**

1 unit/3 hours lecture for 6 weeks. Grade only.

An introduction to community health work and the job of community health workers' roles, characteristics and opportunities for Community Health Workers in Sonoma County, the U.S., and the world. Discussions with local community health workers and other health professionals regarding outreach strategies, multicultural communication, health services teamwork, and health education and counseling. Also included: A field trip to a community agency, and volunteer work with a health agency. (CSU)

## CHW 52A Essential Skills for Community Health Workers I

3 units/3 hours lecture. CR/NC option. Prerequisite: Completion of CHW 50, and concurrent enrollment in CHW 52AL; OR completion of HLC 299.25, and concurrent enrollment in CHW 52AL.

Training community health workers to be members of health care teams who provide effective and appropriate services to medically under-served people in their Sonoma County communities. Skills include communication, exchanging and reporting health information, resolving problems and conflicts, health counseling, group health education, community outreach, and helping people find and use appropriate health services for their health needs. (CSU)

## CHW 52AL Community Health Experience I

3 units/0.5 hour lecture, 7.5 hours by arrangement. CR/NC option. Corequisite: Concurrent enrollment in CHW 52A.

This course provides eight hours a week of community health experience as a Community Health Worker so that students can practice skills learned in CHW 52A. An additional one hour a week will be spent with community experience instructor/supervisor, discussing work activities, problem solving & decision making, interviewing techniques, care plans for clients, & appropriate referrals. Managing time schedules, dealing with stress, communicating with health teams, and planning projects will also be included. To get credit for professional experience for this class, each student will send a current job description & letter of recommendation from their supervisor verifying that they have worked successfully for at least one year as a CHW. (CSU)

## CHW 52B Essential Skills for Community Health Worker II

3 units/3 hours lecture. Grade only. Prerequisite: Completion of CHW 50 & CHW 52A & CHW 52AL with grade of "C" or better. Corequisite: CHW 52BL and CHW 53.

Training community health workers to be members of health care teams who provide practical and suitable services to medically under-served people in their Sonoma County communities. Skills include identifying health services providers, getting involved in the community, supporting community causes, identifying violence problems in communities, planning programs, and developing health education messages about a variety of health topics. (CSU)

## CHW 52BL Community Health Experience II

3 units/0.5 hour lecture, 7.5 hours by arrangement. Grade only. Prerequisite: CHW 50, 52A, 52AL Corequisite: CHW 52B, CHW 53

This course provides eight hours a week of experience as a Community Health Worker for students to practice skills learned in CHW 52B. Another hour each week will be spent with instructor/supervisor, discussing community organization, assessment, outreach skills, and appropriate client referrals. Community work assignments will demonstrate basic knowledge of vulnerable populations' health issues, communicable diseases, nutrition, heart disease and

violence prevention. To get credit for professional experience for this class, students must send job description and letter of recommendation from their supervisor verifying that they have worked successfully for at least one year full time as a CHW. (CSU)

## CHW 53 Community Health Education

3 units/3 hours lecture. Grade only. Prerequisite: CHW 50, 52A, 52AL Corequisite: CHW 52B, 52BL

Training community health workers in health education program planning and delivery, health promotion and self-care, using community organization, networking, and client advocacy. (CSU)

## Community Involvement

### CI 51 Community Involvement 51

0.5-3 units/up to 9 hours by arrangement. CR/NC only. Recommended: Eligibility for Engl 100A or equivalent or concurrent enrollment in or completion of another degree applicable course in a previous semester or departmental recommendation; must acquire or be placed in an approved volunteer position.

A self-directed student volunteer program designed to facilitate experiential learning and service to the community. Students work 50 hours per unit per semester for 5-3 units of credit at a variety of placements including schools, hospitals, recreation programs, day care centers, and various social service agencies. Volunteer activities may include: tutoring, reading for the blind, aiding in mental or physical health projects, assisting in community projects, assisting in classroom teaching, and other similar projects. (CSU)

May be taken for a total of 6 units.

### CI 52 Selected Topics in Community Involvement

0.5-3 units/up to 9 hours by arrangement. CR/NC option. Recommended: Eligibility for Engl 100A

A self-directed student volunteer program designed to facilitate experiential learning and service to the community. Students work 50 hours per unit per semester for 5-3 units of credit at a variety of placements including schools, hospitals, recreation programs, day care centers, and various social service agencies. Volunteer activities may include: tutoring, reading for the blind, aiding in mental or physical health projects, assisting in community projects, assisting in classroom teaching, and other similar projects. (CSU)

May be taken for a total of 6 units.

## Computer & Information Sciences

### CIS 5 Computer Literacy

(Formerly BDP 5) 3 units/3 hours lecture, 1 hour by arrangement. CR/NC option. Recommended: Eligibility for English 100A or equiv.

Designed for the transfer student and/or the person wanting a broad knowledge of computer concepts. No previous experience with computers is required or assumed. This course presents an overview of computers in our world today, how they work, how they are used and their impact on society. This course is primarily lecture with only a small portion of hands-on computer work. Lecture and scheduled lab required. (CSU/UC)

AA/AS area B; CAN CSCI 2

### CIS 10A Computer Science Fundamentals I

(Formerly CIS 10) 3 units/2 hours lecture, 2 hours laboratory, 1 hour by arrangement. Grade only. Prerequisite: Completion of MATH 155; OR completion of MATH 155 or higher (VI); OR completion of MATH 155 or higher (V2). Recommended: Eligibility for English 1A or equiv.

This course introduces computer science and software engineering. Topics include machine architecture, software theory, integrated development environments, object-oriented design and control-of-flow constructs. Eight to ten programs are written in C++. Appropriate as a first course for those pursuing a four-year degree in computer science. Also serves as an introduction to programming for those interested in languages other than C++. (CSU/UC)

CAN CSCI 22

### CIS 10B Computer Science Fundamentals II

3 units/2 hours lecture, 3 hours by arrangement. Grade only. Prerequisite: Completion of CIS 10A (formerly CIS 10, BDP 10) with a grade of "C" or better. Recommended: Eligibility for English 1A or equiv.

This course concludes the introduction of computer science and software engineering begun in CIS 10A. Topics include basic data structures, files, databases, artificial intelligence, theory of computation, abstract data types, arrays and pointers, recursion and inheritance. Eight to ten complete programs are written in C++. Serves as preparation for CIS 11: Data Structures & Algorithms. (CSU/UC)

### CIS 11 Data Structures and Algorithms

4 units/3 hours lecture, 5 hours by arrangement. Grade only. Prerequisite: Completion of CIS 10B. Recommended: Eligibility for Engl 1A or equivalent.

Intended as a second course for those pursuing computer programming. Topics include software engineering principles, the development of efficient algorithms, the design and selection of appropriate data structures, and an overview of computer science. Numerous programs are written in a suitable high-level language. Required for the Programmer certificate. Appropriate for those pursuing a four year degree in computer science. (CSU/UC)

CAN CSCI 24

### **CIS 12A COBOL Programming**

(Formerly BDP 12A) 4 units/3 hours lecture, 5 hours by arrangement. Grade only. Prerequisite: CIS 10A (formerly CIS 10, BDP 10) or CIS 52 or equivalent experience. Recommended: Eligibility for Engl 100A. The student should have previous programming experience and be able to write simple programs which include iteration, input, calculations and output.

A first semester course in COBOL programming, reading from a sequential disc file, printing report, calculation, control break processing and table manipulation. Emphasis on structured programming techniques. Required for the Computer Programmer certificate. (CSU/UC)  
CAN CSCI 8

### **CIS 12B Advanced COBOL Programming**

(Formerly BDP 12B) 4 units/3 hours lecture, 5 hours by arrangement. Grade only. Prerequisite: CIS 12A (formerly BDP 12A, BDP 60) or equivalent experience. Recommended: Eligibility for Engl 100A. Programming experience in COBOL including control break processing and table manipulation. A second semester course in COBOL programming. Topics include: data validation, working with multiple files, indexed sequential files, multidimensional tables, screens, sorting updating files, and subprogramming. Structured programming standards are utilized and team programming concepts introduced. (CSU/UC)

### **CIS 16A Beginning Programming**

(Formerly CIS 16) 4 units/3 hours lecture, 5 hours by arrangement. Grade only. Prerequisite: Completion of CIS 101A or CIS 105A (formerly CIS 81.5A, BDP 81.5A) or CIS 5 (formerly BDP 5, BDP 51) with grade of "C" or better or equivalent experience. Recommended: Eligibility for English 100A or equiv.

This course is designed to introduce students to the concepts of computer programming using the Visual BASIC programming environment. The student will write programs to implement a variety of typical applications. There will be an emphasis on structured programming techniques, writing readable code and developing user-friendly programs. Concepts introduced will include: data types, constants and variables, flow of control, decisions and loops, forms and simple Visual BASIC controls as elements of the user interface, arrays, scope of variables, functions, string manipulation, rudimentary file operations, simple drag and drop and graphics operations, and error handling. (CSU/UC)  
CIS 16A + MATH 32 = CAN CSCI 6

### **CIS 16B Advanced Programming Concepts with Visual Basic**

4 units/3 hours lecture, 5 hours by arrangement. Grade only. Prerequisite: Completion of CIS 16A (formerly CIS 16, BDP 16, BDP 57) with grade of "C" or better or equivalent experience. Recommended: Eligibility for English 100A or equiv. Second semester course in Visual BASIC programming for the CIS 16A graduate or the person who has prior programming experience but has not worked with Visual BASIC. Students will prepare reasonably complex programs and work with advanced features including event-driven programming, user-interface design, ActiveX controls, advanced use of functions, advanced string

manipulation and text handling, data validation and advanced error handling, multi-dimension and control arrays, sorting and searching techniques, advanced file operations, simple database programming, and incorporating graphics. (CSU/UC)

### **CIS 17 Java Programming**

(Formerly CIS 54.11) 3 units/2 hours lecture, 3.5 hours by arrangement. Grade only. Prerequisite: Completion of CIS 10A (formerly CIS 10, BDP 10) OR CIS 20A. Recommended: Completion of CIS 58.51A (or CIS 84.42A) or CIS 58.31A (or CIS 84.44A) in addition to eligibility for Engl 100A or equivalent. Object-oriented programming principles, Java language constructs, the Java Developer's Kit class libraries, multi-threading, networking, GUI development, applets and applications. (CSU/UC)

### **CIS 20A C Programming**

4 units/3 hours lecture, 5 hours by arrangement. Grade only. Recommended: Eligibility for Eng 1A or equivalent. Problem solving in the C programming language. Using a structured approach to programming, the course covers data input/output, data types, control structures, operators, functions and the operating environment. Upon successful completion of the course, the student is able to construct moderately complex programs in C. (CSU/UC)  
CAN CSCI 16

### **CIS 20B C++ & Advanced C Programming**

4 units/3 hours lecture, 2 hours laboratory, 3 hours by arrangement. Grade only. Prerequisite: Completion of CIS 20A; OR prior qualification for CIS 20B. Recommended: Eligibility for Engl 1A or equivalent. This advanced course focuses on large project development issues, the C++ language and object oriented analysis, design and programming. Topics include the ANSI C standard library, multiple source file and mixed language programs, libraries, object oriented concepts, and the C++ extensions to ANSI C. Students will complete a major project in a team setting. (CSU/UC)

### **CIS 22 Assembly Language Programming**

(Formerly BDP 22) 4 units/3 hours lecture, 5 hours by arrangement. Grade only. Prerequisite: Completion of CIS 10B. Recommended: Eligibility for English 100A or equiv. Techniques of assembly language programming for the Intel family of microprocessors. Topics include IBM hardware, architecture (bus, memory, stack, I/O), design of structured assembly language code, use of software interrupts, survey arithmetic notations (BCD, floating point, binary), and discussion of I/O and disk processing concepts. (CSU/UC)  
CAN CSCI 10  
May be taken for a total of 8 units.

### **CIS 49 Special Studies in Data Processing**

1-3 units/up to 12 hours by arrangement. Grade only. Prerequisite: Advanced standing in a CIS program, application to the department and approval by Dean of Instruction. Recommended: Eligibility for Engl 100A or equivalent. Special projects by arrangement to provide for independent study and an enriched academic experience for continuing and advanced students. (CSU/UC)  
Independent study including 49 and 98 courses - 6 unit total.

### **CIS 50.13 Virus Protection/Disk Backup**

(Formerly CIS 84.15A) 0.5 unit/8 hours lecture for 1 week. CR/NC option. Recommended: Completion of CIS 50.91 (or CIS 84.95) or experience with Windows 95 or Windows 98 in addition to eligibility for Engl 100A or equivalent. Overview of computer viruses and disk backup techniques for personal computers. Topics include the prevention and detection of virus infections, removal of viruses, downloading virus detection software and updates from the Internet, developing a hard disk backup strategy, backing up the hard disk, and other data protection techniques. (CSU)

### **CIS 50.31 Understanding Your Macintosh**

(Formerly CIS 81.6) 3 units/2 hours lecture, 3.5 hours by arrangement. CR/NC option. Prerequisite: Completion of CIS 105A (or CIS 81.5A or BDP 81.5A); OR completion of CIS 105A (or CIS 81.5A or BDP 81.5A) or higher (CIS1). Recommended: Eligibility for English 100A or equiv. This course covers essential information for those using or owning a Macintosh. Students will master essential day-to-day operational skills, such as making hard disk backups and using virus software and screen savers. Topics include organizing folders, understanding and installing fonts, adding memory and using popular utility programs. (CSU)

### **CIS 50.71 Introduction to Unix**

3 units/2 hours lecture, 3.5 hours by arrangement. CR/NC option. Recommended: Completion of CIS 51.11 with grade of "C" or better and eligibility for Engl 100A or equivalent. Designed for the serious computer user. This course will introduce the student to the basic concepts of the UNIX operating system. Completion of the course will provide a good basic working knowledge of: essential UNIX commands, login and logout sequences, setting passwords, UNIX E-mail, fundamentals of the vi editor; piping and redirection; security and process control, the Kernel, File System, UNIX shell programming, X Windows, and basic system administration. (CSU)

### **CIS 50.91 Exploring Microsoft Windows**

(Formerly CIS 84.95) 3 units/2 hours lecture, 3.5 hours by arrangement. CR/NC option. Prerequisite: Completion of CIS 101B; OR completion of CIS 105B (or CIS 81.5B or BDP 81.5B); OR completion of CIS 5 (or BDP 5 or BDP 51). Recommended: Eligibility for English 100A or equiv. Exploring Windows is a class designed to introduce the student to the basics of working with Microsoft Windows. Topics covered will include: What is a Graphical User Interface (GUI), Installing Windows, the Windows Desktop, My Computer, the Explorer, Using Windows applications, and Using DOS applications under Windows. (CSU)



### **CIS 51.12A DOS Utilities**

*1.5 units/2 hours lecture, 3.5 hours by arrangement for 8 weeks. CR/NC option. Prerequisite: Completion of CIS 84.1; OR prior qualification for CIS 51.12A; OR completion of CIS 51.11. Recommended: CIS 52.11 or equivalent experience.*

An introduction to the use of utility software products utilized in a DOS operating system environment. Utilities include system maintenance and debugging programs, system security software, software emulators, memory resident systems, and DOS shells. Required for Microcomputer Systems Specialist Certificate. (CSU)

*May be repeated with different topics.*

### **CIS 51.13 Microsoft DOS/Windows Command Line Basics**

*(Formerly CIS 84.17) 1.5 units/2 hours lecture, 2 hours laboratory, 1.5 hours by arrangement for 8 weeks. CR/NC option. Prerequisite: Completion of CIS 50.91 (or CIS 84.95). Recommended: Eligibility for English 100A or equiv.*

This course will provide the student with a detailed understanding of the workings of Microsoft DOS using the command line in Windows. The material in this course will form a foundation of knowledge that can be expanded on by further study and experience with the UNIX, Novell NetWare and Microsoft Windows NT network operating environments. (CSU)

### **CIS 51.14 Networking Essentials - Practicum**

*(Formerly CIS 84.31A) 1.5 units/2 hours lecture, 2 hours laboratory, 1.5 hours by arrangement for 8 weeks. CR/NC option. Prerequisite: Completion of or concurrent enrollment in CIS 51.15 (or CIS 84.31B). Recommended: Eligibility for English 100A or equiv.*

This course will provide the student with hands on networking practice in installing a basic operating system and adding the networking component. Identifying, assessing, and responding to problems related to maintaining and supporting the networking component will be explored using both command line and graphical user interface techniques in a networked environment. The material in this course will form a foundation of knowledge that can be expanded on by further study and experience with the UNIX, Novell NetWare and Microsoft Windows NT network operating environments. (CSU)

### **CIS 51.15 Networking Essentials - Theory and Concepts**

*(Formerly CIS 84.31B) 1.5 units/2 hours lecture, 2 hours laboratory, 1.5 hours by arrangement for 8 weeks. CR/NC option. Prerequisite: Completion of or concurrent enrollment in CIS 51.13 (or CIS 84.17). Recommended: Eligibility for English 100A or equiv.*

Designed for the serious computer user who intends to pursue certification as a Linux Certified Engineer, Microsoft Certified Systems Engineer, or Novell Certified Engineer. This course will introduce the student to the basic theory and concepts of operation of telecommunications and networking systems. Completion of the course will provide a good basic working knowledge of essential networking concepts and fundamentals including: LAN/WAN technologies, Baseband/Broadband transmission, modulation techniques, copper and fiber transmission media,

network topologies and protocols, error detection and correction methodologies, and other essential topics. (CSU)

### **CIS 51.16 Mail Systems with UNIX**

*0.5 unit/8 hours lecture for 1 week. CR/NC option. Prerequisite: Completion of CIS 51.21 (or CIS 84.36A). Recommended: Eligibility for English 100A or equiv.*

This course provides an overview of administering an E-mail Server using UNIX/Linux. It includes an in depth exploration of planning and creating the mail server, logging, securing the mail server, installing transport agents and user agents and troubleshooting. The student will create a working Mail configuration based on the plan they develop for their particular needs. (CSU)

### **CIS 51.17 DNS Configuration with UNIX**

*0.5 unit/8 hours lecture for 1 week. CR/NC option. Prerequisite: Completion of CIS 51.21 (or CIS 84.36A). Recommended: Eligibility for English 100A or equiv.*

This course provides an overview of administering a Domain Name Service (DNS) using UNIX/Linux. It includes an in depth exploration of planning and creating the DNS using BIND, logging, securing the DNS, proxies and troubleshooting. The student will design a working DNS configuration based on the plan they develop for their networking needs. (CSU)

### **CIS 51.21 UNIX System Administration**

*(Formerly CIS 84.36A) 3 units/2 hours lecture, 3.5 hours by arrangement. CR/NC option. Prerequisite: Completion of CIS 50.71; OR completion of CIS 84.12B. Recommended: Eligibility for English 100A or equiv.*

System administrators typically manage user logins, monitor system activity and security, administer file systems, devices, and network services. The course teaches how to install and maintain the software and hardware for the system. This includes hardware configuration, reconfiguration of the kernel, networking, and system maintenance. (CSU)

### **CIS 51.31 Novell Netware System Administration**

*(Formerly CIS 84.35A) 1.5 units/2 hours lecture, 2 hours laboratory, 1.5 hours by arrangement for 8 weeks. CR/NC option. Prerequisite: Completion of CIS 51.14 (or CIS 84.31A), and completion of CIS 51.15 (or CIS 84.31B). Recommended: Eligibility for English 100A or equiv.*

This course will provide the student with a detailed understanding of the workings of Novell NetWare in the Enterprise environment. The material in this course will form a foundation of knowledge that can be expanded on by further study and experience. This course will also help to prepare the student for the NetWare Certified Novell Administrator (CNA) Exam. (CSU)

### **CIS 51.41 SQL Database Administration with UNIX**

*0.5 unit/8 hours lecture for 1 week. CR/NC option. Prerequisite: Completion of CIS 51.21 (or CIS 84.36A). Recommended: Eligibility for English 100A or equiv.*

This course provides an overview of managing multiple SQL Servers supporting both Web and client-server, database installation, configuration, logical/physical DB design, data migration, backup/restore, disaster planning/recovery, capacity planning/performance, testing, and database security using UNIX/Linux. (CSU)

### **CIS 51.51 Microsoft Windows Nt System Administration**

*(Formerly CIS 84.32) 1.5 units/2 hours lecture, 2 hours laboratory, 1.5 hours by arrangement for 8 weeks. CR/NC option. Prerequisite: Completion of CIS 51.14 (or CIS 84.31A), and completion of CIS 51.15 (or CIS 84.31B). Recommended: Eligibility for English 100A or equiv.*

This course will provide a detailed understanding of the workings of Microsoft Windows NT Server. Students will install Microsoft Windows NT Server, assess and plan network needs for a given situation, configure server components, create and administer user/group accounts, manage system resources, migrate from Novell NetWare, and use Microsoft Internet Information Server. Students will also set up, administer and troubleshoot (a) permissions for files, folders and disk resources (b) the printing environment (c) other network resources. Use auditing functions to generate and view security logs, monitor network resources to track usage and disk space, back up and restore files and folders and administer the Microsoft Windows NT Server operating systems in real-world situations. (CSU)

### **CIS 51.71 Web Site Administration with UNIX**

*0.5 unit/8 hours lecture for 1 week. CR/NC option. Prerequisite: Completion of CIS 51.21 (or CIS 84.36A). Recommended: Eligibility for English 100A or equiv.*

This course provides an overview of administering the Apache Web Server using UNIX/Linux. It includes an in depth exploration of planning and creating the web server, logging, securing the web server, creating user sites, virtual domain web sites, proxies and troubleshooting. The student will create a working Apache configuration based on the plan they develop. (CSU)

### **CIS 51.91 Network Interoperability**

*1.5 units/2 hours lecture, 3.5 hours by arrangement for 8 weeks. CR/NC option. Prerequisite: Completion of CIS 51.21 (or CIS 84.36A); OR completion of CIS 51.51 (or CIS 84.32), and completion of CIS 84.33, and completion of CIS 84.34A; OR completion of CIS 51.31 (or CIS 84.35A). Recommended: Eligibility for English 100A or equiv.*

This course provides skills for students to integrate the knowledge of specific systems to allow them to administer a network that may include a variety of hardware. Typically, networks do not include all same-type machines and cross-platform issues will be explored. Students will configure systems to act as both server and client to other systems. (CSU)

### **CIS 52.11A Macintosh System Management**

*1.5 units/2 hours lecture, 3.5 hours by arrangement for 8 weeks. CR/NC option. Prerequisite: Completion of CIS 105A (or CIS 81.5A or BDP 81.5A); OR prior qualification for CIS 52.11A.*

This course covers essential information for those using or owning a Macintosh. Students will master essential day-to-day operational skills such as making hard disk backups and using virus software and screen savers. Topics include organizing folders, understanding and installing fonts, adding memory and using popular utility packages. (CSU)

*May be repeated with different topics.*

### **CIS 54.13 Using JavaScript to Design Dynamic Web Pages**

(Formerly CIS 84.24) 3 units/2 hours lecture, 3.5 hours by arrangement. Grade only. Prerequisite: Completion of CIS 58.51B (or CIS 84.42B), and completion of CIS 10A (or CIS 10 or BDP 10); OR completion of CIS 58.51B (or CIS 84.42B), and completion of CIS 16A (or CIS 16 or BDP 16). Recommended: Eligibility for English 100A or equiv.

JavaScript is a cross-platform, object-based scripting language. This course provides a solid foundation in JavaScript for beginning programmers and shows students how to create scripts and incorporate them into web pages. Subjects include: displaying the current date and time, create scrolling text banners, perform button rollovers, create a "RoloURL" to access URLs from a list, validate and submit user-entered data from a form, serve dynamic images, customize a site with cookies, and manage multiple frames. (CSU)

### **CIS 54.31 Perl & CGI**

(Formerly CIS 84.23) 3 units/2 hours lecture, 3.5 hours by arrangement. CR/NC option. Prerequisite: Completion of CIS 10A (or CIS 10 or BDP 10), and completion of CIS 58.51B (or CIS 84.42B). Recommended: Eligibility for English 100A or equiv.

An introduction to PERL (Program Extraction Report Language) which is used to create common gateway interface (CGI) scripts for use in Internet web sites. Emphasis will be placed on theory as it relates to practice. Students will create original Perl scripts and download existing scripts from the Internet, which they will revise. Lab emphasis will be placed on incorporating the Perl scripts into an existing web site. (CSU)

### **CIS 58.31A Introduction to the Internet & World Wide Web**

(Formerly CIS 84.44A) 1.5 units/2 hours lecture, 3.5 hours by arrangement for 8 weeks. CR/NC option. Prerequisite: Completion of CIS 101A; OR completion of CIS 105A (or CIS 81.5A or BDP 81.5A); OR completion of CIS 101A or higher (CIS1). Recommended: Eligibility for English 100A or equiv.

A beginning hands-on introduction to using the Internet, World Wide Web and e-mail. Subjects covered include: shopping for an Internet service provider; history of the Internet; utilizing search engines; using e-mail; mailing lists and newsgroups; downloading text, graphics and freeware from the Internet. World Wide Web resources which can be used for commercial opportunities, career placement, and personal enrichment will be explored. (CSU)

### **CIS 58.51A Creating Web Pages 1 - HTML**

(Formerly CIS 84.42A) 1.5 units/2 hours lecture, 3.5 hours by arrangement for 8 weeks. CR/NC option. Prerequisite: Completion of CIS 101A; OR completion of CIS 105A (or CIS 81.5A or BDP 81.5A); OR completion of CIS 5 (or BDP 5 or BDP 51); OR completion of CIS 101A or higher (CIS1). Recommended: Eligibility for English 100A or equiv.

A beginning hands-on introduction to using a Hypertext Mark-up Language (HTML) to design Web pages which will be displayed on the World Wide Web. Students will use HTML to create web pages that have the following elements: text in various size and colors, links, lists, background color and patterns, interlaced and transparent graphics, tables, and mailtos. Principles of color, line and design as they apply to screen presentations will be included. (CSU)

### **CIS 58.51B Creating Web Pages 2 - HTML**

(Formerly CIS 84.42B) 1.5 units/2 hours lecture, 3.5 hours by arrangement for 8 weeks. CR/NC option. Prerequisite: Completion of CIS 58.51A (formerly CIS 84.42A) with a grade of "C" or better. Recommended: Eligibility for Engl 100A or equivalent.

A course for students who wish to incorporate the advanced features of Hypertext Markup Language (HTML) when designing Web pages. Students will incorporate animated gifs, client side image maps, frames, server side includes access counters, cascading style sheets, and simple forms which send data as an email message. Web browsers will be compared and compatibility issues explored. Principles of color, line and design as they apply to screen presentations will be included. (CSU)

### **CIS 58.53A Designing Graphics for Web Pages**

(Formerly CIS 84.43A) 1.5 units/2 hours lecture, 3.5 hours by arrangement for 8 weeks. CR/NC option. Prerequisite: Completion of CIS 58.51A (formerly CIS 84.42A) with a grade of "C" or better and completion of CIS 73.31A (formerly CIS 83.12A) with a grade of "C" or better. Recommended: Eligibility for Engl 100A or equivalent experience and familiarity with the Internet, World Wide Web and basics of Photoshop.

A hands-on introduction to creating graphics for the World Wide Web. Subjects covered include: scanning and use of a digital camera; color tables; image resolution; graphics compression formats; repairing damaged Photos; creating collages; original backgrounds; button bars; animated GIFs; principles of color and line for screen design. This class will explore graphics options for both the Macintosh and PC using Photoshop. Students need to be competent in Photoshop to succeed in the course. (CSU)

### **CIS 58.53B Advanced Web Graphics**

(Formerly CIS 84.43B) 1.5 units/2 hours lecture, 3.5 hours by arrangement for 8 weeks. CR/NC option. Prerequisite: Completion of CIS 58.53A (formerly CIS 84.43A) with a grade of "C" or better. Recommended: Eligibility for English 100A or equiv.

This course provides a practical hands-on approach to creating graphics for use on the World Wide Web. Subjects covered include: creating special effects with photos, designing ad banners, creating effective collages, using actions and filters to speed up graphics processing, producing animated GIFs, and editing graphics from an existing web site. All student projects will be displayed on the Internet, knowledge of HTML and Photoshop is required. (CSU)

### **CIS 58.54 Web Content Development**

(Formerly CIS 84.47) 4 units/2 hours lecture, 6 hours by arrangement. CR/NC option. Prerequisite: Completion of CIS 58.51B (or CIS 84.42B). Recommended: Eligibility for English 100A or equiv.

A practical hands-on course where students create a simple web site for a client. Topics include: steps involved in planning and producing a web site, modifying web proposal templates, bidding a job, storyboard and timeline creation, content development, communication strategies, effective teamwork, client relations, production techniques, site promotion strategies, and web site maintenance. Web authoring and maintenance tools will be

explored. Students will work in teams to develop or modify a web site for a customer to be provided by their instructor. (CSU)

### **CIS 58.55 The Business of Website Production**

(Formerly CIS 84.71) 4 units/2 hours lecture, 6 hours by arrangement. Grade only. Prerequisite: Completion of CIS 58.51B (formerly CIS 84.42B) with a grade of "C" or better in addition to completion of one of the following courses with a grade of "C" or better: CIS 58.53A (formerly CIS 84.43A), CIS 54.11 (formerly CIS 84.21), CIS 54.31 (formerly CIS 84.23), CIS 54.13 (formerly CIS 84.24). Recommended: Eligibility for English 100A or equiv.

This advanced project-management course guides teams of students through the pragmatics of web site development. Topics include: writing a web proposal, bidding a job, storyboard and timeline creation, content development, effective teamwork and production techniques, client relations, and web site maintenance. Students will work in teams to develop a web site for a customer to be provided by their instructor. (CSU)

### **CIS 58.57 Creating an Electronic Portfolio for the World Wide Web**

(Formerly CIS 84.72A) 1.5 units/2 hours lecture, 3.5 hours by arrangement for 8 weeks. CR/NC option. Prerequisite: Completion of CIS 58.51A (or CIS 84.42A). Recommended: Eligibility for English 100A or equiv.

A course which focuses on using the Internet and World Wide Web as a tool for displaying student work and assisting in student employment. Participants will create an electronic portfolio which displays their work. They will join work related mailing lists and newsgroups and register their portfolio with on-line career databases. Student will be required to produce 5-7 web pages. No instruction in web page creation will be provided so students will need to be proficient in HTML or a web authoring program such as PageMill or Front Page. (CSU)

### **CIS 58.81A Cisco Networking 1**

(Formerly CIS 84.81A) 3 units/2 hours lecture, 2 hours laboratory, 1.5 hours by arrangement. Grade only. Prerequisite: Completion of CIS 51.15 (or CIS 84.31B). Recommended: Eligibility for English 100A or equiv.

First semester of Cisco's Networking Academy curriculum. Topics include Basic networking, OSI model and TCP/IP protocol. (CSU)

### **CIS 58.81B Cisco Networking 2**

(Formerly CIS 84.81B) 3 units/2 hours lecture, 2 hours laboratory, 1.5 hours by arrangement. Grade only.

Prerequisite: Completion of or concurrent enrollment in CIS 58.81A (or CIS 84.81A). Recommended: Eligibility for English 100A or equiv.

Second semester of Cisco's Networking Academy curriculum. Topics include WAN basics, router set up, startup, and configuration, Cisco user interface, troubleshooting. (CSU)

### **CIS 58.81C Cisco Networking 3**

3 units/2 hours lecture, 2 hours laboratory, 1.5 hours by arrangement. Grade only. Prerequisite: Completion of CIS 84.81B. Recommended: Eligibility for English 100A or equiv. Third semester of Cisco's Networking Academy curriculum. Topics include further study of the OSI/ISO model, VLANs, LAN Network Design, IP Routing Protocols, Access Control Lists (ACLs), Cisco Routers in Network Networks, Network Documentation, Network Security, Planning Structured Cabling, Network Performance, Server Administration, and Network Troubleshooting. (CSU)

### **CIS 58.81D Cisco Networking 4**

3 units/2 hours lecture, 2 hours laboratory, 1.5 hours by arrangement. Grade only. Prerequisite: Completion of CIS 84.81C. Recommended: Eligibility for English 100A or equiv. Fourth semester of Cisco's Networking Academy curriculum. Topics include LAN Switching, WAN Technology, selecting network capabilities, PPP, ISDN, Frame Relay, Network Management, and Troubleshooting. (CSU)

### **CIS 58.91A Exploring the World Wide Web**

(Formerly CIS 84.51A) 0.5 unit/8 hours lecture for 1 week. CR/NC option. Recommended: Completion of CIS 101B (formerly CIS 81.5B, BDP 81.5B) OR CIS 105B OR CIS 5 (formerly BDP 5, BDP 51) in addition to eligibility for Engl 100A or equivalent.

A beginning hands-on introduction to using the World Wide Web. Subjects covered include: shopping for an Internet service provider; using the World Wide Web for marketing opportunities, career placement, and personal enrichment; downloading text, graphics, video, audio, freeware or shareware will also be included. (CSU)

### **CIS 58.92A E-Mail Basics**

(Formerly CIS 84.52A) 0.5 unit/8 hours lecture for 1 week. CR/NC option. Recommended: Completion of CIS 101A OR CIS 105A (formerly CIS 81.5A, BDP 81.5A) OR CIS 5 (formerly BDP 5, BDP 51) in addition to eligibility for Engl 100A or equivalent.

A beginning hands-on introduction to using the Internet to send and receive Electronic Mail (e-mail). Subjects covered include: shopping for an Internet service provider; sending and receiving mail; creating e-mail groups; attaching files; and subscribing to mailing lists or newsgroups. Several e-mail packages will be demonstrated. (CSU)

### **CIS 61.11 Lotus 1-2-3**

3 units/2 hours lecture, 3.5 hours by arrangement. CR/NC option.

A semester length course in the use of the integrated software package of Lotus 1-2-3. Includes a thorough investigation of the use of Lotus 1-2-3 to solve analytical problems. Topics include spreadsheet design and implementation, database systems, graphing and printing. (CSU)

### **CIS 61.31 Using Microsoft Excel**

3 units/2 hours lecture, 3.5 hours by arrangement. CR/NC option. Recommended: CIS 81.5 or equivalent experience with microcomputers.

A lecture/lab course in the use of Microsoft Excel software. Topics covered range from the fundamentals of Excel's three major uses

(spreadsheets, database and graphics) through the advanced use of functions, data commands macros and enhanced graphics capabilities. Additionally, data transfer, data linking and spreadsheet/database integration will be covered. (CSU)  
May be repeated with different topics.

### **CIS 61.33 More Microsoft Excel**

(Formerly CIS 82.18) 3 units/2 hours lecture, 3.5 hours by arrangement. CR/NC option. Prerequisite: Completion of CIS 61.31; OR prior qualification for CIS 61.33 (or CIS 82.18). A second lecture/lab course in the use of Microsoft Excel. Topics cover concepts beyond the fundamentals of Excel, such as linked formulas, macros and what-if analysis. (CSU)

### **CIS 62 Advanced Spreadsheets Design**

4 units/3 hours lecture, 5 hours by arrangement. Grade only. Recommended: Engl 1A or equivalent. Also students should have a thorough understanding of the manual operations of any of the common macrocomputer-oriented, spreadsheet products. Currently it is preferable that the student know Lotus 1-2-3. It would also be useful for the student to have had at least one computer programming course.

Introduction to design, implementation and maintenance of multi-component and multiple file spreadsheets; microcomputer oriented. A review of spreadsheet fundamentals, discussion of various approaches to spreadsheet design, implementation of analytical type spreadsheets, the design and implementation of control programs for manipulating spreadsheet components. Applications are implemented using the Lotus 1-2-3 macro programming language. (CSU)

### **CIS 65.11 Microsoft Word**

3 units/2 hours lecture, 3.5 hours by arrangement. CR/NC option. Recommended: Eligibility for Engl 100A and completion of CIS 101A or CIS 5 (formerly BDP 5, BDP 51) or CIS 81.5 with a grade of 'C' or better.

A full semester course introducing Microsoft Word on both the Macintosh and Windows platform. Beginning skills include creating, editing and formatting a simple document. Intermediate formatting includes tabs and indents, style sheets, line drawing, and multiple columns. Other topics include mail merging, tables, templates and graphics. (CSU)

### **CIS 65.12A Desktop Publishing with Word**

1.5 units/2 hours lecture, 3.5 hours by arrangement for 8 weeks. CR/NC option. Prerequisite: CIS 85.11 or equivalent experience with Microsoft Word. Recommended: The student should be able to create and edit simple documents as well as apply elementary character and paragraph formatting in Microsoft Word.

Advanced document preparation and desktop publishing techniques in Microsoft Word. Working with multiple page documents, creating an index and table of contents. Working with hyphenation and the thesaurus. Special features of laser printers including PostScript. Additional topics include the use of style sheets, tables, incorporating external graphics and multiple columns. Elements of design are reviewed. (CSU)

May be repeated with different topics.

### **CIS 65.31 WordPerfect**

3 units/2 hours lecture, 3.5 hours by arrangement. CR/NC option. Recommended: Completion of CIS 101A or equivalent experience.

Introduction to the WordPerfect word processing software program. Topics include edit, line format, page format, character format, save, retrieve, spell check, use of thesaurus, printing, index, outline footnotes, line drawing, sort, columns, tables, graphics, search and replace, fonts, macros, mail merge, and other WordPerfect features & products. Typing skills are not required. (CSU)

### **CIS 65.51 Adobe PageMaker**

3 units/2 hours lecture, 3.5 hours by arrangement. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent and CIS 105A (formerly CIS 81.5A, BDP 81.5A) or CIS 101A.

This course is an introduction to desktop publishing using Adobe PageMaker for the office publisher. PageMaker documents combine text and graphics to create business cards, fliers, brochures and newsletters. The student will learn the basic fundamentals of PageMaker, import files created in other applications, work scanned images and apply formatting to create professional quality documents. CIS is an Adobe Certified Training Provider in PageMaker. (CSU)

### **CIS 65.53 Adobe PageMaker - Advanced Projects**

(Formerly CIS 83.11) 4 units/3 hours lecture, 3.5 hours by arrangement. CR/NC option. Prerequisite: Completion of CIS 65.51. Recommended: Eligibility for English 100A or equiv.

Advanced desktop publishing topics in PageMaker. The student will reinforce previous PageMaker skills and focus on new features, including color, plug-ins, customizing PageMaker, libraries and creating PDF files and HTML. Special documents will be explored, incorporating booklets, templates and books with an automatic generation of index and table of contents. Features also include advanced linking and exporting of text/graphics, advanced graphics and an introduction to working with commercial printers. (CSU)

### **CIS 65.53A Adobe PageMaker Exploration**

(Formerly CIS 83.31A) 0.5 unit/8 hours lecture for 1 week. CR/NC only. Recommended: Completion of CIS 101A OR CIS 105A (formerly CIS 81.5A, BDP 81.5A) OR CIS 5 (formerly BDP 5, BDP 51) in addition to eligibility for Engl 100A or equivalent.

This course provides a quick overview to desktop publishing skills using PageMaker. It includes a brief introduction to layout and creating simple documents with imported graphics and text. A newsletter will be created to introduce the PageMaker novice to desktop publishing techniques. (CSU)

### **CIS 66 Management Information Systems**

*3 units/3 hours lecture, 1 hour by arrangement. Grade only. Recommended: Eligibility for ENGL 1A or equivalent AND completion of 1 yr of HS algebra OR Math 150A OR BMG 54 or equivalent AND completion of CIS 5 (formerly BDP 5, BDP 51) all with a grade of 'C' or better.*

An examination of the use of information systems to support the management activities of an organization. Topics include: the fundamentals of hardware, software, database management, data communications, transaction processing information systems, decision support systems, information reporting systems, office automation, networks, expert systems, and systems analysis and design. Case studies and several software packages will be utilized to illustrate the principals covered. Required for the computer programmer and the Microcomputer Systems Specialist certificates. (CSU)  
*CAN BUS 6*

### **CIS 69.11 dBASE**

*3 units/2 hours lecture, 3.5 hours by arrangement. CR/NC option. Prerequisite: Knowledge of basic operations of an MS-DOS computer. Recommended: Eligibility for English 100A or equiv.*

An introduction to the dBASE program emphasizing its use as a general purpose database management system. Topics include: how to design, create, update, index a simple database, how to manage a multiple file database. Covers features, calculations, reports, labels, custom data entry, file reorganization, a customized work environment, to the exchange of data with other software packages and an introduction to programming. (CSU)  
*May be repeated with different topics.*

### **CIS 69.31 Access**

*(Formerly CIS 82.21) 3 units/2 hours lecture, 3.5 hours by arrangement. CR/NC option. Recommended: Eligibility for ENGL 100A or equivalent and completion of CIS 101B (or CIS 81.1B) is strongly recommended.*

An introduction to the Access program emphasizing its use as a general purpose relational database management system. Topics include how to design, create, update, modify, select, and report from a database using the Access objects: tables, queries, forms and reports. (CSU)

### **CIS 69.33 Advanced Access**

*(Formerly CIS 82.24) 3 units/2 hours lecture, 3.5 hours by arrangement. CR/NC option. Prerequisite: Completion of CIS 101B; OR completion of CIS 105B (or CIS 81.5B or BDP 81.5B); OR completion of CIS 5 (or BDP 5 or BDP 51). Recommended: Eligibility for English 100A or equiv.*

An advanced course in Microsoft Access designed for students who have successfully completed the beginning course. This course will explore advanced queries, including SQL, forms, and reports. Macros and modules will be used to develop sophisticated turnkey applications; multi-user applications and security will be discussed. (CSU)

### **CIS 69.51 Database Management with Filemaker Pro**

*(Formerly CIS 82.15) 3 units/2 hours lecture, 3.5 hours by arrangement. CR/NC option. Prerequisite: Completion of CIS 101B; OR completion of CIS 105B (or CIS 81.5B or BDP 81.5B); OR completion of CIS 5 (or BDP 5 or BDP 51). Recommended: Eligibility for English 100A or equiv.*

A full semester course exploring database design and

use. Included are creating files/tables, displaying and using precreated forms and custom forms, selecting particular records, using expressions and summary calculations and interfacing with the World Wide Web. (CSU)

### **CIS 69.53 Structured Query Language**

*(Formerly CIS 82.25) 1.5 units/2 hours lecture, 3.5 hours by arrangement for 8 weeks. CR/NC option. Prerequisite: Completion of CIS 69.31 (formerly CIS 82.21) OR CIS 69.51 (formerly CIS 82.15) with a grade of 'C' or better. Recommended: Eligibility for English 100A or equiv.*

This course is designed for the student who has experience with a database management program such as Access or FileMaker Pro and wants to learn Structured Query Language (SQL), the common language of client server database management. The course includes concepts and practice. (CSU)

### **CIS 70 Systems Analysis**

*(Formerly BDP 70) 3 units/3 hours lecture. Grade only. Prerequisite: Completion of CIS 66; OR prior qualification for CIS 70 (or BDP 70). Recommended: Students benefit more from CIS 70 (formerly BDP 70) if they have taken one or more programming courses.*

The study of the design, analysis, and implementation of computer systems in a business environment. The course is micro-computer oriented. Emphasis is placed on use of the various analysis techniques. Case studies are reviewed and a practical hands-on, semester length project is completed by students. (CSU)

### **CIS 71 Data Management**

*(Formerly BDP 71) 4 units/3 hours lecture, 5 hours by arrangement. Grade only. Recommended: CIS 69.11 or equivalent experience with a database management system. Eligibility for Engl 100A.*

Introduction to the design of multiple file, relational database management systems, applications will be implemented using Ashton Tate's dBASE DBMS and its programming language. (CSU)

### **CIS 73.11 Computer Graphics Concepts**

*(Formerly CIS 82.3) 3 units/2 hours lecture, 3.5 hours by arrangement. CR/NC option. Prerequisite: Completion of CIS 101A; OR completion of CIS 105A (or CIS 81.5A or BDP 81.5A); OR completion of CIS 5 (or BDP 5 or BDP 51); OR completion of CIS 101A or higher (CIS1). Recommended: Eligibility for English 100A or equiv.*

A thorough introduction to computer graphics that provides an essential foundation for the student interested in learning other graphics programs and desktop publishing. Popular graphics programs will be sampled, including painting, drawing, desktop publishing, photographic editing, business graphics, animation and presentation software. Other topics include using a scanner, color and digital file formats. (CSU)

### **CIS 73.31A Introduction to Adobe Photoshop**

*(Formerly CIS 83.12A) 1.5 units/2 hours lecture, 3.5 hours by arrangement for 8 weeks. CR/NC option. Recommended: Completion of CIS 101A or CIS 105A (formerly CIS 81.5A, BDP 81.5A) are strongly recommended in addition to eligibility for Engl 100A or equivalent.*

An introduction to Adobe PhotoShop for graphics users of all kinds. The emphasis of this course will be on learning the beginning skills of the PhotoShop

program, such as using the toolbox, painting and editing, selection fundamentals, and working with type. Topics include working with scanned images, masking, filters and applying strokes and fills. This class will not cover the principles of art, design or professional graphics production work. (CSU)

### **CIS 73.31B Intermediate Adobe Photoshop**

*(Formerly CIS 83.12B) 1.5 units/2 hours lecture, 3.5 hours by arrangement for 8 weeks. CR/NC option. Prerequisite: Completion of CIS 73.31A (formerly CIS 83.12A) with a grade of "C" or better. Recommended: Eligibility for English 100A or equiv.*

Intermediate Adobe Photoshop focuses on masks, layers, channels, and paths, and their use in image production and manipulation. This course also examines digital water marking, special effects with type, and plug-in filters. (CSU)

### **CIS 73.31C Photoshop Advanced Concepts**

*(Formerly CIS 83.12C) 4 units/3 hours lecture, 3.5 hours by arrangement. CR/NC option. Prerequisite: Completion of CIS 73.31B (formerly CIS 83.12B) with a grade of 'C' or better. Recommended: Eligibility for English 100A or equiv.*

This course for the Photoshop-experienced student explores Photoshop's advanced features in depth. Successful completion of this course prepares students for the Adobe Photoshop Certified Expert exam. (CSU)

### **CIS 73.33 Fractal Painter**

*(Formerly CIS 83.13A) 1.5 units/2 hours lecture, 3.5 hours by arrangement for 8 weeks. CR/NC option. Prerequisite: Completion of CIS 101A; OR completion of CIS 105A (or CIS 81.5A or BDP 81.5A); OR completion of CIS 5 (or BDP 5 or BDP 51); OR completion of CIS 101A or higher (CIS1). Recommended: Completion of CIS 73.11 (formerly CIS 82.3) or CIS 82.2A (formerly BDP 82.2A) in addition to eligibility for Engl 100A or equivalent.*

An introductory class in Fractal Painter designed for the general computer user. This course explores the basic techniques of painting, including use of palettes, brushes, and paper textures. Topics such as selections, paths, masks, clones and floaters are also introduced. (CSU)

### **CIS 73.35 Graphics with Adobe Illustrator**

*(Formerly CIS 83.14) 1.5 units/2 hours lecture, 3.5 hours by arrangement for 8 weeks. CR/NC option. Prerequisite: Completion of CIS 101A or CIS 105A (formerly CIS 81.5A, BDP 81.5A) with a grade of 'C' or better or other CIS class. Recommended: Completion of CIS 73.11 (formerly CIS 82.3) and eligibility for Engl 100A or equivalent.*

A beginner's introduction to the popular drawing program, Adobe Illustrator, for the general computer user. This course includes basic drawing techniques, use of color and gradients, and designing with type. Other topics include editing and reshaping objects, transformations, working with layers, and special effects. (CSU)

**CIS 73.36 More Graphics with Adobe Illustrator**  
(Formerly CIS 83.14B) 1.5 units/2 hours lecture, 3.5 hours by arrangement for 8 weeks. CR/NC option. Prerequisite: Completion of or concurrent enrollment in CIS 73.35 (or CIS 83.14). Recommended: Eligibility for English 100A or equiv. Further exploration of the popular drawing program Adobe Illustrator for the general computer user who has mastered beginning skills. This course explores the further modification and formatting of shapes, graphing, custom guides, and illustrator documents for desktop publishing and the web. Topics include gradient meshes, Brush tool, patterns and strokes, compound paths and masks. (CSU)

**CIS 73.37 QuarkXpress**  
(Formerly CIS 83.8) 3 units/2 hours lecture, 3.5 hours by arrangement. CR/NC option. Prerequisite: Completion of CIS 105B (or CIS 81.5B or BDP 81.5B); OR completion of CIS 101B. Recommended: Eligibility for Engl 100A or equivalent and at least 6 months computer experience. Designed for the seasoned computer user, serious computer user or business professional. Keyboarding is not required. A full semester course in the desktop publishing package, QuarkXpress. Text and graphics will be created as well as imported from word processing and graphics packages. Topics will include design techniques, style sheets, master pages, tables, templates, scanned images, color publication and Quark printing. Lecture and lab required. (CSU)

**CIS 74.11 Microsoft Office**  
(Formerly CIS 82.22) 3 units/2 hours lecture, 3.5 hours by arrangement. CR/NC option. Prerequisite: Completion of CIS 105A (or CIS 81.5A or BDP 81.5A); OR completion of CIS 101A; OR completion of CIS 5 (or BDP 5 or BDP 51); OR completion of CIS 101B; OR completion of CIS 101A or higher (CIS1). Recommended: Eligibility for English 100A or equiv. An overview of the integrated program Microsoft Office for beginners, including Microsoft Word, Excel, Access and PowerPoint. Students will be introduced to word processing, spreadsheet, database and presentation software. Information will be included on exchanging data between programs. This course is taught using Windows and Mac operating system platforms. (CSU)

**CIS 74.13A Office Integration**  
(Formerly CIS 82.24A) 1.5 units/2 hours lecture, 2 hours laboratory, 1.5 hours by arrangement for 8 weeks. CR/NC option. Prerequisite: CIS 74.11 (formerly CIS 82.22) or two of the following classes: CIS 65.11 Word, CIS 61.31 (formerly CIS 81.21) Excel and CIS 69.31 Access. Recommended: Eligibility for Engl 100A or equivalent. Designed to teach how to exchange data between the various microsoft software products. Object Linking and Embedding (OLE) will be discussed and practiced, as well as transfer of data between applications, mail merge and incorporating applets such as clip art and Word Art. (CSU)

**CIS 75.11A Digital Video Post-Production Techniques 1**  
1.5 units/2 hours lecture, 3.5 hours by arrangement for 8 weeks. CR/NC option. Prerequisite: Completion of CIS 73.31A (or CIS 83.12A). Recommended: Eligibility for English 100A or equiv. This introductory class will teach video fundamentals: pixels and scan lines, frame rates,

fields, time-code, audio sampling rates, compression and the various video formats. All of this leads up to a clear demonstration of the process of digitizing video accurately and outputting the best product. We will also explore Adobe Premiere, the industry choice for creating motion graphics for video, television, film, multimedia, and the Internet. We will learn many of the extensive repertoire of powerful tools for sophisticated editing and compositing, contained in this program. (CSU)

**CIS 75.11B Digital Video Post-Production Techniques 2**  
1.5 units/2 hours lecture, 3.5 hours by arrangement for 8 weeks. CR/NC option. Prerequisite: Completion of CIS 75.11A. Recommended: Eligibility for English 100A or equiv. Digital Video Production 2 continues where Level 1 leaves off; focusing on Adobe After Effects features, including coverage of: rendering, masks, filters, layer transfer modes, nested compositions, value graphs, field rendering issues, and shooting and keying bluescreen footage. We will also be dealing with keyboard shortcuts, proxies, low-resolution tests, and exploring some of the special features of After Effects Production Bundle. (CSU)

**CIS 75.21A Introduction to Macromedia Director**  
(Formerly CIS 84.63) 1.5 units/2 hours lecture, 3.5 hours by arrangement for 8 weeks. CR/NC option. Prerequisite: Completion of CIS 73.31B (or CIS 83.12B). Recommended: Eligibility for English 100A or equiv. This course guides computer-seasoned students through the development cycle of multimedia production using Macromedia Director. Working individually and in teams, students will use Director to develop brief interactive multimedia presentations containing text, graphics, animation, sound, and special effects. (CSU)

**CIS 75.21B Using Lingo Scripting for Authoring in Director**  
1.5 units/2 hours lecture, 3.5 hours by arrangement for 8 weeks. CR/NC option. Prerequisite: Completion of CIS 75.21A (or CIS 84.63). Recommended: Eligibility for English 100A or equiv. An intermediate class dealing with creating interactive multimedia for delivery over Intranets, CD-ROMs, and internet. We will focus primarily on advanced navigation techniques, synchronizing audio and video, examining and implementing basic and intermediate level Lingo scripts, and creating a multimedia project. (CSU)

**CIS 75.31A Intro to Web-Based Animation with Flash**  
(Formerly CIS 84.56A) 1.5 units/2 hours lecture, 3.5 hours by arrangement for 8 weeks. CR/NC option. Prerequisite: Completion of CIS 84.62A. Recommended: CIS 73.31A (formerly CIS 83.12A) and eligibility for Engl 100A or equivalent. An introduction to the use and implementation of Web-based animation tools. We will use Macromedia Flash to create basic vector-based animations. We will examine the concepts that make a quality interactive animation, learn the fundamental tools of each software package, and produce animations of our own. (CSU)

**CIS 75.31B Intermediate Concepts and Action Scripting with Flash**  
1.5 units/2 hours lecture, 3.5 hours by arrangement for 8 weeks. CR/NC option. Prerequisite: Completion of CIS 75.31A (or CIS 84.56A). Recommended: Eligibility for English 100A or equiv. This class will focus on intermediate and advanced topics in Flash including: Action Scripting; Using pre-load movies to improve playback; Create 3D animation sequences; and Create a web site incorporating the elements learned throughout this class. (CSU)

**CIS 75.91 Interactive Multimedia Projects**  
3 units/2 hours lecture, 3.5 hours by arrangement. CR/NC option. Prerequisite: Completion of CIS 75.11B, and completion of CIS 75.21B, and completion of CIS 75.31B. Recommended: Eligibility for English 100A or equiv. A solid foundation in understanding the organizational and creative structure of a multimedia project is essential to its success. This class is designed to help participants understand project group dynamics and work flow during multimedia project development. We will work in small groups. We will create a real-world situation in which groups will face creative brainstorming, story boarding, flow charts, creative briefs in order to complete a project for a client. Each group will complete a project, which will include video, audio, web, and animation components and will become part of the students' multimedia portfolio. (CSU)

**CIS 76 Software Sampler**  
(Formerly BDP 76) 3 units/2 hours lecture, 1 hour laboratory, 2 hours by arrangement. Grade only. Recommended: Eligibility for Engl 100A or equivalent. Designed as an introductory course for the student interested in a survey of popular desktop computer applications. Provides an introduction to system software and the most popular application categories: word processing, databases, and spreadsheets. Applications in common business use will be used to illustrate concepts. (CSU)

**CIS 78.11 Introduction to Telecommunications**  
(Formerly CIS 84.41) 3 units/3 hours lecture, 1 hour by arrangement. CR/NC option. Prerequisite: Completion of CIS 101B; OR completion of CIS 105B (or CIS 81.5B or BDP 81.5B); OR completion of CIS 5 (or BDP 5 or BDP 51). Recommended: Eligibility for English 100A or equiv. An introduction to the electronic transmission of information. Topics include: telecommunications theory and history; hardware and software specifications; telephony; data exchange models, standards, and protocols; telecommunications LANs, WANs, and Intranets; data privacy and security; teleconferencing; telecommuting and other societal impacts. (CSU)

### **CIS 81 Selected Topics in Planning & Implementing Computer Systems**

*0.5-3 units/up to 2 hours lecture, 2 hours laboratory, 1.5 hours by arrangement for 9 weeks. CR/NC option.*

*Prerequisite: Courses may require various prerequisites to suit each class. Recommended: Eligibility for Engl 100A or equivalent.*

Various topics related to planning for an implementation of computer systems. These topics include hardware and software selection, training, operation and the impact of changes in the technology. (CSU)

*May be repeated with different topics.*

### **CIS 82 Selected Topics in Productivity Software**

*0.5-3 units/up to 2 hours lecture, 2 hours laboratory, 1.5 hours by arrangement for 9 weeks. CR/NC option.*

*Prerequisite: Courses may require various prerequisites to suit each class. Recommended: Eligibility for Engl 100A or equivalent.*

Course includes topics fundamental to the application of productivity software such as database, electronic spreadsheets, accounting and graphics. (CSU)

*May be repeated with different topics.*

### **CIS 83 Selected Topics in Office Automation**

*0.5-3 units/up to 2 hours lecture, 2 hours laboratory, 1.5 hours by arrangement for 9 weeks. CR/NC option.*

*Prerequisite: Courses may require various prerequisites to suit each class. Recommended: Eligibility for Engl 100A or equivalent.*

Includes topics relevant to computer use in the modern office such as word processing, electronic mail, electronic calendars and other related subjects. (CSU)

*May be repeated with different topics.*

### **CIS 84 Selected Topics in Systems Software & Languages**

*0.5-3 units/up to 2 hours lecture, 2 hours laboratory, 1.5 hours by arrangement for 9 weeks. CR/NC option.*

*Prerequisite: Courses may require various prerequisites to suit each class. Recommended: Eligibility for Engl 100A or equivalent.*

Selected topics including operating systems, utilities, programming languages, computer-assisted instruction and similar. Appropriate for home computer owners, teachers, business computer users and business data processing students. (CSU)

*May be repeated with different topics.*

### **CIS 84.50A Beginning Front Page**

*0.5-3 units/up to 2 hours lecture, 3.5 hours by arrangement for 8 weeks. CR/NC option. Prerequisite: Completion of CIS 101B; OR completion of CIS 105B (or CIS 81.5B or BDP 81.5B); OR completion of CIS 5 (or BDP 5 or BDP 51).*

*Recommended: Eligibility for English 100A or equiv.*

A beginning hands-on course which focuses on using web authoring tools to create professional-quality Internet or Intranet sites without HTML programming. Students will use web authoring tools to plan, design and publish web sites on the World Wide Web. Web authored planning and design topics include using a Web Editor to create web site structures, set page/web site properties, apply text styles, paragraph styles, graphics features, hyperlinks, standard tables and forms. Web authored site management topics include managing web folders,

applying themes and frames web components, navigation bars, shared borders, global revisions, cross-browser compatibility, web site analysis and publishing the entire web site to a remote host WWW server. (CSU)

*May be repeated with different topics.*

### **CIS 84.96 Windows for Macintosh Users**

*0.5 unit/8 hours lecture, 2 hours laboratory, 1.5 hours by arrangement for 1 week. CR/NC only. Recommended: CIS 105A (formerly CIS 105A (formerly CIS 81.5A, BDP 81.5A) and eligibility for Engl 100A or equivalent.*

A simple introduction to the Windows operating system for Macintosh users. This course converts basic Mac desktop skills to the PC for work in a cross-platform environment. Topics range from getting started on a PC, converting to a two-button mouse and window management to using the taskbar, working with Windows Explorer and file management. Additional features include converting Mac files to PC, font issues, and printer management. (CSU)

*May be repeated with different topics.*

### **CIS 99 Occupational Work Experience Education**

*0.5-8 units/up to 36 hours by arrangement. Grade only.*

Occupational Work Experience is supervised employment extending classroom learning at an on-the-job learning station relating to the student's educational or occupational goal. Students gain this experience by enrollment in the parallel or alternate plan. (CSU)

*May be taken for a total of 16 units.*

### **CIS 99I Occupational Work Experience-Intern Program**

*1-8 units/up to 40 hours by arrangement. Grade only.*

Occupational Work Experience Internship is supervised employment extending classroom learning at an on-the-job learning station relating to the student's educational or occupational goal. May be repeated for a total of sixteen (16) units, four (04) units maximum per semester (Repeat Code 25 for all Parallel Plans). Must be enrolled in 7 units including Work Experience units (for summer school - Work Experience and one other course). Alternate Plan - designed to offer students opportunities to attend college full-time one semester and work full-time the following semester. Job experience must relate directly to the student's educational goals. Up to eight (08) units may be earned in one semester. Students may not be enrolled in more than one other course or transfer from alternate to parallel or vice-versa without completing 7 units between plans. (CSU)

*May be taken for a total of 16 units.*

### **CIS 101A Personal Computers for New Users**

*1 unit/2 hours lecture, 2 hours laboratory, 1.6 hours by arrangement for 5 weeks. CR/NC only.*

Designed as a first course for the student with little or no computer experience. Students will explore computer basics in a hands-on environment, using DOS and Windows-based IBM-compatible systems. Topics include: the components of a computer system; basic terminology; use of the mouse,

keyboard and Windows interface; rudimentary disk and file handling; use of word processing software to create and print simple documents; accessing the Internet and the World Wide Web.

### **CIS 101B Personal Computer Concepts and Practice**

*2 units/2 hours lecture, 2 hours laboratory, 1 hour by arrangement for 10 weeks. CR/NC option. Prerequisite: CIS 101A or equivalent experience.*

Designed as a continuing course for the student who has completed CIS 101A or has other beginning computer experience. Students will continue their introduction to computer basics in a hands-on environment using DOS/Windows based computers. Topics include: essential concepts and resources; an overview of software and multimedia applications; file and storage management; data backup and virus prevention; the basics of computer architecture; computer shopping strategies; ethics; using networks, electronic mail, and the Internet and World Wide Web; the operating environment; intermediate word processing; beginning spreadsheet and database use; software integration techniques.

### **CIS 105A Introduction to Macintosh**

*(Formerly CIS 81.5A) 1.5 units/2 hours lecture, 2 hours laboratory, 7 hours by arrangement for 8 weeks. CR/NC option. Recommended: Eligibility for English 100A or equiv.*

Designed as a first course for students with little or no computer experience. Students will explore computer basics in a hands-on environment, using Mac-OS systems. Topics include: the components of a computer system; basic terminology; use of the mouse and keyboard; Desktop features; disk and file handling; use of word processing, graphics and spreadsheet software to create and print simple documents; accessing the World Wide Web.

### **CIS 105B More Introduction to Macintosh**

*(Formerly CIS 81.5B) 1.5 units/2 hours lecture, 2 hours laboratory, 1.5 hours by arrangement for 8 weeks. CR/NC option. Prerequisite: Completion of or concurrent enrollment in CIS 105A (or CIS 81.5A or BDP 81.5A); OR completion of CIS 101A or higher (CIS1). Recommended: Beginning level skills with the Macintosh desktop, file saving, word processing, graphics and spreadsheets.*

Further exploration of the Macintosh for beginners. The student will continue exploration of application software, including document formatting, using indents and tabs, mail merge, rudimentary desktop publishing, spreadsheet charts, database management and integration between applications. Additional desktop skills include working with multiple applications.

### **CIS 301 Jump Start**

*(Formerly CIS 81.11) 0.5 unit/2 hours lecture for 4 weeks. CR/NC only. Recommended: Eligibility for Engl 100A or equivalent OR completion of ESL 313R (formerly ENGL 313R) or equivalent.*

This class is designed for students who are absolutely new to computers and feel they want a very brief introduction to basic vocabulary and rudimentary skills before going on to CIS 101A or CIS 105A.

## Construction Management Technology

### CONS 50 Construction Surveying and Measurements

2 units/3 hours lecture, 3 hours laboratory for 8 weeks. Grade only. Prerequisite: ApTech 90A (formerly CET 90A) and ApTech 55 (formerly IED 55) or equivalent with a grade of "C" or better. Corequisite: ApTech 90B (formerly CET 90B). Construction surveying and applications including office and field measurements of distances, elevations, angles and material quantities related to construction layout of building and engineering works. (CSU)

### CONS 70 Construction Project Organization and Management

3 units/3 hours lecture. Grade only. Organization and management of a construction project, including: overview of construction industry; contracts; general conditions; use of construction documents; bidding; bonds and insurance; planning for construction; record-keeping; pre-construction project organization; scheduling; construction operations; measurement and payment; changes and extra work; claims and disputes; labor relations; and project closeout. (CSU)

### CONS 71 Materials and Methods of Construction

3 units/3 hours lecture. Grade only. Prerequisite: CONS 80A or CONS 270 (formerly CONS 370, CONS 82) with a grade of "C" or better; or equivalent. An investigation of common building materials and methods of using them, including: code restrictions; foundations; wood (heavy timber and wood light frame); masonry (brick, concrete block, and stone); steel; site-cast concrete; pre-cast concrete; pre-stressed concrete; roofing; glass; and cladding. (CSU)

### CONS 72 Construction Estimating

3 units/3 hours lecture. Grade only. Prerequisite: CONS 80A or CONS 270 (formerly CONS 370, CONS 82) with the grade of "C" or better; or equivalent. An introduction to quantity surveying techniques and practices related to residential construction, including: earthwork and sitework; board and lineal measurements; footings and sub-surface construction; concrete (formwork and reinforcing); floor assemblies; interior and exterior wall members and materials; roof members and materials; and common sources of errors. May include computer program applications. (CSU)

### CONS 73 Estimating with Computers

1.5 units/2 hours lecture, 3 hours laboratory for 8 weeks. Grade only. Prerequisite: Completion of or concurrent enrollment in CONS 72. Application of estimating methods and procedures to document an estimate for a residential or commercial construction project using the selected computer program. Students will learn how to use the computer program; techniques for saving time and money; tips for quantity takeoff; pricing of materials and labor; and apply this information to

the preparation of estimates using the computer program. (CSU)  
May be taken for a total of 3 times.

### CONS 74 Construction Project Scheduling

1.5 units/3 hours lecture for 8 weeks. Grade only. Prerequisite: Completion of CONS 70, and completion of APTECH 90A (or CET 90A). Construction scheduling methods are explored. Bar charts, S-Curves, Logical sequencing, and network diagrams are presented. CPM is explored through the consideration of planning for construction, developing timing estimates, early and late starts, and "float". The use of the schedule to monitor and control the project progress and costs is discussed. (CSU)

### CONS 75 Specifications

1.5 units/3 hours lecture for 8 weeks. Grade only. Prerequisite: Completion of or concurrent enrollment in CONS 71. Introduction to the CSI Masterformat system for organizing, writing and interpreting specifications. Subjects covered include: numbering and naming Sections; the three part Section; correct language; coordinating with other construction documents; interpreting a specification; writing a specification Section. (CSU)

### CONS 80A Introduction to Construction Drafting

3 units/2 hours lecture, 3 hours laboratory. Grade only. Prerequisite: ApTech 55 (formerly IED 55) with the grade of "C" or better, or equivalent demonstrated by portfolio. Development of manual drafting skills, conventions used in architectural drafting are introduced, building code requirements identified and drafting techniques are improved as the student creates a nearly complete set of residential working drawings including: site plan; floor plan; foundation and floor framing plan; roof framing plan; sections; details; elevations; and utility plan. (CSU)

### CONS 80B Architectural Working Drawings

3 units/2 hours lecture, 3 hours laboratory. Grade only. Prerequisite: Completion of CONS 80A. Development of architectural working drawings - the development of working drawings from preliminary data; evaluation of alternative solutions to typical construction problems; selection of appropriate materials; designing of construction connections; selection and development of appropriate details; and learning the problem-solving skills needed to assess, analyze and solve common construction problems. Wood frame construction is featured. Freehand and instrument or CAD drafting will be used. (CSU)

### CONS 80C Architectural Project Development

3 units/2 hours lecture, 3 hours laboratory. Grade only. Prerequisite: CONS 80B and APTECH 57 with grade of "C" or better. Structured as an architectural project, the student develops a residential project from site analysis to production of working drawings, including: problem statement, project objectives, research, programming, schematic design, preliminary design,

design development, and working drawings. Energy efficient design principles, Title 24 compliance (package only), and building codes and ordinances will be included. (CSU)

### CONS 83 Residential Drafting/Design Using CAD

3 units/2 hours lecture, 3 hours laboratory, 2 hours by arrangement. Grade only. Prerequisite: Completion of APTECH 56 (formerly ENGR 56, ENGR 22). Two-dimensional architectural drafting utilizing the AutoCAD Software Program. AutoCAD setup, construction, and editing commands will be emphasized as the student constructs a set of working drawings for a residence. Topics covered include: drawing environment setup, layering, dimensioning, annotation, prototype drawings, layout and editing skills, project design development, working drawing format, construction practices and procedures, and plotting. (CSU)  
May be taken for a total of 2 times.

### CONS 85 Advanced Architectural CAD Drafting

(Formerly CONS 80D) 3 units/2 hours lecture, 3 hours laboratory, 2 hours by arrangement. Grade only. Prerequisite: ApTech 57 with a grade of "C" or better; or equivalent verified by portfolio. Recommended: Cons 80A. Advanced architectural CAD: applications of AutoCAD and third party software. Skills related to the production of computerized architectural project documentation will be developed, including computer project organization and working drawing production. May be taken concurrently with CONS 80B or CONS 80C. (CSU)

### CONS 98 Special Studies in Construction Technology

1-3 units/up to 9 hours by arrangement. Grade only. Prerequisite: Application to department and department approval. Corequisite: Enrollment in construction courses. Seminars or individual conferences by arrangement to provide for the independent study and enriched academic experience. (CSU)  
Independent study including 49 and 98 courses - 6 unit total.

### CONS 201 Energy Efficient Building

(Formerly CONS 301) 1.5 units/2 hours lecture for 12 weeks. Grade only. The primary objective of this course is to help the contractor, architect and developer in the design and construction of energy efficient buildings.

### CONS 210 Computer Estimating for Construction

1.5 units/2 hours lecture, 3 hours laboratory for 8 weeks. Grade only. Prerequisite: CIS 76 (formerly BDP 76) with grade of C or better, or ability to use spreadsheets, and CONS 72 with grade of C or better; or equivalent. Use of computer program to estimate and report construction costs. Using Timberline, Primavera or other industry standard program.

### CONS 220 Architectural Rendering

(Formerly CONS 320) 2 units/2 hours lecture, 1 hour laboratory. Grade only. Prerequisite: CONS 80A, or CONS 270 (formerly CONS 370, CONS 82), with a grade of "C" or better. Emphasis on construction of one, two and three point perspective drawings with an introduction to shade, shadow, texture and pictorial composition.

### **CONS 241 Basic Electricity-A**

*(Formerly CONS 94A) 3 units/3 hours lecture. CR/NC option.*  
Introduction to the use of electricity in buildings starting with basic electrical terms and theory. Residential electrical use, safety, and code requirements are examined. Fixture location, electrical materials, and wiring practices are discussed and demonstrated.

### **CONS 242 Basic Electricity-B**

*(Formerly CONS 94B) 3 units/3 hours lecture. CR/NC option. Prerequisite: Completion of CONS 270 (formerly CONS 370, CONS 82) or CONS 80A; and CONS 241 (formerly CONS 94A) or equivalent with a grade of "C" or better.*  
Calculation of voltage drops in residential service applications. Documentation of locations of electrical services and fixtures in residential construction, including GFI and other code requirements. Calculation of the electrical loading for a residential building, including the production of an efficient wiring schematic. Production of wiring plans for homes with gas appliances. Compliance with energy code requirements are also examined.

### **CONS 250A Introduction to Uniform Building Code**

*(Formerly CONS 395A) 3 units/3 hours lecture. Grade only. Prerequisite: CONS 80A or CONS 270 (formerly CONS 370, CONS 82) with a grade of "C" or better or equivalent.*  
Basic Uniform Building Code organization, requirements, and standards. Introductory course for those interested in design, construction, or inspection. Assists students to qualify for ICBO Certification. Review of provisions of the UBC.

### **CONS 250B Introduction to Electrical, Mechanical and Plumbing Codes**

*3 units/3 hours lecture. Grade only. Prerequisite: CONS 80A or CONS 270 (formerly CONS 370, CONS 82) with a grade of "C" or better.*  
Introduction to the Electrical, Mechanical, and Plumbing Codes, as selected, to help prepare student for ICBO Certification Examination.  
*May be taken for a total of 6 units.*

### **CONS 251 Uniform Mechanical Code**

*(Formerly CONS 391) 3 units/3 hours lecture. Grade only. Prerequisite: CONS 80A or CONS 270 (formerly CONS 370, CONS 82) with grade of "C" or better or equivalent. Recommended: Experience as a journeyman in the building trades or knowledge of materials and methods of construction.*  
Application of the Uniform Mechanical Code to inspection procedures. Review of the major provisions of the Code and their applications.

### **CONS 252 Uniform Electrical Code**

*(Formerly CONS 392) 3 units/3 hours lecture. Grade only. Prerequisite: CONS 80A OR CONS 270 (formerly CONS 370, CONS 82) with a grade of "C" or better or equivalent. Recommended: Experience as a journeyman in the building trades or knowledge of construction materials and methods of construction.*  
Introduction to the basic requirements of the National Electrical Code and the Electrical Orders of the State of California. Review of provisions of the Code and application to construction documentation, building, and inspection.

### **CONS 253 Uniform Plumbing Code**

*(Formerly CONS 393) 3 units/3 hours lecture. Grade only. Prerequisite: CONS 80A OR CONS 270 (formerly CONS 370, CONS 82) with grade of "C" or better or equivalent. Recommended: Experience as a journeyman in the building trades or knowledge of materials and methods of construction.*  
Introduction to the Uniform Plumbing Code. Review of provisions of the Code and interpretation of construction documents, construction procedures and inspection procedures.

### **CONS 254 Residential Energy Standards - Title 24**

*(Formerly CONS 380) 1.5 units/2 hours lecture for 12 weeks. CR/NC option. Prerequisite: CONS 80A or CONS 270 (formerly CONS 270, CONS 82) with grade of "C" or better or equivalent. Recommended: Knowledge of building design and materials of construction.*  
Introduction to Title 24, California Administrative Code: energy requirements for residential construction. In addition the student will learn the skills necessary to demonstrate compliance with the code.

### **CONS 260 Law for Contractors**

*(Formerly CONS 394) 3 units/3 hours lecture. Grade only. Prerequisite: Eligibility for Engl 100A.*  
Review of basic function of the law in contracting. Licensing law and contract law will be discussed. Aspects of construction from award of bid writing a contract, to completion of a project including a review of contractor responsibilities and liability will be covered. Financial aspects of contracting will also be introduced.

### **CONS 261 Beyond Contract-Looking at Liability in Construct Industry**

*(Formerly CONS 294.2) 3 units/3 hours lecture. Grade only. Prerequisite: Eligibility for Engl 100A or equivalent. Recommended: Knowledge of Construction Industry.*  
Legal rights, responsibilities and protections under contractor's licensing law and California liability law - including worker's compensation law, liability, indemnity, and insurance, for contractors, architects, engineers and interested persons in the construction industry.

### **CONS 270 Blueprint Reading**

*(Formerly CONS 370) 3 units/3 hours lecture. Grade only.*  
Language of blueprints and specifications as applied to the building trades: symbols, conventions, scales, nomenclature, orthographic projections, contract documents, specifications and Uniform Building Code.

### **CONS 271 Review & Approval of Building Plans**

*(Formerly CONS 390) 3 units/3 hours lecture. Grade only. Prerequisite: CONS 80A or CONS 270 (formerly CONS 370, CONS 82) with grade of "C" or better, or equivalent ability to read plans.*  
Review of plan check and building permit process, requirements, reviews and approvals.

### **CONS 272 Basic Housing Inspection**

*(Formerly CONS 396) 3 units/3 hours lecture. Grade only. Prerequisite: CONS 80A or CONS 270 (formerly CONS 370, CONS 82) with a grade of "C" or better or equivalent. Recommended: Construction experience and ability to read working drawings.*  
Application of Building Code to residential construction and methods of inspection.

### **CONS 310 Computers for Construction**

*1 unit/2 hours lecture, 2 hours laboratory for 6 weeks. Grade only.*  
Introduction to computers and programs available specifically for entry level construction students. Computer use and software available for technical application.

### **CONS 321 Advanced Architectural Rendering**

*(Formerly CONS 221) 2 units/2 hours lecture, 1 hour laboratory. Grade only. Prerequisite: Completion of CONS 220 (or CONS 320); OR prior qualification for CONS 321 (or CONS 221).*  
Emphasis on shade, shadow, texture and composition with an introduction to style and techniques.

### **CONS 395B Introduction to the Uniform Building Code**

*3 units/3 hours lecture. Grade only.*  
Introduction and basic requirements of the Uniform Building Code relating to the electrical, mechanical and plumbing code provisions, as selected.  
*May be taken for a total of 6 units.*

### **CONS 399 Selected Topics**

*0.5-2 units/up to 6 hours lecture. CR/NC only.*  
A series of short courses, each dealing with a specific topic of relevance to construction technology.  
*May be repeated with different topics.*

## **Consumer and Family Studies**

### **CFS 98 Special Studies in Consumer & Family Studies**

*1-3 units/up to 3 hours by arrangement. Grade only. Prerequisite: Application to department.*  
Seminars or individual conferences by arrangement to provide for independent study and enriched academic experience. (CSU)  
*Independent study including 49 and 98 courses - 6 unit total.*

### **CFS 99 Occupational Work Experience Education**

*0.5-8 units/up to 36 hours by arrangement. Grade only.*  
Occupational Work Experience is supervised employment extending classroom learning at an on-the-job learning station relating to the student's educational or occupational goal. Students gain this experience by enrollment in the parallel or alternate plan. (CSU)  
*May be taken for a total of 16 units.*



### **CFS 991 Occupational Work Experience-Intern Program**

*1-8 units/up to 40 hours by arrangement. Grade only.* Occupational Work Experience Internship is supervised employment extending classroom learning at an on-the-job learning station relating to the student's educational or occupational goal. May be repeated for a total of sixteen (16) units, four (04) units maximum per semester (Repeat Code 25 for all Parallel Plans). Must be enrolled in 7 units including Work Experience units (for summer school - Work Experience and one other course). Alternate Plan - designed to offer students opportunities to attend college full-time one semester and work full-time the following semester. Job experience must relate directly to the student's educational goals. Up to eight (08) units may be earned in one semester. Students may not be enrolled in more than one other course or transfer from Alternate to Parallel or vice-versa without completing 7 units between plans. (CSU)

*May be taken for a total of 16 units.*

### **CFS 302 Selected Topics in Consumer & Family Studies**

*0.5-2 units/up to 2 hours lecture. CR/NC option.* Series of courses designed to provide skills in dealing with current trends and topics in home management, family relationships, consumer interests, and other relevant subject areas.

*May be repeated with different topics.*

#### **CFS 321.1 Independent Living Skills**

*1 unit/3 hours lecture for 8 weeks. CR/NC option.* Series of topics designed to provide skills in dealing with current trends and topics, home management, family relationships, consumer interests and other relevant subject areas. Formerly CFS 301.21.

*May be taken for a total of 3 units.*

#### **CFS 321.2 Independent Living Skills II**

*1 unit/1.5 hours lecture, 1.5 hours laboratory for 8 weeks. CR/NC option.* Series of topics designed to provide skills in using resources of the Junior College. Emphasis is on needs of students involved in the Foster Care System.

*May be taken for a total of 3 units.*

## **Consumer Issues**

#### **CNIS 90 Money Management**

*1-3 units/up to 3 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent.* Principles of money management with emphasis on making day-to-day decisions in the use of resources to solve problems in areas of budgeting, credit, housing, automobiles, estate and retirement planning, investments, taxes and other consumer issues. (CSU)

#### **CNIS 92 Life Management**

*3 units/3 hours lecture. Grade only. Recommended: Completion of Engl 100A.* Addresses skills needed to make good decisions, identify values and manage time and resources effectively. Focus on everyday stresses and successful strategies for organizing one's life at home and at work. (CSU)  
*CSU area E*

#### **CNIS 97 Changing Family Lifestyles**

*3 units/3 hours lecture. Grade only. Recommended: Completion of Engl 100A.* Examines the personal decisions which are based upon the changing values within family and society. Empowers the student to make lifelong informed choices. (CSU)  
*CSU area E*

#### **CNIS 190 Money Management**

*(Formerly CNIS 390) 3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent; interest in managing money wisely.* Principles of money management with emphasis on making day-to-day decisions in the use of resources to solve problems in areas of budgeting, credit, housing, automobiles, estate and retirement planning, investments, taxes and other consumer issues. The course is for the Fashion Careers and Housing Certificates.

#### **CNIS 192 Life Management**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.* Addresses skills needed to make good decisions, identify values and manage time and resources effectively. Focus on everyday stresses and successful strategies for organizing one's life at home and at work.

#### **CNIS 197 Changing Family Life Styles**

*1-3 units/up to 3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.* Examines the personal decisions which are based upon the changing values within family and society. Empowers the student to make lifelong informed choices.

#### **CNIS 315 Selected Topics in Consumer Issues**

*0.5-2 units/up to 1 hour lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv.* Current information necessary to make informed decisions regarding expenditures for credit, housing, insurance, energy, cars, retirement, food, health care, education, etc.  
*May be repeated with different topics.*

## **Counseling**

#### **COUN 50 Student Staff Assistant Training**

*(Formerly GUID 50) 1-3 units/up to 2 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.* A workshop to train students to assist staff and

students in a variety of campus settings. Students will develop competencies in the areas of communication, cross-cultural awareness, human relations and locating and utilizing campus resources. (CSU)

*May be taken for a total of 4 units.*

#### **COUN 55 College Survival Techniques**

*(Formerly GUID 55) 1-3 units/up to 3 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv.* Combines sound learning techniques such as effective listening, note-taking, test preparation; encouraging the student's growth in realizing their potential through decision making, goal setting, values, and time management. (CSU)  
*May be taken for a total of 3 units.*

#### **COUN 56 Take Charge of Your Learning**

*(Formerly GUID 56) 3 units/8 hours lecture for 6 weeks. CR/NC option. Recommended: Eligibility for Engl 100A. Recommended for students on Academic or Progress probation or on dismissal status.* Assessment of study skills, time management, organizational skills, motivation, educational goals, and career goals. Students will evaluate these skills and goals in relationship to their enrollment at SRJC & their poor academic status. The importance of self esteem and ways to improve it will be looked at. (CSU)

#### **COUN 60 Effective Study Workshop**

*(Formerly GUID 60) 1 unit/1 hour lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv.* Provides a planned instruction program designed to assist students in improving their study skills. Formulated for all students, it will emphasize goal identification, organizing study habits, how to read and study textbooks, take effective notes, how to take examinations, and correct use of the library. Covers the total development of the individual and attitudes toward academic and personal problem solving. (CSU)  
*May be taken for a total of 2 units.*

#### **COUN 60.1 Overcoming Math Anxiety**

*(Formerly GUID 60.1) 0.5-3 units/up to 3 hours lecture. CR/NC option.* Explore the nature, causes, and effects of quantitative reasoning anxiety, and define the impact of emotions and attitudes on learning and performance. (CSU)  
*May be taken for a total of 4 units.*

#### **COUN 60.2 Math Study Skills**

*0.5-3 units/up to 3 hours lecture. CR/NC option.* A step by step approach to develop effective study skills that lead to successful completion of college math classes. Topics include the importance of learning the language of math, note-taking skills, study and test preparation skills, effective test taking preparation, and strategies for word problems. Students will identify personal factors that affect their success in math. (CSU)  
*May be taken for a total of 4 units.*

### **COUN 60.3 Study Skills for Law Enforcement Students**

*1 unit/1 hour lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv.*

This class is designed to assist students planning to attend or attending the Intensive and Extended Law Enforcement Academies. The class provides a planned and specifically formatted instruction program, using instructional aides and materials directly related to the law enforcement academies. The class will focus on: time management and organizational skills, study skills (techniques to improve reading, note-taking, test-taking, memory skills), self-development strategies for success in the Academy (motivation, decision-making, learning styles, communication), optimal performance for P.O.S.T. and skills examinations and Academy/college resources. (CSU)

*May be taken for a total of 4 units.*

### **COUN 61 Introduction to Career Development**

*(Formerly GUID 61) 0.5-3 units/up to 3 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv.*

Instruction in the development of a career plan. Emphasis is on interest and personality testing, values clarification, career information, research skills, individual skills assessment, decision making, goal setting and the development of a career implementation plan. Changing job trends and needs and the procurement and retention of employment. (CSU)

*May be taken for a total of 4 units.*

#### **COUN 61.1 Job Search and Retention**

*(Formerly GUID 61.1) 0.5-1 unit/up to 1 hour lecture. CR/NC only. Recommended: Eligibility for Engl 100A or equivalent.*

Exploration of job market; use of letter of application, job application, resume, job interview; and skills necessary to find and retain employment. (CSU)

#### **COUN 61.2 Self-Paced Career Exploration**

*(Formerly GUID 61.2) 0.5-3 units/up to 9 hours by arrangement. CR/NC only. Recommended: Eligibility for English 100A or equiv.*

Self-paced instruction in career planning. Exploration of values, interests, capabilities, requirements of occupations, changing job trends; skills in finding and retaining a job. Students select from workshops, workbook assignments, interest inventories, and other activities to develop their own course. (CSU)

*May be taken for a total of 4 units.*

### **COUN 70 Theory, Techniques & Practices in Human Development**

*(Formerly GUID 70) 1-3 units/up to 3 hours lecture. CR/NC option.*

Study of theories, techniques, and practices regarding human development as they pertain to society, groups, family, and individual behavior. (CSU)  
CSU area E

*May be taken for a total of 6 units.*

### **COUN 72 Development of the Multifaceted Self**

*3 units/51 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv.*

This class will facilitate awareness of the self and of others through understanding of the multilayered, multicultural uniqueness of each person. Influences of ethnic heritage, nationality, gender, age, religion education, economic status, disabilities, and sexual preference contribute to the multifaceted individual. Although the focus will be on individual awareness, the broad categories of European American, Latino American, African American, and Asian American will be used to explore differences and similarities of the American culture. Issues regarding interactions at work, interactions at home, parenting, non-verbal communication, nutrition, health, and stress will be interwoven. This wide-ranging exploration should render an integrated awareness, contributing to individual self-confidence and improved communication. (CSU)

### **COUN 74 Identity and Cultural Diversity**

*(Formerly GUID 74) 3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv.*

A comparative and historical analysis of society and individual behavior from a multicultural perspective. An examination of U.S. American cultural groups and the various experiences and ideas that influence behavior. This course will explore the experiences of at least three of the following cultural groups: African, European, Asian, Latino and Native American. The relationship between personality development and culture, barriers to effective cross-cultural interaction and the development of communication styles will also be explored. (CSU)  
AA/AS areas D, G; CSU area D

### **COUN 80 Understanding the Transfer Process**

*(Formerly GUID 80) 0.5-3 units/up to 1 hour lecture. CR/NC only. Recommended: Eligibility for Engl 100A or ESL 314 (formerly Engl 314, Engl 114) or equivalent.*

Introduction to the transfer research process designed for planning long term educational and career goals. Evaluating universities, transfer requirements, application process, degrees offered, housing, financial aid, scholarships and supportive services. (CSU)

*May be taken for a total of 3 units.*

### **COUN 89 Ethical Issues in Human Services**

*1.5 units/3 hours lecture for 8 weeks. Grade only. Recommended: Eligibility for English 100A or equiv.*

This course presents the rules and standards governing the professional conduct of those working in human services delivery. Topics include professional ethics, confidentiality, physical and emotional abuse, and counselor/client rights and responsibilities. (CSU)

### **COUN 90 Introduction to Human Services**

*(Formerly GUID 90) 3 units/3 hours lecture. Grade only. Recommended: Eligibility for English 100A or equiv.*

An introduction to human services which involves a critical exploration of the history, theoretical development, defining problems and causes within the field of human services as well as the

characteristics and careers of a human service worker. The course will also study a variety of local agencies looking at the diverse population they serve, the politics and economics of the system and evaluation of the legal and social issues with such a delivery system. (CSU)

### **COUN 91 Skills and Techniques in Human Services**

*(Formerly GUID 91) 3 units/3 hours lecture. Grade only. Recommended: Eligibility for English 100A or equiv.*

An introduction to interview techniques on behalf of clients and Human Service agencies. Sensitivity and awareness of the needs of the client during an interview will be stressed. The course will cover interviewing children, the disabled and the aged. (CSU)

### **COUN 92 Introduction to Group Process**

*3 units/3 hours lecture. Grade only. Recommended: Eligibility for English 100A or equiv.*

An introduction to the dynamics of group interaction with emphasis upon the individual's firsthand experience as the group studies itself. The factors involved in problems of communication, effective emotional responses and personal growth will be highlighted. Emphasis will be placed on group process as a means of changing behavior. This course is designed to help persons who will function as leaders in a variety of small group situations. (CSU)

### **COUN 93 Introduction to Case Management**

*1.5 units/3 hours lecture for 8 weeks. Grade only. Recommended: Eligibility for English 100A or equiv.*

Students will develop a working knowledge of the various roles and duties of a Case Manager (CSU)

### **COUN 94 Intervention/Crisis Counseling Training**

*(Formerly GUID 201) 3 units/3 hours lecture. Grade only. Recommended: Eligibility for English 100A or equiv.*

Techniques used for intervention and crisis counseling, intake interviewing and referral will be studied and practiced. Special attention will be given to the question, "What is helpful?" and to the process of intervention; admitting and recording of information as it pertains to alcohol and drug abuse clients. Through an experiential format, participants will learn and practice skills in attentive listening, recognizing and responding to different levels of client communication. (CSU)

### **COUN 95 Advocate Training**

*(Formerly GUID 200) 3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100A.*

This course prepares the student to do advocacy work in the field of domestic violence - presenting a theoretical framework, investigating local resources and procedures, and developing advocate skills. (CSU)

### **COUN 96 Exploration Within the Field of Disability Studies**

*3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent.*

An introduction to disability which includes a critical exploration of the history, theoretical development, defining problems and causes within the field of disability studies. It will include the characteristics and careers of a disability services worker. The course will also study a variety of local agencies looking at the diverse population they serve, the politics and economics of the local, state and national systems, and evaluation of the legal and social issues of the system. (CSU)

### **COUN 97 Strategies for Working in Disability Services Agencies.**

*3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent.*

Learning, developing and applying strategies, tools and methods for effectively working in disability service agencies. The course will include counseling and group process techniques, implementing accommodations and understanding agency policies and procedures. This course uses a cross-cultural model of disability. (CSU)

### **COUN 98 Special Studies in Guidance**

*(Formerly GUID 98) 1-3 units/up to 1 hour lecture, 1 hour by arrangement. Grade only. Recommended: Eligibility for Engl 100A or equivalent.*

Seminars or individual conferences by arrangement to provide for independent study and enriched academic experience. (CSU)

*Independent study including 49 and 98 courses - 6 unit total.*

### **COUN 299 An Overview of Differences Between High School and College**

*0.5 unit/8 hours lecture for 1 week. CR/NC only.*

Provides a basic overview of differences between high school and college. Students will be given a general outlook of the certificate programs and the A.A./A.S. degree programs offered by Santa Rosa Junior College.

*May be taken for a total of 4 times.*

### **COUN 355 College Preparation Skills**

*(Formerly GUID 355) 1-3 units/up to 3 hours lecture. CR/NC option. Recommended: Concurrent enrollment in Engl 355.*

Combines study skills, college awareness, self-assessment, and educational planning. Encourages the individual's growth toward a college success program.

### **COUN 361 Introduction to Career Development for ESL Students**

*(Formerly GUID 361) 1-3 units/up to 3 hours lecture. CR/NC only.*

Exploration for ESL students of occupational choices and the job market in relationship to personal and vocational goals. Development of career planning for students that are uncertain about their educational and vocational goals.

*May be taken for a total of 6 units.*

### **COUN 366 Introduction to Career Development for ESL Students**

*1-3 units/up to 3 hours lecture for 16 weeks. CR/NC only.*

*Prerequisite: Eligibility for ESL 312 (formerly ENGL 312, ENGL 112). Corequisite: ESL 312 (formerly ENGL 312, ENGL 112), ESL 314 (formerly ENGL 314, ENGL 114), ESL 316 (formerly ENGL 316, ENGL 116), and ESL 318 (formerly ENGL 318). Recommended: Eligibility for ESL 312 (formerly Engl 312, Engl 112).*

Exploration for ESL students of occupational choices and the local job market in relationship to personal vocational goals and transferrable skills.

Development of career planning for students that are uncertain about their educational and vocational goals.

*May be taken for a total of 6 units.*

### **COUN 367 Introduction to Study Skills for ESL Students**

*1 unit/1 hour lecture for 16 weeks. CR/NC only. Prerequisite:*

*Eligibility for Engl 308. Corequisite: Engl 308, ESL 310 (formerly Engl 310, Engl 110), ESL 312 (formerly Engl 312, Engl 112), or ESL 314 (formerly Engl 314, Engl 114). Recommended: Eligibility for Engl 308.*

Course for students who speak English as a second language. Designed to develop good study techniques applicable in classroom environments at Santa Rosa Junior College.

*May be taken for a total of 2 units.*

### **COUN 370 College Orientation**

*(Formerly GUID 370) 0.5-1 unit/up to 8 hours lecture for 2 weeks. CR/NC only.*

Provides a basic overview of the programs and courses offered at the college, the services available to students, the college procedures and the college's expectations of students.

### **COUN 370.1 College Orientation for ESL Students**

*(Formerly GUID 370.1) 1 unit/1 hour lecture. CR/NC only.*

Course for students who speak English as a second language. Designed to help students establish fundamental relationships to instructional and student support services in the Santa Rosa Junior College environment.

*May be taken for a total of 2 units.*

### **COUN 371 Orientation to College Financial Aid**

*0.5-1 unit/up to 2 hours lecture for 8 weeks. CR/NC only.*

Orientation to financial aid programs and issues; explanation of related college policies and procedures. Recommended for students currently applying for financial aid or prospective applicant upon transfer.

operation. Emphasis on the supervisor's responsibility to maintain a sanitary and safe work environment. (CSU)

### **CULT 51A Introduction to Commercial Food Production**

*4 units/3 hours lecture, 4 hours laboratory. Grade only.*

*Prerequisite: Eligibility for enrollment in Engl 100A or equivalent. Recommended: Eligibility for Engl 100A or equivalent. Concurrent enrollment in Cult 50.*

Basics of commercial food production. Lecture and labs to provide foundation of knowledge, skills and attitudes required for successful employment as a cook. (CSU)

### **CULT 51B Introduction to Commercial Food Production**

*4 units/3 hours lecture, 4 hours laboratory. Grade only.*

*Prerequisite: CULT 51A Recommended: Eligibility for Engl 100A or equivalent.*

Continuation of basics of commercial food production. Lecture and laboratory to provide foundation of knowledge, skills and attitudes required for successful employment as a cook. Planning and execution of menus for small groups. (CSU)

### **CULT 52 Introduction to Professional Cookery**

*7 units/4 hours lecture, 9 hours laboratory. Grade only.*

*Recommended: Eligibility for enrollment in Engl 100A or equivalent.*

Lecture and laboratory to provide foundation of knowledge, skills and attitudes required for successful employment as a cook. (CSU)

### **CULT 53 Practical Professional Cookery**

*4 units/2 hours lecture, 6 hours laboratory, 0.5 hour by arrangement. Grade only. Recommended: Eligibility for ENGL 100A*

Practical student-run restaurant experience. Students rotate through the stations of a student-run restaurant, refining culinary skills in hot and cold food production, portion control, plating techniques, food and environmental safety and sanitation, and concepts of teamwork. (CSU)

*May be taken for a total of 8 units within 4 semesters.*

### **CULT 54 Introduction to Baking**

*4 units/3 hours lecture, 4 hours laboratory. Grade only.*

*Recommended: Eligibility for Engl 100A or equivalent.*

Study and practical application of basic baking techniques and science, designed for the beginner. Precise instruction on measuring, preparation and baking. Demonstration of different baking approaches and simple desserts, basic formulas and conversion principles. American/European techniques. (CSU)

### **CULT 55 Food Science**

*3 units/2 hours lecture, 4 hours laboratory. Grade only.*

*Recommended: Eligibility for Engl 100A or equivalent.*

Study of chemical and physical properties of foods and their interaction when manipulated and/or cooked. Factors which affect food quality are investigated through lecture, laboratory experiments and demonstration. Identification and comparison of food products. (CSU)

## **Culinary Training**

### **CULT 50 Sanitation & Safety**

*2 units/2 hours lecture. Grade only. Recommended:*

*Eligibility for Engl 100A or equivalent.*

The basic principles of sanitation and safety and the application of these principles to a food service

**CULT 60 Orientation to the Food Service Industry**

2 units/2 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent. Provides overview of the rapidly growing food service industry from "fast food" to "haute cuisine" including institutional feeding programs. History of food preparation, an examination of the literature relating food and culture, origins of regional and ethnic cuisines, terminology, legal aspects and emerging trends in the industry. (CSU)  
May be taken for a total of 4 units.

**CULT 61.1 Commercial Food Preparation**

1-12 units/up to 4 hours lecture, 24 hours laboratory. Grade only. Prerequisite: CULT 50A, 51A, 51B, 54, 55, 258 (formerly CULT 58), and 60. Basic concepts and techniques of cold food preparation. Culinary skills are advanced through daily production of food. Students continue to rotate among the stations of a commercial kitchen. Emphasis is on the refinement of basic skill through repetition and practice. (CSU)

**CULT 61.2 Commercial Food Preparation**

1-12 units/up to 4 hours lecture, 24 hours laboratory. Grade only. Prerequisite: Cult 50, 51A, 51B, 54, 55, 258 (formerly Cult 58) and 60. Fundamentals of commercial food preparation emphasizing practical experience. Members of the class rotate through the stations of a kitchen, developing cooking skills in hot food production, learning portion control, proper plating of food, environmental sanitation, industrial safety and the concepts of teamwork. (CSU)

**CULT 62 Meat/Fish Cutting & Identification**

3 units/2 hours lecture, 3 hours laboratory. Grade only. Prerequisite: Acceptance into Culinary Training Program. Fundamentals of red meat and seafood: identification, selection, handling and basic prefabrication. Utilization and care of hand and machine tools is stressed. (CSU)

**CULT 63 Advanced Professional Cookery**

2 units/1 hour lecture, 3 hours laboratory. Grade only. Prerequisite: CULT 51B or 52 or equivalent. Recommended: Eligibility for English 100A or equiv. Advanced practices in commercial food production. Building on basic culinary knowledge, the student will learn and apply through lecture, demonstration, and laboratory advanced classical and modern culinary techniques. (CSU)

**CULT 64 Advanced Baking**

2 units/1 hour lecture, 4 hours laboratory. Grade only. Prerequisite: Completion of CULT 54. Recommended: Eligibility for English 100A or equiv. Building on introductory baking skills, students prepare baked goods with emphasis on skill development and refinement of technique. (CSU)  
May be taken for a total of 4 units.

**CULT 68 Charcuterie Garde Manger Preparation**

1-2 units/up to 2 hours lecture. Grade only. Prerequisite: Acceptance into Culinary Training Program. Advanced instruction in cold food preparation and presentation techniques. The class concentrates on

the refinement of decorations for cold buffet showpieces. (CSU)  
May be repeated with different topics.

**CULT 69 Restaurant Record Keeping/Kitchen Management**

1-2 units/up to 2 hours lecture. Grade only. Instruction in records maintenance for food and beverage industry, purchasing, pricing and sales, receiving and storage, inventory, cash records, payroll, filing systems and correspondence and government regulation of restaurant. (CSU)  
May be repeated with different topics.

**CULT 86 Cultural Foods**

(Formerly FDNT 86) 1.5-3 units/up to 2 hours lecture, 4 hours laboratory. Grade only. Recommended: Interest in other cultures and/or cooking. Knowledge of distinctive foods, eating habits, holiday customs and traditions of many different cultures. Preparation of representative foods with emphasis on identification of ingredients, comparison of cuisines, application of flavor principles to creative cooking and artistic presentation of food. (CSU)

**CULT 99I Occupational Work Experience-Intern Program**

1-8 units/up to 40 hours by arrangement. Grade only. Occupational Work Experience Internship is supervised employment extending classroom learning at an on-the-job learning station relating to the student's educational or occupational goal. May be repeated for a total of sixteen (16) units, four (04) units maximum per semester (Repeat Code 25 for all Parallel Plans). Must be enrolled in 7 units including Work Experience units (for summer school - Work Experience and one other course). Alternate Plan - designed to offer students opportunities to attend college full-time one semester and work full-time the following semester. Job experience must relate directly to the student's educational goals. Up to eight (08) units may be earned in one semester. Students may not be enrolled in more than one other course or transfer from Alternate to Parallel or vice-versa without completing 7 units between plans. (CSU)  
May be taken for a total of 16 units.

**CULT 186 Cultural Foods**

1.5-3 units/up to 2 hours lecture, 4 hours laboratory. CR/NC option. Recommended: Interest in other cultures and/or cooking. Knowledge of distinctive foods, eating habits, holiday customs, and traditions of many cultures. Preparation of representative foods with emphasis on identification of ingredients, comparison of cuisines, application of flavor principles to creative cooking, and artistic presentation of food.

**CULT 200.1 Entrees - Poultry Cookery**

(Formerly CULT 221.5) 0.5 unit/1.5 hours lecture, 2 hours laboratory for 4 weeks. CR/NC option. Professional chef presents theory, demonstrates techniques, & supervises and critiques student preparation of a variety of poultry dishes including chicken, duck, and turkey. Students practice a variety

of cooking techniques as they apply to poultry and will prepare accompanying sauces and side dishes. May be taken for a total of 2 times.

**CULT 200.2 Entrees - Poultry Cookery II**

(Formerly CULT221.35) 0.5 unit/1.5 hours lecture, 2 hours laboratory for 4 weeks. CR/NC option. Recommended: Basic cooking knowledge. Professional chef presents theory, demonstrates techniques, & supervises and critiques student preparation of a variety of advanced poultry dishes including chicken, duck and game birds. Students practice a variety of cooking techniques as they apply to poultry and will prepare accompanying sauces and side dishes. May be taken for a total of 2 times.

**CULT 200.4 Meat Cookery**

0.5 unit/1.5 hours lecture, 2 hours laboratory for 4 weeks. CR/NC option. Professional chef presents theory, demonstrates techniques and supervises and critiques student preparation of a variety of meat dishes including beef, pork, and chicken. Students practice a variety of cooking techniques as they apply to meat and will prepare accompanying sauces and side dishes. May be taken for a total of 2 times.

**CULT 200.5 Meat Cookery II**

0.5 unit/1.5 hours lecture, 2 hours laboratory for 4 weeks. CR/NC option. Professional chef presents theory, demonstrates techniques and supervises and critiques student preparation of a variety of meat dishes including lamb, veal, and game. Students practice a variety of cooking techniques as they apply to meat and will prepare accompanying sauces and side dishes. May be taken for a total of 2 times.

**CULT 200.6 Seafood and Shellfish**

(Formerly CULT221.29) 0.5 unit/1.5 hours lecture, 2 hours laboratory for 4 weeks. CR/NC option. Professional chef presents theory, demonstrates techniques, & supervises and critiques student preparation of a variety of fish and shellfish dishes including salmon, rockfish, prawns and mussels. Students apply a variety of cooking techniques as they apply to fish and shellfish and will prepare accompanying sauces and side dishes. May be taken for a total of 2 times.

**CULT 200.8 Entrees - Seasonal Vegetarian Cookery**

0.5 unit/1.5 hours lecture, 2 hours laboratory for 4 weeks. CR/NC option. Professional chef will lead an exploration into the world of seasonal vegetarian cookery. This course will emphasize the use of fresh local products and utilize them in the preparation of Mediterranean, Asian, and Latin recipes. May be taken for a total of 2 times.

### **CULT 200.9 Entrees - Pasta Cookery**

*0.5 unit/1.5 hours lecture, 2 hours laboratory for 4 weeks. CR/NC option.*

Professional chef presents theory, demonstrates techniques, and supervises and critiques student preparation of a variety of pasta dishes. Students will prepare fresh pasta as well as dry pasta to create delicious entrees. A variety of sauces, meats, fish and vegetables will be prepared to accompany the pasta entrees.

*May be taken for a total of 2 times.*

### **CULT200.10 Entrees - Game Cookery**

*0.5 unit/1.5 hours lecture, 2 hours laboratory for 4 weeks. CR/NC option.*

Professional chef presents theory, demonstrates techniques, and supervises and critiques student preparation of a variety of game dishes including pheasant, venison, rabbit and small game birds. Students apply a variety of cooking techniques as they apply to game and will prepare accompanying sauces and side dishes.

*May be taken for a total of 2 times.*

### **CULT200.11 Hors D'oeuvres**

*(Formerly CULT221.25) 0.5 unit/1.5 hours lecture, 2 hours laboratory for 4 weeks. CR/NC option.*

Professional chef presents theory, demonstrates techniques, & supervises and critiques student preparation of a variety of hors d'oeuvres, appetizers, and first course dishes. This course will focus on the production of baked appetizers, using a variety of doughs, vegetables, meat, shellfish, and cheeses.

*May be taken for a total of 2 times.*

### **CULT200.12 Foundations, Beginnings: Stocks, Soups & Sauces**

*(Formerly CULT 221.9) 0.5 unit/1.5 hours lecture, 2 hours laboratory for 4 weeks. CR/NC option.*

Professional chef presents theory, demonstrates techniques, & supervises and critiques student preparation of a variety of stocks, soups, and sauces. Students practice a variety of cooking techniques as they apply to stocks, soups, and sauces and will prepare appropriate accompaniments.

*May be taken for a total of 2 times.*

### **CULT200.13 Salads and Salad Dressings**

*0.5 unit/1.5 hours lecture, 2 hours laboratory for 4 weeks. CR/NC option.*

Professional chef presents theory, demonstrates techniques, and supervises and critiques student preparation of a variety of salads and salad dressings including green salads, composed salads, meat and fish salads, grain, pasta, and bean salads, vinaigrettes and creamy dressings. Students practice a variety of cooking techniques as they apply to first course, side dish and entree salads.

*May be taken for a total of 2 times.*

### **CULT200.14 Garde Manger**

*(Formerly CULT221.24) 0.5 unit/1.5 hours lecture, 2 hours laboratory for 4 weeks. CR/NC option.*

Professional chef provides students with a foundation in Garde Manger, or the cold kitchen. Basic salad preparations, vinaigrettes, emulsified and non-emulsified dressings, cold sauces, salad condiments,

sandwiches, canapes, cold hors d'oeuvres and their proper use.

*May be taken for a total of 2 times.*

### **CULT200.17 The Art of Buffet Entertaining**

*(Formerly CULT221.32) 0.5 unit/1.5 hours lecture, 2 hours laboratory for 4 weeks. CR/NC option. Recommended: Basic cooking knowledge.*

Professional chef presents theory, demonstrates techniques, & supervises and critiques student preparation of a variety of buffet presentations. Students apply a variety of techniques and exercise their creativity by identifying themes and then creating menus, displays, and decorations with these themes in mind.

*May be taken for a total of 2 times.*

### **CULT200.18 The Art of Plate Presentation**

*0.5 unit/1.5 hours lecture, 2 hours laboratory for 4 weeks. CR/NC option.*

Professional chef presents theory, demonstrates techniques, supervises & critiques student preparation of a variety of plate presentation techniques. Students apply a variety of techniques as they practice the art of food presentation including the use of colors, shapes, textures, and arrangement of the foods.

*May be taken for a total of 2 times.*

### **CULT 205.2 Introduction to Food and Wine Pairing**

*(Formerly CULT221.50) 1 unit/1.5 hours lecture, 2 hours laboratory for 8 weeks. CR/NC option. Prerequisite: Must be 21 year or older.*

An introduction to the concepts involved in food and wine pairing through formal tasting, cooking, and lectures. Students are taught how to use sensory abilities to identify those ingredients in both food and wine that complement each other.

*May be taken for a total of 4 units.*

### **CULT 210.1 Quick Breads**

*(Formerly CULT221.19) 0.5 unit/1.5 hours lecture, 2 hours laboratory for 4 weeks. CR/NC option.*

Professional chef demonstrates techniques and supervises student preparation of sweet and savory quick breads including coffee cakes, muffins, scones, biscuits, soda breads, and corn breads.

*May be taken for a total of 2 times.*

### **CULT 210.2 Pastry: Chocolate**

*(Formerly CULT221.20) 0.5 unit/1.5 hours lecture, 2 hours laboratory for 4 weeks. CR/NC option.*

Professional chef presents theory, demonstrates techniques, & supervises and critiques student preparation of a variety of chocolate products.

*May be taken for a total of 2 times.*

### **CULT 210.3 Holiday Desserts**

*(Formerly CULT221.21) 0.5 unit/1.5 hours lecture, 2 hours laboratory for 4 weeks. CR/NC option.*

Professional chef presents theory, demonstrates techniques, and supervises and critiques student preparation of holiday desserts such as Buche de Noel, fancy cookies, ethnic breads, and puddings.

*May be taken for a total of 2 times.*

### **CULT 210.4 Cake Decorating**

*(Formerly CULT221.22) 0.5 unit/1.5 hours lecture, 2 hours laboratory for 4 weeks. CR/NC option.*

Professional chef demonstrates technique and supervises student preparation of specialty cakes. A variety of cake decorating tools will be used such as French buttercream, molding, buttercream, royal icing, poured fondant, rolled fondant, marzipan, pastillage, and chocolate. Emphasis will be on perfecting basic cake assembly, frosting, and piping as well as flowers, chocolate borders, and writing.

*May be taken for a total of 2 times.*

### **CULT 210.5 Wedding Cakes**

*(Formerly CULT221.30) 0.5 unit/1.5 hours lecture, 2 hours laboratory for 4 weeks. CR/NC option. Recommended: CULT 54 or consent of instructor.*

Demonstration and student construction of contemporary type cakes, buttercreams and glazes, garnishes of fresh flowers, plain borders and drapes. Includes logistics of transport and pricing.

*May be taken for a total of 2 times.*

### **CULT 210.6 Pies and Tarts**

*(Formerly CULT221.47) 0.5 unit/1.5 hours lecture, 2 hours laboratory for 4 weeks. CR/NC option.*

Professional chef demonstrates technique and supervises student preparation of pies and tarts including sweet and savory doughs such as pate sucree, pasta frolla, pie crust, pate brisee, and filling such as pastry cream, frangipane, and lemon curd. Emphasis will be on perfecting tart shell molding, single and double-crust pies, and free-form tarts.

*May be taken for a total of 2 times.*

### **CULT 210.7 Yeast Bread**

*(Formerly CULT221.48) 0.5 unit/1.5 hours lecture, 2 hours laboratory for 4 weeks. CR/NC option.*

Professional chef demonstrates techniques and supervises student preparation of yeasted breads, including sourdough starter breads such as French Country Bread, and Pain au Levain, as well as commercially yeasted breads from Pizza and Focaccia to 100% Whole Wheat Bread and Brioche. Emphasis will be on working with yeast and perfecting the manual techniques of braiding, rolling and shaping loaves.

*May be taken for a total of 2 times.*

### **CULT 210.8 Flatbread from Around the World**

*(Formerly CULT221.51) 0.5 unit/1.5 hours lecture, 2 hours laboratory for 4 weeks. CR/NC option.*

Professional chef demonstrates techniques and supervises student preparation of yeasted and non-yeasted flatbreads including Pita, Lavash, Chapatti, and Matzoh. Emphasis will be on working with a variety of flours and grains and on perfecting the manual techniques of shaping and proper baking of a diverse number of flatbreads such as Naan, Tortillas, Fougasse, and others from around the world.

*May be taken for a total of 2 times.*

### **CULT 215.1 How to Cook-a Class for Absolute Beginners**

(Formerly CULT221.49) 1 unit/1.5 hours lecture, 2 hours laboratory for 8 weeks. CR/NC option.

An introductory class in basic food preparation, designed for students with little or no knowledge of cooking techniques, including everything from setting up a kitchen at home to healthful and familiar beginner's recipes using many quick and easy techniques.

May be taken for a total of 2 times.

### **CULT 215.2 Summer Grilling and Barbecuing**

(Formerly CULT221.46) 0.5 unit/1.5 hours lecture, 2 hours laboratory for 4 weeks. CR/NC option.

Professional chef presents theory, demonstrates techniques, & supervises and critiques student preparation of grilled and barbecued foods, with an emphasis on fresh local products. Course will cover meat, poultry, fish, seafood, fresh produce, marinades, sauces and salsas.

May be taken for a total of 2 times.

### **CULT 215.3 California Low-Fat Cooking**

(Formerly CULT221.43) 0.5 unit/1.5 hours lecture, 2 hours laboratory for 4 weeks. CR/NC option.

Study and preparation of contemporary low-fat food using the bountiful supply of food products available in California. New recipe ideas as well as methods of modifying existing recipes to create lower fat dishes will be addressed. Course will cover appetizers, entrees, side dishes, breads, and desserts.

May be taken for a total of 2 times.

### **CULT 220 The Arts of the Professional Chef**

(Formerly CULT 320) 1 unit/3 hours lecture for 6 weeks. CR/NC option. Recommended: Knowledge of basic cooking techniques.

Six professional chefs lecture and demonstrate food preparation and food presentation. Each semester's offering presents new chefs and learning experiences.

May be taken for a total of 4 units.

### **CULT 221 Selected Topics in Professional Food Preparation**

(Formerly CULT 321) 0.5-2 units/up to 1.5 hours lecture, 2 hours laboratory. CR/NC option.

Professional chefs present theory, demonstrate techniques, supervise production and critique student production of a variety of foods.

May be repeated with different topics.

### **CULT 222 A Cook's Tour of Sonoma**

2 units/1.5 hours lecture, 2 hours laboratory. CR/NC option.

An introduction to the concept of a regionally based diet with an emphasis on the spectrum of foods grown and produced in Sonoma County. Includes lectures, field trips, tastings with demonstrations and hands-on preparation using local ingredients. Cost \$40.00.

May be taken for a total of 4 units.

### **CULT 225.1 Basic Mexican Cuisine I**

(Formerly CULT287.17) 1 unit/1.5 hours lecture, 2 hours laboratory for 8 weeks. CR/NC option. Recommended: Basic cooking knowledge.

Selection of ingredients and preparation of Mexican

foods. Introductory class in the use of peppers and spices and the preparation of tortilla dishes, soups, stews, breads, and pastries.

May be taken for a total of 2 times.

### **CULT 240.1 Basic Italian Cuisine I**

(Formerly CULT 287.9) 1 unit/1.5 hours lecture, 2 hours laboratory for 8 weeks. CR/NC option. Recommended: Basic cooking knowledge.

Introductory class in the historical background and culture of Italian Cuisine. Preparation of basic Italian soups, sauces, vegetables, pastas, and desserts.

May be taken for a total of 2 times.

### **CULT 240.2 Italian Cuisine II**

(Formerly CULT287.10) 1 unit/1.5 hours lecture, 2 hours laboratory for 8 weeks. CR/NC option. Recommended: Basic cooking knowledge.

Instruction in the preparation of classic Italian cuisine with emphasis on meat, fish and fowl. Use of various Italian cold cuts.

May be taken for a total of 2 times.

### **CULT 250 Sanitation and Safety**

1 unit/1 hour lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent.

The basic principles of food safety and sanitation and the application of these principles in a food service operation. Includes instruction on sanitation regulations and personal hygiene, contamination sources, microorganisms and conditions for growth, proper food handling techniques and storage, development of a comprehensive cleaning and sanitizing program to prevent foodborne illnesses, and basic concepts of workplace safety. Upon completion students will be prepared to take the ServSafe certification test.

### **CULT 250.1 Culinary Arts Survey**

1 unit/1 hour lecture. Grade only. Recommended: Eligibility for Engl 100A & CSXL 372.

Introduction to fundamentals of the culinary arts, including culinary history, terminology, culinary mathematics, palate development, and food anthropology.

### **CULT 252.1 Principles of Vegetarian Cooking**

1 unit/1.5 hours lecture, 2 hours laboratory for 8 weeks. CR/NC option.

Eating plan for vegetarian diets with review of nutrition concepts such as complementary proteins and alternative sources of necessary nutrients. Laboratory experiences include preparation and evaluation of meatless dishes and meals based on seasonally available, local organically grown products.

### **CULT 252.2 Chinese Vegetarian Cuisine**

1 unit/1.5 hours lecture, 2 hours laboratory for 8 weeks. CR/NC option.

Introduction to the fundamental cooking techniques and ingredients of traditional Chinese vegetarian cooking. Emphasis on selection and preparation of healthy ingredients.

### **CULT 252.3 Knife Skills**

2 units/6 hours laboratory. Grade only. Prerequisite: Completion of or concurrent enrollment in CULT 250; OR completion of or concurrent enrollment in CULT 50.

Recommended: Eligibility for Engl 100A or equivalent.

Professional chef presents theory, demonstrates techniques, and supervises and critiques students' practice and mastery of basic knife skills, with an introduction to vegetable preparation. Emphasis is placed on proper sanitation practices and developing good motor skills.

### **CULT 252.4 Stocks, Soups & Sauces**

0.5 unit/0.5 hour lecture, 1.5 hours laboratory for 8 weeks. Grade only. Prerequisite: Completion of or concurrent enrollment in CULT 252.3, and completion of or concurrent enrollment in CULT 250.1. Recommended: Eligibility for Engl 100A or equivalent.

Further development of the student's knife skills with emphasis on speed and precision. Introduction to stocks, soups, and sauces. Emphasis is placed on sanitation and safety, and developing good motor skills.

Further development of the student's knife skills with emphasis on speed and precision. Introduction to stocks, soups, and sauces. Emphasis is placed on sanitation and safety, and developing good motor skills.

### **CULT 252.5 Grains, Legumes, Potatoes & Pasta**

0.5 unit/0.5 hour lecture, 1.5 hours laboratory for 8 weeks. Grade only. Prerequisite: Completion of or concurrent enrollment in CULT 252.3, and completion of or concurrent enrollment in CULT 250.1. Recommended: Eligibility for Engl 100A or equivalent.

Further development of the student's knife skills. Instruction includes cooking procedures for pasta, potatoes, grains and legumes.

Further development of the student's knife skills.

Instruction includes cooking procedures for pasta, potatoes, grains and legumes.

### **CULT 252.6 Vegetarian Cookery**

0.5 unit/0.5 hour lecture, 1.5 hours laboratory for 8 weeks. Grade only. Prerequisite: Completion of or concurrent enrollment in CULT 252.3, and completion of or concurrent enrollment in CULT 250.1. Recommended: Eligibility for Engl 100A or equivalent.

Further development of the student's knife skills with emphasis on speed and precision. Instruction includes fundamentals of vegetarian cookery.

Further development of the student's knife skills with emphasis on speed and precision. Instruction includes fundamentals of vegetarian cookery.

### **CULT 252.7 Meat, Fish & Poultry Identification & Fabrication**

0.5 unit/0.5 hour lecture, 1.5 hours laboratory for 8 weeks. Grade only. Prerequisite: Completion of or concurrent enrollment in CULT 252.3, and completion of or concurrent enrollment in CULT 250.1. Recommended: Eligibility for Engl 100A or equivalent.

A practical course focusing on the proper receiving, inspection, fabrication, and distribution of meats, poultry, fish, and shellfish. Includes further development of the student's knife skills. Sanitation, handling, and storage procedures are stressed.

A practical course focusing on the proper receiving, inspection, fabrication, and distribution of meats, poultry, fish, and shellfish. Includes further development of the student's knife skills. Sanitation, handling, and storage procedures are stressed.

### **CULT 252.8 Fundamentals of Grilling and Roasting**

1 unit/0.5 hour lecture, 1.5 hours laboratory. Grade only. Prerequisite: Completion of or concurrent enrollment in CULT 250.1, and completion of or concurrent enrollment in CULT 252.3. Recommended: Eligibility for Engl 100A or equivalent.

Introduction to fundamentals of dry-heat cooking methods: grilling and roasting. Emphasizes speed, timing, and teamwork.

### **CULT 252.9 Fundamentals of Sauteing and Panfrying**

*1 unit/0.5 hour lecture, 1.5 hours laboratory. Grade only. Prerequisite: Completion of or concurrent enrollment in CULT 250.1, and completion of or concurrent enrollment in CULT 252.3. Recommended: Eligibility for Engl 100A or equivalent.* Course provides an introduction to the fundamentals of sauteing, deep-frying, and panfrying. Emphasizes speed, timing, and teamwork.

### **CULT 252.10 Fundamentals of Poaching and Steaming**

*0.5 unit/0.5 hour lecture, 1.5 hours laboratory for 8 weeks. Grade only. Prerequisite: Completion of or concurrent enrollment in CULT 250.1, and completion of or concurrent enrollment in CULT 252.3. Recommended: Eligibility for Engl 100A or equivalent.* Introduction to fundamentals of moist-heat cooking methods: poaching and steaming. Emphasizes speed, timing, and teamwork

### **CULT 252.11 Fundamentals of Braising and Stewing**

*0.5 unit/0.5 hour lecture, 1.5 hours laboratory for 8 weeks. Grade only. Prerequisite: Completion of or concurrent enrollment in CULT 250.1, and completion of or concurrent enrollment in CULT 252.3. Recommended: Eligibility for Engl 100A or equivalent.* Course provides an introduction to the fundamentals of braising and stewing. Emphasizes speed, timing, and teamwork.

### **CULT 252.12 Breakfast Cookery**

*0.5 unit/0.5 hour lecture, 1.5 hours laboratory for 8 weeks. Grade only. Prerequisite: Completion of or concurrent enrollment in CULT 250.1, and completion of or concurrent enrollment in CULT 252.3. Recommended: Eligibility for Engl 100A or equivalent.* Hands-on approach to the fundamentals of breakfast and egg cookery. Focus on egg cookery, selection and preparation of breakfast meats, and preparation of pancakes and waffles. Healthier choices include cereals and fresh fruit preparations.

### **CULT 252.13 Fundamentals of Garde Manager**

*1 unit/0.5 hour lecture, 1.5 hours laboratory. Grade only. Prerequisite: Completion of or concurrent enrollment in CULT 250.1, and completion of or concurrent enrollment in CULT 252.3. Recommended: Eligibility for Engl 100A or equivalent.* Provides cold kitchen fundamentals, including equipment sanitation and safety, production, salads, emulsified and non-emulsified dressings, sandwiches, cold sauces, salad condiments. Emphasizes speed, timing, and teamwork.

### **CULT 253.1 Practical Kitchen Preparation**

*2 units/1 hour lecture, 3 hours laboratory. Grade only. Prerequisite: Completion of or concurrent enrollment in CULT 250; OR completion of or concurrent enrollment in CULT 50. Recommended: Eligibility for Engl 100A or equivalent.* Under supervision of chef instructor, students practice basic knife skills and introductory cooking techniques in a production kitchen environment. Includes preparing mise en place for stations in working kitchen.

### **CULT 253.2 Culinary Cafe Kitchen I**

*2 units/1 hour lecture, 3 hours laboratory. Grade only. Prerequisite: Completion of or concurrent enrollment in CULT 252.4, and completion of or concurrent enrollment in CULT 252.5, and completion of or concurrent enrollment in CULT 252.6, and completion of or concurrent enrollment in CULT 252.7, and completion of or concurrent enrollment in CULT 252.8, and completion of or concurrent enrollment in CULT 252.9, and completion of or concurrent enrollment in CULT 252.10, and completion of or concurrent enrollment in CULT 252.11, and completion of or concurrent enrollment in CULT 252.12, and completion of or concurrent enrollment in CULT 252.13. Recommended: Eligibility for Engl 100A or equivalent.*

Students develop hands-on skills while rotating through various stations in kitchen of a student-run restaurant and preparing lunch for the public café.

### **CULT 253.3 Culinary Cafe Kitchen II**

*2 units/1 hour lecture, 3 hours laboratory. Grade only. Prerequisite: Completion of or concurrent enrollment in CULT 253.2. Recommended: Eligibility for Engl 100A or equivalent.* Provides further hands-on experience in a production kitchen. Students assume responsibility for various stations in a production kitchen of a student-run restaurant. Emphasis is on refining culinary skills and the ability to manage, mentor and instruct others.

### **CULT 253.4 Practical Kitchen Management**

*1 unit/0.5 hour lecture, 1.5 hours laboratory. Grade only. Prerequisite: Completion of or concurrent enrollment in CULT 253.2. Recommended: Eligibility for Engl 100A or equivalent.* Introduction to basic kitchen management procedures, including ordering, receiving and delivery procedures, menu planning and cost analysis, and inventory control. The student will organize and manage a station in the Culinary Café.

### **CULT 254.1 Introduction to Baking & Pastry**

*2 units/2 hours lecture. Grade only. Prerequisite: Completion of or concurrent enrollment in CULT 250, and completion of or concurrent enrollment in CULT 250.1; OR completion of or concurrent enrollment in CULT 50, and completion of or concurrent enrollment in CULT 250.1. Recommended: Eligibility for Engl 100A or equivalent.*

Introduction to the fundamental skills, concepts, and techniques of baking and pastry for the commercial kitchen. Precise instruction on measuring, preparation, basic formulas, and conversion principles. Overview of production techniques for a variety of baked goods.

### **CULT 254.2 Baking Skills Lab**

*2 units/1 hour lecture, 3 hours laboratory. Grade only. Prerequisite: Completion of or concurrent enrollment in CULT 254.1. Recommended: Eligibility for Engl 100A or equivalent.* Introduction to basic bread making and pastry techniques. The student will also learn basic pastry doughs, pastry cream, and pie and tart fillings. Muffins, quickbreads, scones, and biscuits will be prepared, as well as basic cakes and icings. Cake assembly and basic decoration techniques will be practiced.

### **CULT 254.3 Production Baking**

*2 units/1 hour lecture, 3 hours laboratory. Grade only. Prerequisite: Completion of or concurrent enrollment in CULT 254.2. Recommended: Eligibility for Engl 100A or equivalent.* Building on introductory baking skills, students

prepare a variety of desserts and baked goods for retail sale. Emphasis on skill development, refinement of technique, and speed building.

### **CULT 254.4 Purchasing and Bakeshop Management**

*1 unit/1 hour lecture. Grade only. Prerequisite: Completion of or concurrent enrollment in CULT 254.3. Recommended: Eligibility for Engl 100A or equivalent.* Introduction to basic bakeshop management procedures, including ordering, receiving and delivery procedures, recipe planning and cost analysis, and inventory control. The students will organize and manage the bakeshop in the Culinary Café.

### **CULT 254.6 Bread Baking**

*1 unit/0.5 hour lecture, 1.5 hours laboratory. Grade only. Prerequisite: Completion of or concurrent enrollment in CULT 254.2. Recommended: Eligibility for Engl 100A or equivalent.* Building on introductory baking skills, students prepare yeast breads with emphasis on skill development and refinement of technique. Emphasis on working with yeast, expanding knowledge of ingredients, mixing, shaping, and baking a variety of breads ranging from classic French and Italian loaves to topped and untopped flatbreads from around the world.

### **CULT 254.7 Puff Pastry, Danish, and Croissants**

*0.5 unit/0.5 hour lecture, 1.5 hours laboratory for 8 weeks. Grade only. Prerequisite: Completion of or concurrent enrollment in CULT 254.2. Recommended: Eligibility for Engl 100A or equivalent.* Building on introductory baking skills, students prepare laminated doughs with emphasis on skill development and refinement of technique. Emphasis on working with yeast, expanding knowledge of ingredients, mixing, shaping, and baking a variety of laminated dough products, including puff pastry, croissants, and Danish.

### **CULT 254.8 Tea Breads & Muffins**

*0.5 unit/0.5 hour lecture, 1.5 hours laboratory for 8 weeks. Grade only. Prerequisite: Completion of or concurrent enrollment in CULT 254.2. Recommended: Eligibility for Engl 100A or equivalent.* Building on introductory baking skills, students prepare a variety of quickbreads with emphasis on skill development and refinement of technique.

### **CULT 254.9 Cakes & Cake Decorating**

*1 unit/0.5 hour lecture, 1.5 hours laboratory. Grade only. Prerequisite: Completion of or concurrent enrollment in CULT 254.2. Recommended: Eligibility for Engl 100A or equivalent.* Building on introductory baking skills, students prepare and decorate a variety of cakes with emphasis on skill development and refinement of technique.

### **CULT 254.10 Tarts & Pies**

*1 unit/0.5 hour lecture, 1.5 hours laboratory. Grade only. Prerequisite: Completion of or concurrent enrollment in CULT 254.2. Recommended: Eligibility for Engl 100A or equivalent.* Building on introductory baking skills, students prepare a variety of tarts and pies with emphasis on skill development and refinement of technique.

### **CULT254.11 Chocolate Techniques**

*1 unit/0.5 hour lecture, 1.5 hours laboratory. Grade only. Prerequisite: Completion of or concurrent enrollment in CULT 254.2. Recommended: Eligibility for Engl 100A or equivalent.* Building on introductory baking skills, students prepare and decorate a variety of chocolates with emphasis on skill development and refinement of technique.

### **CULT254.12 Cookies, Candies, & Confections**

*0.5 unit/0.5 hour lecture, 1.5 hours laboratory for 8 weeks. Grade only. Prerequisite: Completion of or concurrent enrollment in CULT 254.2. Recommended: Eligibility for Engl 100A or equivalent.* Building on introductory baking skills, students prepare and decorate a variety of cookies, candies, and confections with emphasis on skill development and refinement of technique.

### **CULT254.13 Ice Cream, Custards, & Soft Desserts**

*1 unit/0.5 hour lecture, 1.5 hours laboratory. Grade only. Prerequisite: Completion of or concurrent enrollment in CULT 254.2. Recommended: Eligibility for Engl 100A or equivalent.* Building on introductory baking skills, students prepare a variety of soft desserts with emphasis on skill development and refinement of technique. Emphasis on ice creams, sorbets, custards, mousses, souffles and other frozen desserts.

### **CULT 256.1 Table Service I**

*0.5 unit/0.5 hour lecture, 1.5 hours laboratory for 8 weeks. Grade only. Prerequisite: Completion of or concurrent enrollment in CULT 250, and completion of or concurrent enrollment in CULT 250.1; OR completion of or concurrent enrollment in CULT 50, and completion of or concurrent enrollment in CULT 250.1. Recommended: Eligibility for Engl 100A or equivalent.* Introduction to the basic skills of table service with an emphasis on support positions, covering the role of table service in the food industry, and an introduction to the classical styles of service and their supporting equipment and staffing requirements.

### **CULT 256.2 Table Service II**

*2 units/6 hours laboratory. Grade only. Prerequisite: Completion of or concurrent enrollment in CULT 250, and completion of or concurrent enrollment in CULT 250.1; OR completion of or concurrent enrollment in CULT 50, and completion of or concurrent enrollment in CULT 250.1. Recommended: Eligibility for Engl 100A or equivalent.* Further development of table service skills, with an emphasis on waiting tables, banquet service, and host/hostess duties. P.O.S. system will be introduced.

### **CULT 256.3 Food & Beverage Operations**

*1 unit/1 hour lecture. Grade only. Prerequisite: Completion of or concurrent enrollment in CULT 250, and completion of or concurrent enrollment in CULT 250.1; OR completion of or concurrent enrollment in CULT 50, and completion of or concurrent enrollment in CULT 250.1. Recommended: Eligibility for Engl 100A.* Provides an introduction to food and beverage management in the food service operation. Introduces principles of menu design, cost control, inventory and record keeping, purchasing, receiving and storage, and marketing and sales.

### **CULT 256.4 Culinary Supervision & Leadership Skills**

*1 unit/0.5 hour lecture, 1.5 hours laboratory. Grade only. Prerequisite: Completion of or concurrent enrollment in CULT 250, and completion of or concurrent enrollment in CULT 256.2, and completion of or concurrent enrollment in CULT 256.3; OR completion of or concurrent enrollment in CULT 50, and completion of or concurrent enrollment in CULT 256.2, and completion of or concurrent enrollment in CULT 256.3. Recommended: Eligibility for Engl 100A or equivalent.* Introduces human resources and management aspects of the table service profession. Explores the proper way to staff, retain, and supervise employees. Lectures and practical exercises focus on writing a job description and evaluating employees, and on effective communication, leadership, and management styles. Includes an introduction to legal aspects of restaurant management.

### **CULT 256.5 Wine Appreciation**

*1 unit/0.5 hour lecture, 1.5 hours laboratory. Grade only. Prerequisite: Must be age 21 or older. Recommended: Eligibility for Engl 100A or equivalent.* The role of wine in professional food service and wine tasting operations. Through tasting, the student will develop an appreciation of different types of wine, including varietal characteristics and other components, in order to become an effective wine ambassador. Includes a field trip to a local winery.

### **CULT 256.6 Wine and food Affinities**

*1 unit/0.5 hour lecture, 1.5 hours laboratory. Grade only. Prerequisite: Must be age 21 or older. Recommended: Eligibility for Engl 100A or equivalent.* Food and wine pairing in professional food service operations. Through formal tasting, cooking, and lectures, students refine their sensory abilities to identify complementary ingredients in food and wine and investigate the "marriage" of food and wines. Includes in-class food and wine tasting and a field trip to a local winery.

### **CULT 256.7 Wine Service**

*0.5 unit/3 hours laboratory for 8 weeks. Grade only. Prerequisite: Must be age 21 or older. Recommended: Eligibility for Engl 100A or equivalent.* A hands-on introduction to professional wine service. Students develop effective sales and service techniques for tableside or winery tasting room service.

### **CULT 257.1 Practical Ware Washing**

*1 unit/3 hours laboratory. Grade only. Prerequisite: Completion of or concurrent enrollment in CULT 250; OR completion of or concurrent enrollment in CULT 50. Recommended: Eligibility for ENGL 100A or equivalent.* Provides practical experience in all aspects of ware washing in a working kitchen. Emphasis on sanitation and good work ethics.

### **CULT 257.2 Practical Kitchen Maintenance**

*1 unit/0.5 hour lecture, 1.5 hours laboratory. Grade only. Prerequisite: Completion of or concurrent enrollment in CULT 250; OR completion of or concurrent enrollment in CULT 50. Recommended: Eligibility for ENGL 100A or equivalent.* Practical experience maintaining a professional kitchen. Under supervision, the student will practice maintaining various pieces of commercial restaurant

equipment, clean and maintain refrigerators and freezers, maintain floors, maintain storage areas for back-of-the-house operation. Emphasis is placed on sanitation and safe use of cleaning solutions.

### **CULT 257.3 Practical Restaurant Maintenance**

*1 unit/0.5 hour lecture, 1.5 hours laboratory. Grade only. Prerequisite: Completion of or concurrent enrollment in CULT 250; OR completion of or concurrent enrollment in CULT 50. Recommended: Eligibility for ENGL 100A or equivalent.* Practical experience maintaining front-of-the-house operations, including a restaurant dining room and bar area. Under supervision, students will practice maintaining various pieces of commercial restaurant equipment and storage and public areas. Emphasis on sanitation and safe use of cleaning solutions.

### **CULT 258 Table Service**

*(Formerly CULT 58) 0.5-2 units/up to 1 hour lecture, 2 hours laboratory for 6 weeks. CR/NC option.* Overview of accepted standards of table service covering history, service techniques and methods, supervision in the dining room, terminology, legal aspects and emerging trends in the industry. *May be taken for a total of 2 units.*

### **CULT 259 Wine Training for Cooks**

*(Formerly CULT 359) 1.5 units/3 hours lecture for 8 weeks. CR/NC option. Prerequisite: Must be 21 years or older.* Wine industry, wine production methods with a focus on wine and food compatibility. Disciplined palate exercises and demonstrations by professional chefs.

### **CULT 265.1 Japanese Cuisine I**

*(Formerly CULT287.13) 1 unit/1.5 hours lecture, 2 hours laboratory for 8 weeks. CR/NC option. Recommended: Basic cooking knowledge.* Introductory class in preparation of basic Japanese dishes with emphasis on techniques, seasoning and presentation. *May be taken for a total of 2 times.*

### **CULT 270.1 Thai Cuisine**

*(Formerly CULT221.41) 0.5 unit/1.5 hours lecture, 2 hours laboratory for 4 weeks. CR/NC option.* Professional chef presents lectures on distinctive food patterns and dietary customs of Thailand. Demonstration and hands-on preparation of Thai cuisine. *May be taken for a total of 2 times.*

### **CULT 287 Selected Topics in Cultural Cuisine**

*(Formerly CULT 387) 1 unit/1.5 hours lecture, 2 hours laboratory for 8 weeks. CR/NC option. Prerequisite: Knowledge of basic cooking techniques.* Distinctive foods, food patterns, and customs as related to gourmet, regional, national, and international cuisines. *May be repeated with different topics.*



## Dental

### Dental Education (Assisting & Hygiene)

#### DE 50 Introduction to the Dental Profession

(Formerly DNA 60) 2 units/2 hours lecture. Grade only. Corequisite: DA 60 (formerly DE 52). Recommended: HLC 50 or ANAT 51 and eligibility for ENGL 100A, 104 or 1A, or equivalent.

An introduction to the roles, educational requirements, and legal responsibilities of each member of the dental health team. Discussion of current issues facing the dental profession and the roles and responsibilities of the various agencies influencing the practice of dentistry. Overview of the career opportunities available to the registered dental assistant and dental hygienist. (CSU)

#### DE 51 Occupational Health & Safety

2 units/2 hours lecture. Grade only. Prerequisite: Admission to Dental Assisting Program via application process; completion of or concurrent enrollment in HLC 50 or ANAT 51. Corequisite: DA 60 (formerly DE 52).

This course will survey the various agencies that are involved in making regulations and/or recommendations that affect dentistry. Students will compare state and federal OSHA regulations in the areas of Hazard Communication and the Bloodborne Pathogen Standard. An in-depth study of the requirements of the Cal/OSHA Bloodborne Pathogen Standard. (CSU)

#### DE 55A Introduction to Dental Radiology I

(Formerly DNA 65A) 2 units/1 hour lecture, 3 hours laboratory. Grade only. Corequisite: DE 51.

Instruction in the basic principles of radiography, history, protection and safety guidelines. Physics and biological effects of radiation for the patient's and operator's protection and comfort. Types of films, exposures and manual processing techniques on mannequins. The relationship of dental anatomy and facial structures to the exposure and mounting of films. (CSU)

#### DE 55B Dental Radiology II

(Formerly DNA 65B) 2 units/1 hour lecture, 3 hours laboratory. Grade only. Prerequisite: Completion of DE 55A (formerly DNA 65A) or equivalent with grade of C or better.

Instruction in the advanced techniques of dental radiology, anatomical landmarks, dental anatomy pertaining to dental radiography, exposure and processing faults. Emphasis is on evaluation of the quality of the films both intra- and extra-oral. Processing and maintaining automatic processors. Knowledge of panoramic techniques and other related radiographic equipment. (CSU)

## Dental Education - Assisting

#### DA 60 Applied Dental Science

(Formerly DE 52) 3 units/2 hours lecture, 3 hours laboratory. Grade only. Prerequisite: Admission to the Dental Assisting Program via application process. Corequisite: DE 51. Dental terminology, basic anatomy of the oral cavity, dental anatomy and physiology, oral embryology and histology, tooth morphology, classifications of cavities and restorations, preliminary oral inspection, charting conditions of the hard and soft tissues, taking and recording vital signs. The methods and techniques of sterilization and disinfection. (CSU)

#### DA 61 Introduction to Chairside Dental Assisting

(Formerly DNA 63) 3 units/4 hours lecture, 6 hours laboratory for 8 weeks. Grade only. Prerequisite: Admission to the Dental Assisting Program via application process. Corequisite: DE 51

Introduction to the role of the chairside dental assistant, preparing the patient for dental treatment, positioning of the patient, operator and assistant for four-handed and six-handed dentistry. Obtaining patient health history and vital signs, treatment planning and data gathering and medical emergencies. Instrument grasps/transfers, triplex syringe use, oral evacuation and retraction. Identification and use of hand instruments, equipment maintenance, tub and tray setups. (CSU)

#### DA 62 Introduction to Dental Procedures

(Formerly DNA 62) 3 units/4 hours lecture, 6 hours laboratory for 8 weeks. Grade only. Prerequisite: Admission to the Dental Assisting Program via application process. Corequisite: DE 51

Introduction to the oral environment and dental materials instruction in the properties, characteristics, and manipulation of dental materials. Instrumentation for operative dental procedures such as composite and amalgam restorations, crown and bridge procedures, veneering and bonding techniques. Mannequin instruction in preliminary impression technique. (CSU)

#### DA 63 Dental Specialties

(Formerly DNA 66) 3 units/2 hours lecture, 3 hours laboratory. Grade only. Prerequisite: DA 62 (formerly DNA 62).

Instruction in assisting and instrumentation for the following specialties in dentistry: orthodontics, endodontics, periodontics, removable prosthodontics, pediatric dentistry and oral maxillofacial surgery. Assisting in the administration of nitrous oxide. (CSU)

#### DA 64 Advanced Dental Assisting

(Formerly DNA 67) 2 units/1 hour lecture, 3 hours laboratory. Grade only. Prerequisite: DA 61 (formerly DNA 63).

Development of the pre-clinical skills required for the Registered Dental Assistant. Students are required to meet standards of competency for each required RDA task. Preparation for the practical component of the California Registered Dental Assistant examination. Mannequins are used for most instruction. (CSU)

#### DA 65 Dental Science II

(Formerly DNA 64) 3 units/2 hours lecture, 3 hours laboratory. Grade only. Prerequisite: DA 60 (formerly DE 52).

A foundation in dental pharmacology, oral pathology, dental nutrition, prevention, education and community health. Theory in practice in treating special needs patients. Lecture and lab provide the skills necessary for a California state approved course in coronal polish. (CSU)

#### DA 66A Clinical Practice I

(Formerly DNA 69) 3 units/1 hour lecture, 6 hours laboratory. Grade only. Prerequisite: Completion of DA 62 (formerly DNA 62) with grade of "C" or better.

Clinical practice in patient management and chairside assisting dental students at the University of California, San Francisco School of Dentistry and the University of the Pacific School of Dentistry. Practice in working as part of a complete dental team in private practice/general practice dentistry offices in Sonoma County. Continuation of the development of skills in radiography in the classroom. (CSU)

#### DA 66B Clinical Practice II

(Formerly DNA 70) 4 units/1 hour lecture, 24 hours by arrangement for 10 weeks. Grade only. Prerequisite: DA 66A (formerly DNA 69).

Practice in working in private dental offices, both general and specialty, in Sonoma County. Experience in chairside and office management techniques with the emphasis on performance of the RDA tasks. Weekly seminars to evaluate and review clinical application. Written reports required. (CSU)

#### DA 67 Dental Office Management

(Formerly DNA 68) 2 units/2 hours lecture. Grade only. Prerequisite: Completion of DA 60 (formerly DE 52) with a grade of "C" or better.

Instruction in the non-clinical functions which dental assistants are required to perform with emphasis on: financial arrangements, collection techniques, completing insurance forms, and maintaining current insurance records, office mail, dental office computer systems, group practice, inventory, marketing, purchasing, payroll, tax records, disbursements, and petty cash. Students will learn the Dental Mac integrated record system. (CSU)

#### DA 69 Chairside Skills Workshop

0.5 unit/1 hour lecture, 3 hours laboratory for 4 weeks. CR/NC only. Prerequisite: Accepted into the 22-month Dental Assisting Program via the application process. Corequisite: DE 51 and DA 60 (formerly DE 52).

This course is designed to develop minimal skills in basic dental chairside techniques. Included are patient/operator positioning, cavity classifications and basic instrumentation. Required for those students accepted into the 22-month dental assisting program. (CSU)

### DNA 57 Clinical Dental Assisting

10 units/3 hours lecture, 4 hours laboratory, 26 hours by arrangement. Grade only. Prerequisite: Completion of DNA 56, Engl 100B, Engl 1A, Engl 84A (formerly Engl 84), or Engl 104, FDNT 10 or FDNT 62, NR 205 and Anat 51 (3 units) or HLC 50 with grades of "C" or better.

Practice in working as part of the complete dental team in private dental offices in Sonoma County. Continuation of the development of clinical skills in radiography in the classroom laboratory as well as dental offices. Two Saturdays at the Dental Access Program required. Experience in general dentistry and specialty practices. Practice management skills appropriate for general practice as well as specialty practices, including application of data processing equipment and software. Weekly seminars to evaluate and review clinical applications. Written reports required. (CSU)

### DNA 98 Special Studies

0.5-2 units/up to 64 hours by arrangement for 2 weeks. CR/NC only. Prerequisite: Application to program and active or inactive status as RDA or CDA, or consent of instructor.

Individual conferences and participation in specific lecture/laboratory portions of classes and independent study to upgrade skills and knowledge in specific tasks. (CSU)

Independent study including 49 and 98 courses - 6 unit total.

### DNA 255 Dental Radiography

2 units/1 hour lecture, 2 hours laboratory. CR/NC only. Prerequisite: DNA 55 or equivalent with a grade of "C" or better. Recommended: Eligibility for Engl 100B, 1A or 104; employment as a dental assistant for a minimum of three months.

Radiation hygiene and techniques involved in application of radiology in the dental office. Fulfills certification requirements.

### DNA 257 Dental Insurance

1.5 units/3 hours lecture for 8 weeks. CR/NC only. Recommended: Experience as dental assistant or receptionist.

Instruction for developing, processing and tracking claims for payment by third party dental plans. Interpretation of the benefits of the plan to the patient and arranging for payment of required fees by the patient.

May be taken for a total of 2 units.

### DNA 276 Extended Duties for Dental Assistants

2 units/2 hours lecture, 1 hour laboratory. CR/NC option. Recommended: Eligibility for Engl 100B, 1A or 104; employment as a dental assistant for a minimum of 12 months or completion of a dental assisting program at a post high school level.

Duties of registered dental assistants; mannequins used for most instructions. Didactic and laboratory instruction preparatory for the California Registered Dental Assistant Examinations.

May be taken for a total of 4 units.

### DNA 299 Selected Topics for Dental Auxiliaries

0.5-1 unit/up to 48 hours by arrangement for 1 week. CR/NC only. Prerequisite: Advanced level work may require prerequisites. Recommended: Eligibility for Engl 100A or equivalent.

A series of courses designed to meet specific training needs of dental auxiliaries in the community. Each

course carries a specific title related to the subject matter to be covered.

May be taken for a total of 4 units.

### DNA 380.2 Certification Review

0.5 unit/3 hours laboratory for 8 weeks. CR/NC only. Prerequisite: Completion of DNA 276 or DNA 57 or equivalent. Recommended: Candidate status for the RDA Practical Examination.

Review for RDA Practical Examination - mannequin practice and evaluation.

May be taken for a total of 3 units.

## Dental Education - Hygiene

### DH 70 Dental Anatomy and Tooth Morphology

3 units/2 hours lecture, 3 hours laboratory. Grade only.

Prerequisite: Completion of ANAT 1; OR concurrent enrollment in DH 71.

The study of the dental terminology, tooth morphology, structures of the oral cavity, classification of cavities, and charting conditions of the teeth. The content of this course will be taught through combined lecture and laboratory experience.

Aspects related to dental hygiene care such as Root Morphology, Restorative Charting, Occlusion and Dental Anomalies are emphasized. (CSU)

### DH 71 Intro to Comprehensive Clin Dental Hygiene Care and Theory

4 units/2 hours lecture, 6 hours laboratory. Grade only. Prerequisite: MICRO 60 OR HLC 55 and all of the following: PSYCH 1A, ANAT 1, PHYSIO 1, CHEM 60, FDNT 10 (OR FDNT 62), SPCH 1A. Corequisite: DH 70 Recommended: Eligibility for English 1A or equiv.

An introduction to the contemporary role of the dental hygienist in California; the evolving profession of dental hygiene and the dental hygiene process of care. Clinical competency development will focus on the technical skills, procedures, and client assessments used in the clinical practice of dental hygiene. Infection control protocols established by the California Board of Dental Examiners and the Centers for Disease Control and Prevention will be implemented. (CSU)

### DH 71.1 Medical Emergencies

1 unit/2 hours lecture for 8 weeks. Grade only. Prerequisite: DH 71; evidence of satisfactory completion of a course in CPR (adult and child or health care provider) by the American Heart Association or Red Cross Corequisite: DH 75

This course provides the student with the basics in the prevention and management of medical emergencies in the dental office. Emphasis is on the recognition of clinical signs and symptoms of emergencies and the prevention of emergency escalation. The management of medical emergencies is outlined along with drugs and equipment utilized in an emergency. (CSU)

### DH 72 Oral Health Education

2 units/2 hours lecture. Grade only. Prerequisite: Completion of DH 70, and completion of DH 71. Corequisite: Concurrent enrollment in DH 73.

This course is designed to introduce oral hygiene

care education theory and practice. The primary focus will be on educational techniques that can be utilized to assist individuals and groups in becoming integrally involved as well as making informed decisions with regard to oral health promotion and disease prevention. Personal mechanical removal of bacterial plaque through use of toothbrushes and oral physiotherapy aids is emphasized. (CSU)

### DH 73 Clinical Dental Hygiene I

3 units/1 hour lecture, 6 hours laboratory. Grade only. Prerequisite: Completion of DH 70, and completion of DH 71, and completion of or concurrent enrollment in DH 72.

Application of the dental hygiene process of care guided by the human needs conceptual model to promote oral health and wellness. The course includes laboratory and clinical experiences in client assessments, problem identification (dental hygiene diagnosis), dental hygiene care planning, case presentation and implementation of dental hygiene care (preventive and therapeutic procedures, oral health education). Evaluation of dental hygiene care/oral health goals attainment is also emphasized as an essential component of the dental hygiene process. (CSU)

### DH 74 Head & Neck Anatomy, Histology and Embryology

3 units/2 hours lecture, 3 hours laboratory. Grade only. Prerequisite: Completion of DH 70, and completion of DH 71.

This course emphasizes the structure of the head and neck. Specific focus will be placed on knowledge necessary for clinical application. Histology and embryology contains the foundation of knowledge necessary to understand pathology and developmental disturbances encountered in dentistry. (CSU)

### DH 75 Pharmacology for the Dental Hygienist

2 units/2 hours lecture. Grade only. Prerequisite: Completion of DH 70, and completion of DH 71.

The the clinical usage of those therapeutic agents used in the practice of dentistry. The indications, dosage, methods of administration, contraindications and side effects of these agents will be studied to give the student hygienist a foundation in the physical manifestations to be expected in drug administration. (CSU)

### DH 76 Dental Materials for the Dental Hygienist

2 units/1 hour lecture, 3 hours laboratory. Grade only. Prerequisite: Completion of DH 70, and completion of DH 71.

The study of the science and use of dental materials. Students will gain knowledge of the basic science, behavior, and manipulation of dental materials within a framework which will enable them to adapt to the rapidly evolving array of new dental materials and techniques in the professional arena. (CSU)

### **DH 77 Clinical Dental Hygiene Care II**

*2 units/3 hours lecture, 9 hours laboratory for 6 weeks. Grade only. Prerequisite: Completion of DH 73.*

DH 77 is the third course in the clinical dental hygiene course series. The course is given over a six-week period in the summer session between the first and second years of the dental hygiene program. DH 77 is designed for continuity of clinical application of the dental hygiene process for delivering client-centered care initiated in the DH 73 course (Spring Semester - 1st year). The course will consist of seminar and clinical experiences. Students will develop skills by working with clients in the Santa Rosa Junior College Dental Clinic. (CSU)

### **DH 78 Local Anesthesia/Nitrous Oxide Conscious Sedation**

*1 unit/1.5 hours lecture, 4 hours laboratory for 6 weeks. Grade only. Prerequisite: Completion of DH 75.*

A course covering the techniques of pain control by the administration of local anesthetics. The course will prepare the student for management of the more complex clinical client during advanced dental hygiene care procedures. (CSU)

### **DH 79 Periodontics for the Dental Hygienist**

*2 units/2 hours lecture. Grade only. Prerequisite: Completion of DH 74. Corequisite: Concurrent enrollment in DH 80.*

The study of the discipline of periodontics. This course includes related biological, clinical and behavioral aspects of the discipline, including the etiology, histopathology, epidemiology of the periodontal diseases. Traditional and modern diagnostics; and the classification of the periodontal diseases. The principles of periodontal therapy will be discussed including preventive (oral hygiene) for the periodontally involved patient; initial periodontal therapy (biologic basis and rationale); adjunctive therapy such as chemical therapeutics and pharmacotherapeutics. Principles of respective and regenerative surgery will be presented. (CSU)

### **DH 80 Oral Pathology for the Dental Hygienist**

*2 units/2 hours lecture. Grade only. Prerequisite: Completion of DH 74. Corequisite: Concurrent enrollment in DH 79.*

Introduction to clinical and diagnostic general and oral pathology. Emphasis will be placed on the recognition of abnormalities. The student will gain sufficient knowledge upon which to base a reasonable differential diagnosis of any lesion which is likely to be met in general dental practice. (CSU)

### **DH 81 Community Dental Health**

*2 units/2 hours lecture. Grade only. Prerequisite: Completion of DH 72.*

The study of oral health and disease in culturally and economically diverse community and public health settings. Course emphasis is on oral health education in a variety of environments with numerous oral health needs. The process of community and public health program planning includes: epidemiology, biostatistics, and participation in community health planning and public health programs. (CSU)

### **DH 82 Advanced Clinical Dental Hygiene Care**

*6 units/1 hour lecture, 15 hours laboratory. Grade only. Prerequisite: Completion of DH 77.*

A one-semester clinical course designed to continue the development of dental hygiene skills in preventive therapy, oral prophylaxis, periodontal initial preparation and maintenance therapy. The educational focus is on the refinement of periodontal process skills in scaling and root planing, the application of advanced instrumentation principles, and early self-assessment skills. Techniques in the use and interpretation of radiographs, infection control, and office procedures will continue to be developed. (CSU)

### **DH 83 Ethics, Jurisprudence & Practice Mgt for Dental Hygienist**

*2 units/2 hours lecture. Grade only. Prerequisite: Completion of DE 50 (or DNA 60).*

The study of jurisprudence, ethics, and practice management as these concepts relate to dental hygiene care. A personal philosophy toward professional conduct, continuous quality improvement, self-assessment and peer evaluation is developed. (CSU)

### **DH 84 Advanced Clinical Dental Hygiene Care II**

*6 units/1 hour lecture, 15 hours laboratory. Grade only. Prerequisite: Completion of DH 82.*

A seminar and clinical course designed to continue to expand and develop dental hygiene skills in preventive therapy, oral prophylaxis, initial preparation and maintenance therapy. Students will become proficient in scaling and root planing procedures, pain control, and gingival curettage. Dental hygiene assessment (diagnostic) and treatment planning skills will be refined. The student will also become proficient in adjunct therapeutic skills. Learning experiences will be conducted within a human needs framework. Care will be patient centered. (CSU)

### **DH 85 Advanced Periodontal Dental Hygiene Care**

*2 units/2 hours lecture. Grade only. Prerequisite: Completion of DH 79.*

Study of advanced principles of clinical dental hygiene practice; including advanced principles of instrumentation, soft tissue (gingival) curettage, use of ultrasonic scalers, dental hygiene diagnosis, continued classification of the periodontal diseases, and dental hygiene treatment planning of periodontal patients. The principles of chemical and preventive therapy, and pharmacological therapies will be addressed, prevailing periodontal theories will be explored in the context of dental hygiene care on simulated patient presentations. (CSU)

### **DH 86 Integration of Dental Hygiene and Dentistry**

*2 units/2 hours lecture. Grade only. Prerequisite: Completion of DH 76.*

A course covering various aspects of dentistry including restorative dentistry, esthetic dentistry, prosthodontics, endodontics, orthodontics, pediatric dentistry, periodontics, geriatric dentistry, oral/

maxillofacial surgery, and new technology in dentistry. Students are exposed to how these various areas of dentistry are implemented in the general dental practice, how dental hygiene relates to each area, as well as how to make a referral to a dental specialist in the case of the difficult patient. Integration of dental concepts and comprehensive patient care in preparation for future collaborative practice between the dental hygienist and other health care providers is emphasized for each topic area. (CSU)

## **Diesel/Equipment Technology**

### **DET 60 Diesel Shop Practices**

*3 units/4 hours lecture, 8 hours laboratory for 8 weeks. Grade only.*

Theory and application of industrial shop practices including career information, safety, tool and equipment use, and other related competencies. (CSU)

*May be taken for a total of 6 units within 4 semesters.*

### **DET 63 Mobile Hydraulics Fundamentals**

*3 units/4 hours lecture, 6 hours laboratory for 8 weeks. Grade only. Recommended: Completion of DET 60.*

The study of fluid power as it applies to its use in machinery and vehicles that are mobile as a part of their function. Lab exercises in the inspection and repair of hydraulic systems and components. (CSU)

*May be taken for a total of 6 units within 4 semesters.*

### **DET 64 Light and Medium-Duty Diesel Applications**

*3 units/2 hours lecture, 3 hours laboratory. Grade only.*

The study of diesel engines and fuel systems as the power source in light or medium duty vehicles or equipment. (CSU)

*May be taken for a total of 6 units within 4 semesters.*

### **DET 65 Heavy Duty Electrical/Electronics**

*3 units/4 hours lecture, 8 hours laboratory for 8 weeks. Grade only. Recommended: AUTO 56.*

Principles of operation of electrical and electronic components and systems as related to heavy machinery and vehicles. Practical experiences in analyzing, measuring, and troubleshooting electrical/electronic circuitry. (CSU)

*May be taken for a total of 8 units within 4 semesters.*

### **DET 66 Heavy-Duty Power Transmission**

*3 units/4 hours lecture, 6 hours laboratory for 8 weeks. Grade only. Recommended: Completion of DET 60.*

The study of the transmission of power from the power source to the end function as related to heavy machinery and transportation vehicles. Lab performance in the disassembly, assessment, and reassembly of related components. (CSU)

*May be taken for a total of 6 units within 4 semesters.*

### **DET 67 Heavy Duty Chassis & Undercarriage Systems**

*3 units/4 hours lecture, 8 hours laboratory for 8 weeks. Grade only. Recommended: Completion of DET 60.*

The study of heavy-duty chassis and undercarriage systems including steering, braking, and suspension systems. Practical application of repair and maintenance procedures related to steering, braking, and suspension systems. (CSU)

*May be taken for a total of 6 units within 4 semesters.*

### **DET 68 Preventative Maintenance and Inspection**

*3 units/4 hours lecture, 8 hours laboratory for 8 weeks. Grade only. Recommended: Completion of DET 60.*

The study of preventative maintenance and inspection practices as related to vehicles and machinery. Preventive maintenance program design and vehicle and machinery compliance inspections are practiced. Students will work with area businesses in this class. (CSU)

*May be taken for a total of 8 units within 4 semesters.*

### **DET 71 Internal Combustion Engines and Systems**

*(Formerly DET 61) 6 units/3 hours lecture, 9 hours laboratory. Grade only. Recommended: DET 60.*

The operating principles of the internal combustion engine and related systems. Disassembly and reassembly of a variety of engines on stands using service manuals to inspect components, analyze component failures, and perform tune-up procedures. (CSU)

*May be taken for a total of 12 units within 4 semesters.*

### **DET 72 Practical Applications**

*4 units/2 hours lecture, 18 hours laboratory for 8 weeks. Grade only. Prerequisite: Completion of DET 60, 63, 68, and 71 (formerly DET 61).*

The practical application of previous Diesel Equipment Technology course skills to customer repair work. Students will make repairs to vehicles and machinery as per customer repair orders. Classroom study will relate to specific repairs in progress, customer relations and career entry readiness. (CSU)

*May be taken for a total of 8 units within 4 semesters.*

### **DET 73 Caterpillar Engine Rebuild**

*4 units/3 hours lecture, 5 hours laboratory. Grade only. Recommended: Eligibility for Engl 100A or equivalent.*

Theory and rebuild of Caterpillar Diesel Engines including tune-up and system troubleshooting of mechanical and electronic engines. (CSU)

*May be taken for a total of 8 units within 4 semesters.*

### **DET 83 Farm Machinery Repair and Maintenance**

*(Formerly DET 399.7) 1.5 units/3 hours lecture, 2 hours laboratory for 8 weeks. CR/NC option.*

The study and practical application of repair and maintenance principles as related to agricultural and light utility machinery. (CSU)

*May be taken for a total of 3 units.*

### **DET 398 Special Studies in Diesel/Equipment Technology**

*1-3 units/up to 9 hours by arrangement. Grade only.*

*Prerequisite: Application to Department. Must have completed one DET course.*

Seminars or individual conferences by arrangement

to provide for independent study and enriched academic experience.

*Independent study including 49 and 98 courses - 6 unit total.*

## **Dietetic Technology**

### **DIET 50 Sanitation & Safety**

*2 units/2 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent.*

Basic principles of sanitation and safety and the applications of these principles to a food service operation. Emphasis on the supervisor's responsibility to maintain a sanitary and safe work environment. (CSU)

### **DIET 51A Intro to Commercial Food Production**

*(Formerly DIET 51) 3 units/2 hours lecture, 4 hours laboratory. Grade only. Recommended: Eligibility for Engl 100A or equivalent.*

PMSLOG-of commercial food production. Lecture and lab to provide foundation of knowledge, skills and attitudes required for successful employment as a cook. (CSU)

### **DIET 52 Management Training Techniques**

*3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100B or equivalent.*

Supervisory responsibilities with emphasis on managing a food service operation, including employee selection, training, evaluation, grievance procedure, documentation and dismissal, scheduling, budgeting, writing policies and procedures, and preparedness for review of kitchen operation by regulatory inspectors. (CSU)

### **DIET 55 Food Production Management**

*2 units/2 hours lecture. Grade only.*

The control of food purchasing, labor costs, food control and the importance of sound purchasing methods, receiving procedures, controlled food production, inventories, storeroom issues and standardized recipes. Effective management of time and equipment and the responsibilities of the production supervisor are stressed. (CSU)

### **DIET 55L Food Production Clinical Experience**

*3 units/1 hour lecture, 4 hours laboratory. Grade only. Prerequisite: Concurrent enrollment in DIET 55.*

Foundation of knowledge and skills to recognize and evaluate different food service systems. Provides practical experience to add to didactic experience. (CSU)

### **DIET 57 Modified Diets**

*3 units/2 hours lecture, 3 hours laboratory. Grade only.*

*Prerequisite: Completion of FDNT 63; OR prior qualification for DIET 57; OR completion of FDNT 10; OR completion of FDNT 62.*

Review of principles of normal nutrition and application of these principles in treatment of medical and surgical conditions using modifications for various dietary needs. (CSU)

### **DIET 253 Selected Topics in Dietetic Technology**

*(Formerly DIET 353) 0.5 unit/1 hour lecture for 8 weeks. CR/NC option.*

Series of .5 unit courses designed to present information in compact form to meet specific interests and needs to participate in health care system.

*May be repeated with different topics.*

### **DIET 300 Sanitation**

*1 unit/2 hours lecture for 8 weeks. Grade only. Prerequisite: Employment in food service, particularly health care facilities.*

Basic principles of applied food service sanitation, including management of a sanitary food service facility.

## **Disability Resources**

*(LPE courses now listed under Adapted Physical Education as APE courses)*

### **DRD 300 Learning Needs Assessment**

*(Formerly LSE 300) 0.5 unit/1.5 hours by arrangement. CR/NC only.*

Administration of an intensive individualized assessment battery to determine verification of disability and identify student's academic strengths and weaknesses.

*May be taken for a total of 1 unit.*

### **DRD 301 Learning Skills**

*(Formerly LSE 301) 0.5-2 units/up to 6 hours laboratory. CR/NC only.*

Individual and/or small group tutoring in learning process applied to academic and/or study skills for students with learning disabilities.

*May be taken for a total of 6 units.*

### **DRD 305A English for Deaf Students**

*(Formerly LENGL 305A) 3 units/3 hours lecture. CR/NC option.*

Basic instruction in reading, spelling, and communication skills using methods and materials specially designed for deaf students. Emphasis on communicating effectively using American Sign Language and written English.

*Each may be repeated 3 times for a total of 12 units each.*

### **DRD 305B English for Deaf Students**

*(Formerly LENGL 305B) 3 units/3 hours lecture. CR/NC option.*

Further instruction in reading comprehension, spelling, beginning writing, and communication skills for deaf students. Emphasis on individual specific skills.

*Each may be repeated 3 times for a total of 12 units each.*

**DRD 311 Brain Calisthenics: Pract. Exerc. in Language Memory & Organ**

(Formerly LSL 311) 3 units/3 hours lecture. CR/NC option. Individual and group exercises provide development of language, memory, and organizational skills for students with special needs. Instruction provides a vehicle for experimentation and performance to enhance listening, expressive language, reasoning, decision-making skills, use of memory strategies, and organizational abilities.  
May be taken for a total of 12 units.

**DRD 312 Coping Strategies for Students with Acquired Brain Injuries**

(Formerly LSL 312) 3 units/3 hours lecture. CR/NC only. Techniques to enable students with acquired brain injuries to recognize barriers that may be inhibiting full self-expression. Coping strategies will be emphasized to enable the student to re-enter the mainstream of academic, vocational, and social life.  
May be taken for a total of 12 units.

**DRD 315 Vision Training & Perceptual Development**

(Formerly LSE 315) 3 units/3 hours lecture. CR/NC only. Training and strengthening the visual system in relation to perceptual disorders and learning problems. Exercises are presented for individualized and group training with materials specifically developing visual perceptual skills.  
May be taken for a total of 6 units.

**DRD 330 Introductory Spelling and Word Attack**

(Formerly LENGL 330) 3 units/3 hours lecture. CR/NC option. Use of the Lindamood technique - a multimodality approach to spelling. Students will learn all consonant and vowel sounds and apply the knowledge to spelling single syllable phonetic words. Also includes application of basic spelling rules and spelling of non-phonetic word spelling.  
May be taken for a total of 6 units.

**DRD 334 Intermediate Spelling and Word Attack**

(Formerly LENGL 334) 3 units/3 hours lecture. CR/NC option. Recommended: Completion of DRD 330 (LENGL 330, LENGL 130) with a grade of C or better. Practice in spelling words of more than one syllable. Includes work with prefixes, suffixes, and spelling of words with variant vowel or consonant sounds. Application of various spelling rules, and practice in breaking down words into syllables to simplify spelling.  
May be taken for a total of 6 units.

**DRD 337 Basic Writing Skills**

(Formerly LENGL 337) 3 units/3 hours lecture, 2 hours laboratory. CR/NC only.  
DRD 337 split to DRD 337A & DRD 337B.  
May be taken for a total of 6 units.

**DRD 337A Basic Writing Skills**

(Formerly LENGL 337A) 3 units/3 hours lecture. CR/NC option. Recommended: DRD 381 (formerly LCIS 381, LBDP 381). Basic writing skills for students with disabilities. Writing as process, including techniques for pre-

writing, composing the rough draft, revision, and editing. The mechanics of writing, including sentence structure, rules of capitalization and punctuation, and paragraph development. Computer laboratory component.  
May be taken for a total of 6 units.

**DRD 337B Essay Writing**

(Formerly LENGL 337B) 3 units/3 hours lecture. CR/NC option. Recommended: DRD 337A (formerly LENGL 337A) and the ability to use a computer for writing. The process of writing, for students with disabilities, as applied to the development of the essay, including techniques for pre-writing, composing the rough draft, revision, and editing. Computer laboratory component.  
May be taken for a total of 6 units.

**DRD 355 Learning Styles and Strategies**

(Formerly LGD 355) 3 units/3 hours lecture. CR/NC option. Assessment of learning styles, mastery of learning strategies, and appropriate application of strategies to learning tasks. Students will learn principles of learning and memory as applied to academic tasks and analysis and synthesis of textbook and student generated materials. Students will learn to interpret, synthesize and evaluate ideas by developing strategies for critically examining information.  
May be taken for a total of 6 units.

**DRD 361A Introduction to Career Development**

(Formerly LGD 361A) 0.5-3 units/up to 3 hours lecture. CR/NC option. Career planning and job search techniques for students who are uncertain about their educational and vocational goals. Personal interests, values, and personality testing; overview of labor market trends; disability management and strategies for career planning; and individualized assistance in job search techniques.  
May be taken for a total of 6 units.

**DRD 364 Movement Laboratory**

(Formerly LPE 364) 1 unit/2 hours laboratory. CR/NC only. The Movement Laboratory is a class for students in the Disability Resources Department that provides an individualized remedial movement program based upon test results of the student's abilities determined at the beginning of the semester.  
May be taken for a total of 4 units.

**DRD 365 College Orientation**

(Formerly LGD 365) 0.5 unit/8 hours lecture for 1 week. CR/NC only. Assistance to incoming students with special needs in planning a program of study and making use of appropriate college resources  
May be taken for a total of 1 unit.

**DRD 370 Vocational Assessment**

0.5-1 unit/up to 3 hours laboratory. CR/NC option. Administration of individualized assessments to determine a student's potential and stamina for employment. Assessments include both standardized tests and situational assessments. This course is designed for students with disabilities.  
May be taken for a total of 6 units.

**DRD 371 Creative Processes as Preparation for Academic Learning**

(Formerly LGD 370) 3 units/3 hours lecture, 1 hour laboratory. CR/NC only. Emphasis on the use of art materials and art journal keeping, interrelationship of verbal, non-verbal, and artistic communication.  
May be taken for a total of 6 units.

**DRD 375 Success at Work**

0.5-3 units/up to 3 hours lecture. CR/NC option. Exploration of skills and behaviors that lead to success at the workplace including: understanding workplace cultures, workplace communication skills, meeting employer expectations, getting along with co-workers, disability management, and strategies for advancement. Designed for students with disabilities.  
May be taken for a total of 6 units.

**DRD 380 General Arithmetic**

(Formerly LMATH 380) 3 units/3 hours lecture. CR/NC option. Basic mathematics skills designed specifically for students with special learning needs. Using a wide variety of resources, basic skills taught include addition, subtraction, multiplication, and division of whole numbers, fractions and decimals, basic percent problems and measurement.  
May be taken for a total of 6 units.

**DRD 381 Introduction to Word Processing**

(Formerly LCIS 381) 2 units/2 hours lecture, 1 hour laboratory, 1 hour by arrangement. CR/NC option. Introduction to word processing software on the Apple Macintosh computer. Designed to teach students software programs that will augment their writing skills. Basic word processing outlining, spell checking, and grammatical analysis used to correlate with writing assignments or enhance original writing that will prepare students for mainstream classes.  
May be taken for a total of 4 units.

**DRD 382 Pre-Algebra**

(Formerly LMATH 381) 3 units/3 hours lecture. CR/NC option. Recommended: DRD 380 (formerly LMATH 380, LMATH 180) or equivalent. Preparation for algebra designed for students with special learning needs using a wide variety of resources, skills taught include number properties, polynomials, and basic equations.  
May be taken for a total of 6 units.

**DRD 383 Introduction to Keyboarding and Skill Building**

(Formerly LCIS 383) 1 unit/3 hours by arrangement. CR/NC only. Students learn basic keyboarding skills/touch typing and intermediate skill building to increase speed and accuracy. This is a self-paced class. Includes specialized instruction and adaptive technology for students with special needs.  
May be taken for a total of 4 units.

### **DRD 384 Word Processing Using Adapted Computer Technology**

*1 unit/3 hours by arrangement. CR/NC only.*  
Individualized training provides computer access to students who are blind visually impaired, orthopedically impaired and/or learning disabled using specialized hardware & software. Specialized instruction in the use of adaptive technology to access word processing.  
*May be taken for a total of 4 units.*

### **DRD 385 Consumer Math**

*0.5-3 units/up to 3 hours lecture. CR/NC option.*  
Instruction in necessary arithmetic skills needed in everyday living with an emphasis on money management skills, banking and credit, and use of mathematical skills at the workplace. Use of calculators taught.  
*May be taken for a total of 6 units.*

### **LGD 360 Learning, Thinking and Study Skills**

*(Formerly LGD 360A) 3 units/3 hours lecture. CR/NC option. Corequisite: Recommended concurrent enrollment in mainstream college class. Recommended: Enrollment in and/or readiness for mainstream classes.*  
A course in learning how to learn. Students explore their own learning styles and experiment with a variety of study techniques. Topics include: learning styles, time management, concentration, and memory, preparing for exams, notetaking, using the library, and campus resources.  
*May be taken for a total of 6 units.*

### **LGD 361B Job Search Strategies**

*(Formerly LGD 161B) 0.5-3 units/up to 3 hours lecture. CR/NC option.*  
Exploration of the job market, application procedures, preparing a resume, job interview, job retention, and other skills necessary in finding and holding a job. For students with special learning needs.  
*May be taken for a total of 6 units.*

### **LSCI 350 Introduction to the Sciences**

*3 units/3 hours lecture. CR/NC only.*  
An introduction to the concepts and vocabulary of physical and biological sciences designed for students with special learning needs.  
*May be taken for a total of 6 units.*

## **Earth and Space Science**

### **ERTHS 48 Selected Topics/Earth Science**

*3 units/3 hours lecture. CR/NC option. Prerequisite: Certain advanced topics may require other course prerequisites as determined by the instructor and the instructional office. Recommended: Eligibility for Engl 100A or equivalent.*  
A series of courses designed to meet student interests generated by new discoveries in the earth sciences. Each class will carry a specific title relating to the subject being covered. The description of each class is determined by the instructor with the approval of the instruction office. (CSU/UC)  
*May be repeated with different topics.*

### **ERTHS 49 Special Studies in Earth Sciences**

*3 units/9 hours by arrangement. Grade only. Prerequisite: Application to the department. Corequisite: Completion of at least one course within the Earth and Space Science Dept. Recommended: Eligibility for Engl 100A or equivalent.*  
Seminars or individual conferences by arrangement to provide for independent study and enriched academic experience. (CSU/UC)  
*Independent study including 49 and 98 courses - 6 unit total.*

## **Economics**

### **ECON 1A Principles of Economics**

*3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100B or equivalent and Math 150A or equivalent.*  
An introduction to economic concepts and principles of economic analysis; foundations of economic life; national income and employment; business cycles; money and banking; monetary and fiscal policy; economic growth and stability; public finance. Emphasis on macroeconomics. (CSU/UC)  
*AA/AS area D; CSU area D; IGETC area 4; CAN ECON 2*

### **ECON 1B Principles of Economics**

*3 units/3 hours lecture. CR/NC option. Prerequisite: Econ 1A. Recommended: Engl 100B or equivalent and Math 150A or equivalent.*  
A continuation of the principles of economic analysis; business organization and finance, combinations and regulation; price theory and resource allocation; agriculture; income distribution and poverty; labor economics; international trade and finance; the world's poorer economies and alternative economic systems. Emphasis is on microeconomics. (CSU/UC)  
*IGETC area 4; CAN ECON 4*

### **ECON 10 The Making of Economics**

*3 units/3 hours lecture. CR/NC option. Recommended: Engl 100B or equivalent.*  
Introduction to economic thought and analysis from Old Testament to present day; survey of lives, times and ideas of great economic thinkers; their impact on development of modern economic society. Economic ideas and events placed in the context of the Western intellectual tradition. An introduction to economic thinking for general education. (CSU/UC)  
*AA/AS area D; CSU area D; IGETC area 4*

### **ECON 20 The American Economy**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent. Not open to students who have completed Econ 1A-1B.*  
A non-theoretical, non-technical survey of basic economic concepts and institutions. Emphasis is given to the American economy in the areas of business organization and finance; labor unionism; public finance; money and banking; national income; unemployment and inflation; economic growth; income distribution; poverty; agriculture and foreign trade as they pertain to the citizen and the businessman. (CSU/UC)  
*AA/AS area D; CSU area D; IGETC area 4*

### **ECON 30 The Global Economy**

*3 units/3 hours lecture. CR/NC option. Recommended: Engl 100B or equivalent.*  
The study of international economic forces which shape the patterns of global trade and development. Explores issues of trade policy, multi-national corporations, exchange rates and international finance, developing countries and economies in transition, environmental issues, and the current dynamics of the evolving world economy. Includes numerous selected case studies. (CSU/UC)  
*AA/AS area D; CSU area D; IGETC area 4*

## **Education**

### **EDUC 50 Tutoring Techniques**

*1-2 units/up to 3 hours by arrangement. CR/NC option. Recommended: Eligibility for English 100A or equiv.*  
Communication and teaching techniques for those students who intend to serve as tutors and section leaders. (CSU)  
*May be taken for a total of 4 units.*

## **Electronic Technology**

### **ELEC 50A Survey of Electronics**

*3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent.*  
A general study in basic concepts of electrical principles and electronic terminology; fundamentals of radio, TV, communications, and computers. (CSU)  
*AA/AS area C*

### **ELEC 50B Survey of Electronics**

*3 units/3 hours lecture. Grade only. Prerequisite: Completion of ELEC 50A.*  
In-depth look at the topics of Elec 50A with the addition of microwave systems and devices. Includes basic computer programming for control and systems applications. Recommended for non-technical students who work as associates with technical people. (CSU)

### **ELEC 51A Fundamentals of Electricity**

*3 units/3 hours lecture. Grade only. Recommended: Completion of IED 90A or one year of high school algebra or equivalent.*  
Fundamentals of basic physical principles as applied to direct and alternating current, basic circuits, units, components, and test equipment. Electrical safety and energy conservation as it is applied to household and industrial appliances are evaluated. (CSU)

### **ELEC 51B Industrial Education Electronics**

3 units/3 hours lecture. Grade only. Prerequisite: Completion of ELEC 51A with "C" or better or equivalent. Continuation of Elec 51A intended for trade technical or industrial majors. The basic operation identification of semiconductor devices, tubes, and associated components. Simple test techniques and test equipment. Common circuits employing these components. (CSU)

### **ELEC 60 Direct & Alternating Current Theory**

5 units/5 hours lecture. Grade only. Prerequisite: Concurrent enrollment in ELEC 60L and ELEC 90A (Math 27, formerly MATH 57, or a higher course may be substituted for ELEC 90A). Corequisite: ELEC 60L and ELEC 90A (Math 58 may be substituted for ELEC 90A) Recommended: Eligibility for English 100A or equiv. Atom theory, basic laws of physics, electrical units, direct current circuit analysis, batteries, magnetism, meters, alternating current, capacitance, inductance, transformers, and AC circuit analysis. (CSU)

### **ELEC 60L Direct & Alternating Current Lab**

2 units/1 hour lecture, 3 hours laboratory. Grade only. Prerequisite: Completion of or concurrent enrollment in ELEC 60. Measurement and analysis of DC and AC circuits. Documentation of results in a lab report format. (CSU)

### **ELEC 61 Fundamentals of Electronic Circuits**

5 units/5 hours lecture. Grade only. Prerequisite: Completion of ELEC 60 and ELEC 60L and ELEC 90A or a math course (MATH 27 (formerly MATH 57) or higher. Corequisite: ELEC 61L and ELEC 90B. Recommended: Completion of MATH 11. Analysis of linear electronic circuits. Concepts of rectification, amplification, and oscillating circuits utilizing both vacuum and solid-state devices. (CSU)

### **ELEC 61L Fundamental Circuits Lab**

2 units/1 hour lecture, 3 hours laboratory. Grade only. Prerequisite: Completion of or concurrent enrollment in ELEC 61. Theory of semiconductors and their associated circuits, including vacuum tube. Application of alternating and direct current theory to these devices. (CSU)

### **ELEC 62 Electronic Circuits Theory**

4 units/3 hours lecture, 2 hours laboratory, 1 hour by arrangement. Grade only. Prerequisite: Completion of ELEC 61, 61L, and 90B with a "C" grade or better or their equivalents; OR ELEC 71B and 71BL with a "C" or better or their equivalents. Recommended: Concurrent enrollment in ELEC 66A. The theory of operation of various electronic circuits, breadboarding selected circuits and measurements of selected parameters. These circuits include: power supply regulators, single and multistage amplifiers, filters, RC and LC oscillators, interstage coupling, amplitude and frequency modulation, single side-band and amplitude and frequency demodulation circuits. (CSU)

### **ELEC 63 Electronic Circuit Theory**

4 units/3 hours lecture, 2 hours laboratory, 1 hour by arrangement. Grade only. Prerequisite: Completion of ELEC 62. Review of Elec 62 subject matter, AM, FM, SSB and power supplies. Introduce operational amplifiers

and all of their configurations, advanced devices and their circuits and large scale linear integrated systems. (CSU)

### **ELEC 64A Electronic Construction**

2 units/1 hour lecture, 3 hours laboratory. Grade only. Prerequisite: Concurrent enrollment in or completion of ELEC 60, 51A, or 50A with a "C" grade or better. A basic electronic fabrication course designed to develop fundamental skills required of all electronic mechanic/technicians. The course includes general safety rules, basic concepts of the use and care of hand tools, soldering and de-soldering techniques to a variety of terminal posts and printed circuit boards, and coaxial and shielded pair cable assembly. The student will learn to identify graphic symbols of common electronic components used on electronic schematics, the technique of chassis assembly, and chassis wiring procedures. (CSU)

### **ELEC 64B Electronic Construction**

2 units/1 hour lecture, 3 hours laboratory. Grade only. Prerequisite: Completion of ELEC 64A. An advanced electronic construction source consisting of one of three different projects. The first is a "continuity/voltage tester", the second is a "blinking LED circuit", and the third is an "adjustable, bipolar, regulated power supply". (CSU)

### **ELEC 66 Tests & Measurements/Troubleshooting**

4 units/3 hours lecture, 2 hours laboratory, 1 hour by arrangement. Grade only. Prerequisite: Elec 62 completed with a grade of C or better. Operation, applications and limitations of analog voltmeters, digital voltmeters, signal generators, and oscilloscopes. Construction of a transistor AM receiver to be used as a vehicle for troubleshooting. Circuit analysis at the block and component level is evaluated. Troubleshooting techniques and procedures are covered in general and then applied to the AM radio using standard test equipment. (CSU)

### **ELEC 67A Communications**

4 units/3 hours lecture, 2 hours laboratory, 1 hour by arrangement. Grade only. Prerequisite: ELEC 61, 61L and 90B or Math 27 (formerly MATH 57) or higher course with a "C" or better. An introductory course in theory and practice of transmission lines, microwave devices, and microwave circuits. Included is basic use of Smith Chart solutions of transmission line problems. Laboratory work includes the operation of slotted lines, power meters, attenuators, standing wave meters, chart recorders and basic single frequency power and voltage standing wave ratio measurement techniques. (CSU)

### **ELEC 67B Advanced Microwave Systems and Devices**

4 units/3 hours lecture, 2 hours laboratory, 1 hour by arrangement. Grade only. Prerequisite: Completion of ELEC 67A. Continuation of Elec 67A with emphasis on Swept Frequency Techniques, Spectral Analysis, and Modern Microwave devices and practice including GasFET, HEMT, and YIG circuits. (CSU)

### **ELEC 68A Pulse and Digital Circuits**

3 units/2 hours lecture, 3 hours laboratory. Grade only. Prerequisite: Elec 60, 60L and 90A or its equivalent with a grade of "C" or better; Elec 61 completed or in progress. Introduction to BASIC language and how to use it to analyze electronic circuits. Programs will be developed on IBM-compatible computers that parallel theory presented in Elec 60 & 61. Course begins with covering statements, commands, and functions of BASIC and progresses to applications used in the electronic industry. No previous programming experience is required. (CSU)

### **ELEC 68B Pulse & Digital Circuits**

4 units/3 hours lecture, 2 hours laboratory, 1 hour by arrangement. Grade only. Prerequisite: Completion of ELEC 68A; OR completion of ELEC 61, and completion of ELEC 61L, and completion of ELEC 90B; OR completion of ELEC 71B, and completion of ELEC 71BL. Concepts to understanding and using the microprocessor as a programmable system component. Major effort is directed to understanding a chosen microprocessor and its relation to memory and the interface to input- output devices. Introduction to LSI devices. Offers hands-on experience with the latest hardware available. Each student has complete 8-bit parallel central processor unit to develop into a usable system. (CSU)

### **ELEC 68C Pulse & Digital Circuits**

4 units/3 hours lecture, 2 hours laboratory, 1 hour by arrangement. Grade only. Prerequisite: Completion of ELEC 68B. Diagnostic programs are introduced so that troubles can be isolated in a microcomputer system. Assembly language programs for the 8088 series of microprocessor are developed. These programs are integrated into the disk operating system for great efficiency in troubleshooting hardware. System hardware requirements and organization is covered. (CSU)

### **ELEC 70A Direct Current Theory**

3 units/3 hours lecture. Grade only. Prerequisite: Concurrent enrollment in or completion of ELEC 90A. Not open to students who have completed ELEC 60. Atom theory, basic laws of physics, electrical units, direct current circuit analysis, batteries, magnetism, and meters. (CSU)

### **ELEC 70AL Direct Current and Electronic Cons Lab**

2 units/1 hour lecture, 2 hours laboratory, 1 hour by arrangement. Grade only. Prerequisite: Concurrent enrollment in Elec 70A. Measurement and analysis of DC circuits. Documentation of results in a lab report format. Basic electronic fabrication involving general safety rules, soldering and de-soldering a variety of terminal posts and printed circuit boards, coaxial, and shielded pair cable assembly, and schematic reading. (CSU)

### **ELEC 70B Theory of Alternating Current**

3 units/3 hours lecture. Grade only. Prerequisite: Not open to students who have completed ELEC 60. Completion of ELEC 70A AND ELEC 70AL and concurrent enrollment in ELEC 70BL

Electronics topics include magnetism, alternating current, capacitance, inductance, transformers, and AC circuit analysis. Math topics include right angle trigonometry, periodic functions, harmonics, vectors, phasor algebra, logarithms, and decibels. (CSU)

### **ELEC 70BL Alternating Current & Electronic Construction Lab**

2 units/1 hour lecture, 2 hours laboratory, 1 hour by arrangement. Grade only. Prerequisite: Completion of ELEC 70AL. Corequisite: Concurrent enrollment in ELEC 70B.

Measurement and analysis of AC circuits.

Familiarization and operation of an oscilloscope chassis assembly including schematic reading and chassis wiring. (CSU)

### **ELEC 71A Electronic Devices**

3 units/3 hours lecture. Grade only. Prerequisite: Completion of ELEC 70B AND ELEC 70BL. Not open to students who have completed ELEC 61. Corequisite: ELEC 71AL

Linear electronic circuits. Electronic devices are studied for rectification, amplification, and oscillating circuits. (CSU)

### **ELEC 71AL Electronic Devices Lab**

2 units/1 hour lecture, 2 hours laboratory, 1 hour by arrangement. Grade only. Prerequisite: Not open to students who have completed ELEC 61L. Completion of ELEC 70BL. Corequisite: ELEC 71A

Electronic devices and circuits testing, and laboratory report writing. (CSU)

### **ELEC 71B Electronic Devices**

3 units/3 hours lecture. Grade only. Prerequisite: Completion of ELEC 71A AND ELEC 71AL. Not open to students who have completed ELEC 61. Corequisite: ELEC 71BL

Continuation of Elec 71A. (CSU)

### **ELEC 71BL Electronic Devices Lab**

2 units/1 hour lecture, 2 hours laboratory, 1 hour by arrangement. Grade only. Prerequisite: Completion of ELEC 71AL. Not open to students who have completed ELEC 61L. Corequisite: ELEC 71B.

Continuation of Elec 71AL. (CSU)

### **ELEC 75A Radio Communication**

3 units/3 hours lecture. Grade only. Essentials of electronic and radio theory; preparation for a commercial Federal Communications Commission license. (CSU)

### **ELEC 90A Electronic Mathematics I**

3 units/3 hours lecture. Grade only. Prerequisite: First year of H. S. Algebra (or Math 150A or equivalent) with a grade of "C" or better.

Literal numbers, fundamental algebraic processes, equations, electronic units, special products and factoring, fractions, fractional equations, right triangle trigonometry, simultaneous equations, determinants Kirchhoff's Law and Thevenin's Theorem applied to circuits with two power supplies. (CSU)

### **ELEC 90B Electronic Mathematics II**

3 units/3 hours lecture. Grade only. Prerequisite: Completion of ELEC 90A; OR completion of MATH 27 (or MATH 57) or higher (V2). Recommended: Completion of MATH 156.

Fundamental operations of trigonometry, periodic functions, harmonics, vectors, phasor algebra as applied to a series, parallel, series parallel, and bridge circuits. Logarithms, decibels, and transients. Binary math. (CSU)

AA/AS area B

### **ELEC 90C Electronics Calculus**

3 units/3 hours lecture. Grade only. Prerequisite: Completion of ELEC 90B; OR completion of MATH 27 (or MATH 57) or higher (V2); OR completion of ELEC 71B.

Fundamental concepts of calculus. Basic operations of differentiation and integration as applied to electronic circuits. (CSU)

### **ELEC 91 Electronic Math Review**

3 units/3 hours lecture. Grade only. Recommended: 1st yr HS algebra or MATH 150A or equiv. with "C" or better.

Literal numbers, fundamental algebraic processes, equations, electronic units, special products and factoring, fractions, fractional equations, right triangle trigonometry, and simultaneous equations. (CSU)

### **ELEC 98 Special Studies in Electronic Technology**

1-3 units/up to 9 hours by arrangement. Grade only.

Prerequisite: Application to department Corequisite: Enrollment in Electronic courses.

Seminars of individual conferences by arrangement to provide for independent study and enriched academic experience. (CSU)

Independent study including 49 and 98 courses - 6 unit total.

### **ELEC 299 Selected Topics in Electronic Technology**

0.5-6 units/up to 9 hours lecture, 3 hours laboratory, 2 hours by arrangement. CR/NC option. Recommended: May apply depending upon specific topic.

A series of short courses, each dealing with a specific topic of relevance to Electronic Technology. Specific topics are listed in the Schedule of Classes.

May be repeated with different topics.

### **ELEC 300 Introduction to Electronics**

(Formerly ELEC 200) 2 units/4 hours lecture for 8 weeks. CR/NC option.

Introduction to the terms used in the electronics industry; correlation between electronic symbols and the physical equivalent of that symbol; schematic reading. Recommended for students who are presently employed or considering employment in entry level jobs in the electronic industry.

### **ELEC 300L Basic Soldering Skills for Electronics**

(Formerly ELEC 200L) 1 unit/3 hours laboratory. CR/NC only. Recommended: Concurrent enrollment in ELEC 300 (formerly ELEC 200).

Basic Soldering Skills for Electronics is a 45-hour hands-on training course designed to provide the student with the necessary knowledge and skill to attain proficiency in producing high reliability solder connections. This course is suitable for individuals with no prior knowledge of electronic soldering techniques as well as the advanced electronic

student. This course covers approximately ten individual soldering lessons that are based on current industrial, military, and NASA practices. Basic printed-circuit board (PCB) rework techniques as component removal and PCB repair of open traces and lifted pads.

May be taken for a total of 3 units.

## **Emergency Medical Care**

### **EMC 233 Non-Traditional First Responder**

(Formerly HLE 233) 3 units/3 hours lecture. Grade only.

Recommended: Eligibility for Engl 100A or equivalent.

Provide the non-traditional first responder with the knowledge and skills necessary to help sustain life, reduce pain, and minimize the consequences of an emergency illness or injury until a more advanced level of medical help arrives. Upon completion, student will receive a course completion certificate and CPR card.

### **EMC 265 Mobile Intensive Care Nursing**

(Formerly NR 265) 3 units/6 hours lecture for 10 weeks.

Grade only. Prerequisite: RN licensure.

Designed to prepare the experienced registered nurse working in a base hospital emergency department to evaluate medical and trauma emergencies in the pre-hospital setting. Application to scientific and nursing principles allows the student to direct paramedics, via radio, to perform advanced life support procedures. Approved by the Sonoma County Emergency Medical Services and meets partial fulfillment of requirements for certification as an MICN.

### **EMC 270A Emergency Medical Technician - Paramedic Didactic**

14 units/16 hours lecture, 8 hours laboratory. Grade only.

Prerequisite: Provisional: Eligibility for ENGL 100A or equivalent. Score of 25 on computational math exam. Students scoring less than 25 must complete CSKL 374 (formerly CSKL 373B) or equivalent. Math prerequisite may also be met by any math course from Area B of the General Education pattern. EMC 274 (formerly HLC 274) or equivalent (must be currently certified California EMT-1).

EMC 275.1 (formerly HLC 275B) or equivalent. ANAT 58 (previously ANAT 52) or equivalent; possess current CPR card; must be admitted to program. Recommended: Six months of field experience with an EMS provider prior to start of class; HLC 60-Medical Terminology.

Course designed to meet California State Health and Safety Code training requirements for emergency medical technician-paramedic. Students are able to apply the principles of anatomy, physiology, pathophysiology, clinical symptoms and diagnosis as they pertain to pre-hospital emergency medical care of the sick and injured. The first course leading to state certification as an EMT-paramedic.



### **EMC 270B Emergency Medical Technician - Paramedic Clinical**

8 units/25 hours by arrangement for 8 weeks. Grade only. Prerequisite: Successful completion of EMC 270A.

Application of skills in the clinical setting to include, but not be limited to, the emergency department and various specialty units. Student will demonstrate knowledge & skills related to anatomy, physiology, pathophysiology, clinical symptoms and diagnosis as they pertain to pre-hospital emergency medical care of the sick and injured. This is the second course designed to give students the clinical experience required for certification as an EMT-paramedic in California.

### **EMC 270C Emergency Medical Technician - Paramedic Field Internship**

10 units/42 hours by arrangement for 12 weeks. Grade only. Prerequisite: Completion of EMC 270B; OR prior qualification for EMC 270C.

Application of skills in the field setting while working on an approved advanced life support ambulance. Student will demonstrate knowledge and skills related to anatomy, physiology, pathophysiology, clinical symptoms and diagnosis as they pertain to pre-hospital emergency medical care of the sick and injured. This is the third course designed to give students the field experience required for certification as an EMT-paramedic in California.

### **EMC 270D EMT-Paramedic National Registry Exam Preparation and Testing**

(Formerly EMC 299.8) 0.5 unit/4 hours lecture, 12 hours laboratory for 1 week. CR/NC only. Prerequisite: Completion of Paramedic Certificate Program or minimum of 240 hours of paramedic internship completed as required by California Health & Safety Code.

This course is designed to prepare the paramedic student who has completed training or is in the final phase of field internship for the Paramedic National Registry Exam. The course will consist of review for the written and skills testing. The final phase of the course will be the administration of the EMT-Paramedic National Registry Exam that is required for licensing as a paramedic in the State of California.

### **EMC 274 Emergency Medical Technician Lecture/Lab**

(Formerly HLC 274) 5 units/3 hours lecture, 3 hours laboratory, 2.5 hours by arrangement. Grade only. Prerequisite: EMC 233 (formerly HLE 233) or 290 or equivalent; current certification in CPR. Recommended: Eligibility for Engl 100A or equivalent. Completion of Anat 51.

Basic level course primarily designed to meet the California State Department of Health lecture requirements for the emergency medical technician who functions on an operational ambulance. Students are able to apply principles of anatomy, physiology and communications as they relate to the assessment of the sick and injured and rendering pre-hospital basic life support. Students will apply the above knowledge to develop manipulative skills necessary to the practice of an EMT. Students must be 18 years of age by course completion to be eligible

for the State Dept of Health certification. Students are not permitted to take FIRE 208.1 concurrently with this course.

### **EMC 274.1 Emergency Medical Technology Refresher**

(Formerly EMC 275R) 0.5-2 units/up to 4 hours lecture for 8 weeks. Grade only. Prerequisite: Completion of EMC 274 (formerly HLC 274) and EMT-1(A) Certification, current or expired no more than 12 months. Current CPR card.

Recommended: Eligibility for Engl 100A or equivalent. Refresher course designed to update the knowledge and skills on the EMT-1 in compliance with the requirements as outlined by the State of California Administration Code. Basic principles learned as an EMT-1 are used in the exploration and solving of problems encountered in the pre-hospital setting. May be taken for a total of 16 units.

### **EMC 275.1 Basic Arrhythmia Recognition Course**

(Formerly HLC 275B) 2 units/3 hours lecture for 11 weeks. Grade only.

Application of basic principles of cardiac anatomy and physiology to recognize basic heart arrhythmias. Designed for health and allied care personnel who assume responsibility for cardiac monitoring in the pre-hospital and hospital setting.

### **EMC 275.2 Advanced Cardiac Life Support**

(Formerly HLC 275C) 1 unit/8 hours lecture for 3 weeks. Grade only. Prerequisite: Physician, RN or paramedic actively involved or required by law to be certified as advanced cardiac life support provider. Current CPR certification.

Designed for nursing, medical, para-medical or allied health personnel whose daily occupation demands proficiency and certification in the knowledge of ACLS skills. Student is able to analyze life threatening cardiac emergencies and apply advanced principles of cardiac and respiratory anatomy and physiology. Curriculum adheres to the American Heart Association ACLS standards.

### **EMC 275.3 Automated Early Defibrillation**

0.5 unit/8 hours lecture for 1 week. CR/NC only. Prerequisite: EMC 290 or equivalent. Must have a current CPR card.

Application of cardiac, anatomy and physiology principles and electrocardiography that will allow the first responder or EMT-trained student to assess and apply semi-automatic electrical defibrillator to a patient in cardio-pulmonary arrest. Content is based upon the California State Dept of Health requirements as defined by Title 22 of the Health & Welfare Code. State certification awarded at successful completion.

### **EMC 275.5 12 Lead EKG Interpretation & Advanced Arrhythmias**

(Formerly EMC299.04) 1 unit/6 hours lecture, 2 hours laboratory for 3 weeks. CR/NC only. Prerequisite: Completion of EMC 275.1 (formerly HLC 275B) with a grade of C or better. ACLS certification recommended. Recommended: Completion of EMC 275.2.

Designed for paramedical and other allied health personnel whose occupation entails interpretation and/or knowledge of 12 lead EKG. Application of principles needed to interpret a 12-lead electrocardiogram.

May be taken for a total of 2 units.

### **EMC 276 Driving Skills for Emergency Medical Driver Operators**

0.5 unit/2 hours lecture, 6 hours laboratory for 1 week. CR/NC only.

Designed for emergency service personnel to improve the skill level of operators of vehicles concentrating on hands-on driving exercises. To develop and improve skills in close-quarters maneuvering, backing, and everyday driving activities.

May be taken for a total of 4 times.

### **EMC 276.1 Preparation for Emergency Vehicle Operation Class**

0.5 unit/8 hours lecture for 1 week. CR/NC only.

Recommended: One or more of the following: completion or enrollment in a Public Safety course or vocational interest in Public Safety.

Course will prepare the student with the knowledge necessary to safely operate an emergency vehicle in emergency and non-emergency settings. This course is a preparation course for (EMC276) Emergency Vehicle Operations.

May be taken for a total of 1 unit.

### **EMC 290 Emergency Care for First Responders**

3 units/3 hours lecture. Grade only. Recommended:

Standard first aid.

Develops manipulative and problem-solving skills necessary for the initial evaluation and stabilization of the victim of emergency illness or trauma.

Designed for persons who are interested in a career as first responders to medical emergencies. Upon completion, student receives CPR and First Responder certificates.

### **EMC 290.1 First Responder Refresher**

(Formerly FIRE299.59) 1 unit/12 hours lecture, 12 hours laboratory for 1 week. CR/NC only. Prerequisite: Completion of EMC 290 or equivalent within the last 3 years.

This course is designed to update material from EMC 290. It is presented in six modules that contain lecture, skills review and scenarios that are common to the working first responder. Emphasis is placed on the priorities of each type of response as well as the probable injuries or medical conditions likely to be encountered.

May be taken for a total of 16 units.

### **EMC 299 Selected Topics in Emergency Medical Care**

0.5-1 unit/up to 1 hour lecture, 1 hour laboratory. CR/NC only. Recommended: Eligibility for English 100A or equiv.

A series of selected topics designed to meet a specific emergency medical training need, each section carries a specific title relative to the subject matter to be covered.

May be repeated with different topics.

## Engineering

### ENGR 1 Introduction to Surveying

3 units/2 hours lecture, 3 hours laboratory. Grade only. Prerequisite: Completion of MATH 58 or higher (V2); OR prior qualification for ENGR 1; OR completion of MATH 27 (or MATH 57).

Principles and practice of surveying; measurements of distance, elevation, and angles; directions; traversing; topographic mapping; errors and adjustments; horizontal and vertical curves. (CSU/UC)

CAN ENGR 10

### ENGR 6 Programming in MATLAB for Engineers

3 units/3 hours lecture. CR/NC option. Prerequisite: Completion of MATH 1A or higher (V2); OR concurrent enrollment in MATH 1A. Recommended: One year of high school physics or PHYS 1 completed or in progress.

Designed to meet computer programming requirements for engineering transfer students. Engineering examples and applications using MATLAB. Students outline, write, test, and debug computer programs to solve problems and display results. Emphasis on proper documentation of computer code and reports. Programming topics include: the operating environment, program structure, data types, math functions, selection statements, loops, and recursion. Engineering problems expose the student to math and physics topics including: units, mechanics, electricity, optics, matrices, complex numbers, statistics, numerical differentiation and integration. (CSU/UC)

### ENGR 10 Introduction to the Engineering Profession

1.5 units/2.4 hours lecture for 10 weeks. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent. Non-mathematical introduction to the field of engineering. Students research and discuss the role of the engineering and technology in society, and the expectations and experiences of engineers in academia and industry. Group activities, assignments, and interaction are emphasized. Course encourages information gathering toward making informed decisions about career paths, majors, and schools. Course also includes information regarding engineering transfer requirements and coursework expectations. Job hunting skills such as networking, resume writing, and interviewing are explored. A short design project will give exposure to engineering design concepts. Field trips and guest speakers augment student information gathering. (CSU/UC)

### ENGR 16 Electric Circuits & Devices

4 units/3 hours lecture, 3 hours laboratory. Grade only. Prerequisite: PHYS 4C completed or in progress and Math 2B completed or in progress.

Fundamental principles of engineering circuit analysis and an introduction to the theory and use of common electronic devices. Subjects covered include node and loop analysis, circuit simplification techniques, natural and forced response, op amp

behavior and circuits, semiconductor theory and behavior, transistor biasing, modeling, small signal analysis, and digital circuits. Mathematical concepts reviewed and applied include: matrices and determinants, binary and complex numbers. Fourier and Laplace transforms, phasors and partial fraction expansion. Lab will be selected from those topics in the above list not duplicated in the Physics 4C (Electricity and Magnetism). (CSU/UC)

CAN ENGR 6

### ENGR 25 Engineering Graphics and Design

3 units/2.5 hours lecture, 1.5 hours laboratory. Grade only. Prerequisite: Math 27 (formerly MATH 57) with a grade of "C" or better. Recommended: Completion of APTECH 56.

Basic principles of engineering graphics including: orthographic projection, descriptive geometry, and geometric tolerancing are introduced with an emphasis on solutions to mechanical and civil engineering problems in three dimensional space. AutoCAD coverage emphasizes 3D solid modeling, but includes 2D commands and working drawings in a project and oral presentation format. Engineering group design processes are introduced and applied using design contests. (CSU/UC)

CAN ENGR 2

### ENGR 34 Statics

3 units/3 hours lecture. Grade only. Prerequisite: Phys 4A. A vectorial treatment of the principles of statics with application to engineering problems. (CSU/UC)

CAN ENGR 8

### ENGR 45 Properties of Materials

4 units/3 hours lecture, 3 hours laboratory. Grade only. Prerequisite: CHEM 1A or 4A and PHYS 4A.

Structure, properties, selection, utilization, and deterioration of engineering materials. (CAN ENGR 4) (CSU/UC)

CAN ENGR 4

### ENGR 49 Special Studies in Engineering

1-3 units/up to 9 hours by arrangement. Grade only.

Prerequisite: Application to department

Seminars or individual conferences by arrangement to provide for independent study and enriched academic experience. (CSU/UC)

Independent study including 49 and 98 courses - 6 unit total.

## English

### ENGL 1A Reading & Composition

4 units/4 hours lecture. Grade only. Prerequisite: Qualifying score on English Placement Test or completion of Engl 100B or Engl 104 with a grade of "C" or better.

Critical reading and discussion of works in various literary forms. Composition predominantly of reasoned and reflective prose. Content and emphasis of particular sections specified in the English Department's course description bulletin "A Hundred Doors" issued every year. (CSU/UC)

AA/AS area A; CSU area A2; IGETC area 1A; CAN ENGL 2; ENGL 1A + ENGL 1B = CAN ENGL SEQ A

### ENGL 1B Literature and Composition

3 units/3 hours lecture. Grade only. Prerequisite: Completion of Engl 1A with a grade of "C" or better.

Critical reading and discussion of works in the major genres of literature and in works of literary criticism. The course emphasis is on critical reading and writing applied to the analysis of literature. The content and emphasis of particular sections are specified in the English Department's course description bulletin "A Hundred Doors" issued every year. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B; CAN ENGL 4; ENGL 1A + ENGL 1B = CAN ENGL SEQ A

### ENGL 1C Reading & Composition

3 units/3 hours lecture. Grade only. Prerequisite: Engl 1B with a "C" or better. Recommended: College level reading and writing skills, with particular emphasis on critical/analytical thinking and writing. An ability to write focused, cohesive essays on a variety of cross-disciplinary issues.

An interdisciplinary reading and writing course to give the student extensive experience in various modes of composition and thought with emphasis on reasoned and reflective prose. (CSU/UC)

### ENGL 1B.1 Reading and Composition/American Cultures Breadth

3 units/3 hours lecture. Grade only. Prerequisite: Engl 1A with "C" or better.

Introduction to imaginative literature through critical reading and discussion of various literary forms addressing theoretical and analytical issues relevant to understanding race, culture, and ethnicity in American history and society. Will take substantial account of groups drawn from at least 3 of the following: African Americans, American Indians, Asian Americans, Chicano/Latinos, and European Americans. Composition of predominantly reasoned and reflective prose. Fulfills both English 1B General Education requirement and American Cultures Breadth requirement at UC Berkeley. (CSU/UC)

CSU areas C2, A2

### ENGL 2 Introduction to the Novel

3 units/3 hours lecture. CR/NC option. Prerequisite: Engl 1A. Elements of the novel form: narration, point of view, structure, plot, character, and metaphorical language, as well as themes introduced through reading and discussion of seven to ten outstanding novels. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B; CAN ENGL 18

### ENGL 3 Introduction to Poetry

3 units/3 hours lecture. CR/NC option. Prerequisite: Completion of Engl 1A.

Study of nature, variety and significance of poetry: a studious pursuit of what makes poems work, why they are valued, and how to enjoy them fully. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B; CAN ENGL 20

### ENGL 4A Beginning Creative Writing

3 units/3 hours lecture. CR/NC option. Prerequisite: Eligibility for Engl 1A or equivalent, completion of Engl 1A is strongly recommended.

Study and writing of short fiction, poetry, or drama. Content and emphasis of particular sections specified in the English Department's course description bulletin "A Hundred Doors" issued every year. (CSU/UC)

CAN ENGL 6

### ENGL 4B Creative Writing Workshop

3 units/3 hours lecture. CR/NC option. Prerequisite: Completion of ENGL 4A.

Continuation of English 4A, work in the writing of fiction, poetry, drama, and/or non-fiction prose. (CSU/UC)

CAN ENGL 6

### ENGL 4C Advanced Creative Writing Workshop

3 units/3 hours lecture. CR/NC option. Prerequisite: Engl 4B with a grade of "C" or better.

Continuation of English 4B, work on the writing of fiction, poetry, drama, and/or non-fiction prose. (CSU/UC)

CAN ENGL 6

### ENGL 5 Advanced Composition and Critical Thinking

3 units/3 hours lecture. Grade only. Prerequisite: Completion of Engl 1A with a "C" or better.

A critical reasoning and advanced composition course designed to develop critical reading, thinking and writing skills beyond the level achieved in English 1A. The course will focus on development of logical reasoning and analytical and argumentative writing skills. (CSU/UC)

AA/AS area B; CSU area A3; IGETC area 1B

### ENGL 7 Introduction to the Short Story

3 units/3 hours lecture. CR/NC option. Prerequisite: Engl 1A.

An introduction to the genre of the short story, including the elements of the form: narration, point of view, character, plot and metaphorical language. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B

### ENGL 13 Recurrent Mythic Themes in Literature

3 units/3 hours lecture. CR/NC option. Prerequisite: Eligibility for Engl 1A or equivalent. Recommended: General awareness of literature.

Recurrent mythic archetypes and themes in literature. Readings not confined to a single genre or historical period. (CSU/UC)

### ENGL 15 Women in Literature

3 units/3 hours lecture. CR/NC option. Prerequisite: Eligibility for Engl 1A or equivalent. Recommended: General awareness of literature.

Study of the tradition of women writing fiction, poetry and drama. While focusing on women in the western literary tradition, attention will be paid to work from other cultures. Approach will be interdisciplinary, with reference to history, sociology, psychology and art. Study will include examination of the place of women in literary history, and the role of changing models of literary criticism. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B

### ENGL 22 Ethnic Diversity in American Literature

3 units/3 hours lecture. CR/NC option. Prerequisite: Completion of ENGL 1A or equivalent.

A study of ethnic literature in America. Reading, discussion and analysis of trends in the literature of three of the following United States ethnic groups: Native American, European American, Asian American, African American, Chicano/Latino American. Readings will depend on the ethnic traditions selected by the instructor for the given semester but will consist of works from a variety of literary genres: nonfiction, fiction, poetry, drama and prose. The course will emphasize the cultural issues that shape each ethnic literature, as well as its special contributions to the overall American mix. (CSU/UC)

AA/AS areas E, G; CSU area C2; IGETC area 3B

### ENGL 25 Introduction to Language Study

3 units/3 hours lecture. CR/NC option. Prerequisite: Eligibility for Engl 1A or equivalent.

Study of the nature and structure of language; language and the mind; child language acquisition; language in its social setting; language and culture; language change; applications of the science of linguistics. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B

### ENGL 27 Introduction to Shakespeare

3 units/3 hours lecture. CR/NC option. Prerequisite: Engl 1A with a grade of "C" or better.

Appreciation of Shakespeare based on a reading of representative plays and selected sonnets. (CSU/UC)

CSU area C2; IGETC area 3B

### ENGL 30.1 Introduction to American Literature

(Formerly ENGL 30A) 3 units/3 hours lecture. CR/NC option. Prerequisite: Engl 1A with grade of "C" or better.

Significant writers and their works from the Colonial Period to the Civil War, including both a thematic and a historical approach to literature of the period. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B; CAN ENGL 14; ENGL 30.1 + ENGL 30.2 = CAN ENGL SEQ C

### ENGL 30.2 Introduction to American Literature

(Formerly ENGL 30B) 3 units/3 hours lecture. CR/NC option. Prerequisite: Engl 1A with a grade "C" or better.

Significant writers and their works from 1865 to present, including both a thematic and a historical approach to the literature of the period. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B; CAN ENGL 16; ENGL 30.1 + ENGL 30.2 = CAN ENGL SEQ C

### ENGL 31 African American Arts and Literature

3 units/3 hours lecture. CR/NC option. Prerequisite: Completion of ENGL 1A.

Reading, discussion and writing about significant African-American writers and artists and their works from slave period to present. Both a thematic and historical approach to the literature and arts including folk tales, slave narratives, political essays, spirituals, poetry, plays, cinema, music, art, biographies, and novels. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B

### ENGL 32 Asian American Literature

3 units/3 hours lecture. CR/NC option. Prerequisite: Completion of ENGL 1A.

Using a historical and thematic approach, the course provides an intensive study of exemplary fiction, non-fiction, poetry, and drama written by and about Asian Americans predominantly of the twentieth century. (CSU/UC)

AA/AS areas E, G; CSU area C2; IGETC area 3B

### ENGL 33 Chicano/Chicana Arts & Literature

3 units/3 hours lecture. CR/NC option. Prerequisite: Engl 1A with a "C" or better.

An introductory survey of contemporary and traditional literature, drama, cinema, art, and music created by those identified as Chicanas/Chicanos. (CSU/UC)

AA/AS areas E, G; CSU area C2; IGETC area 3B

### ENGL 44.1 Masterpieces of European Literature

(Formerly ENGL 44A) 3 units/3 hours lecture. CR/NC option. Prerequisite: Engl 1A with "C" or better.

Study in translation of a number of the great masterpieces of Continental literature from Homer to the Renaissance. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B

### ENGL 44.2 Masterpieces of European Literature

(Formerly ENGL 44B) 3 units/3 hours lecture. CR/NC option. Prerequisite: Engl 1A with grade of "C" or better.

Recommended: Completion of Engl 44.1 (formerly Engl 44A) with "C" or better.

Reading and discussion of works of great Continental authors from the seventeenth to the twentieth century. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B

### ENGL 46.1 Survey of English Literature

(Formerly ENGL 46A) 3 units/3 hours lecture. CR/NC option. Prerequisite: Eligibility for Engl 1A or equivalent.

Recommended: Engl 1B or general awareness of methods of analyzing and writing about literature.

Reading and discussion of important works in English in the period between Beowulf and Johnson, demonstrating the importance and relevance of these works and their authors. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B; CAN ENGL 8; ENGL 46.1 + ENGL 46.2 = CAN ENGL SEQ B

### ENGL 46.2 Survey of English Literature

(Formerly ENGL 46B) 3 units/3 hours lecture. CR/NC option. Prerequisite: Eligibility for Engl 1A or equivalent.

Recommended: Engl 1B or general awareness of methods of analyzing and writing about literature.

Reading and discussion of important works in English from the Romantics to the Moderns, demonstrating the importance and relevance of these works and their authors. (CSU/UC)

AA/AS area E; CSU area C2; CAN ENGL 10; ENGL 46.1 + ENGL 46.2 = CAN ENGL SEQ B

### **ENGL 48 Selected Topics in English**

0.5-3 units/up to 3 hours lecture. CR/NC option. Prerequisite: Eligibility for Engl 1A. Recommended: Varies, will be defined for individual topics.

Intensive study of a topic in English of current interest, selected by the English Department and presented by an instructor specializing in that area. The purpose is to stimulate serious thought by an in-depth analysis of a subject through lecture, seminar, discussion, research, film and other media. (CSU/UC)

May be repeated with different topics.

### **ENGL 49 Special Studies in English**

1-3 units/up to 9 hours by arrangement. Grade only. Prerequisite: Completion of ENGL 100B or higher (V8). Seminars or individual conferences by arrangement to provide for independent study and enriched academic experience. (CSU/UC)

Independent study including 49 and 98 courses - 6 unit total.

### **ENGL 80 Small Publications Workshop**

3 units/2 hours lecture, 3 hours laboratory. CR/NC option. Prerequisite: Eligibility for Engl 100A or equivalent. Recommended: Basic interest in poetry, short fiction, art and publishing; ability to type; and familiarity with a word processing program.

Workshop in creating a "small press" book or magazine from the first stages of developing and editing material through the final details of print production. Students may work on their own projects or on the Santa Rosa Junior College community annual, First Leaves. (CSU)

### **ENGL 81 Speed Reading**

1 unit/3 hours lecture for 8 weeks. CR/NC option.

Prerequisite: Eligibility for Engl 100A.

Analysis of reading skills. Laboratory practice in the improvement of vocabulary, reading comprehension, speed and study skills. (CSU)

### **ENGL 83 Literature and Film: Transformations**

1.5-3 units/up to 3 hours lecture. CR/NC option. Prerequisite: Eligibility for Engl 1A.

Critical reading, viewing, discussion, and writing of and on the narrative, figurative, thematic, and topical formations of literature and film. The content and emphasis of particular sections are specified in the English Department's course description bulletin "A Hundred Doors" issued every year. (CSU)

May be taken for a total of 3 units.

### **ENGL 84A Technical Writing**

(Formerly ENGL 84) 4 units/4 hours lecture. CR/NC option. Prerequisite: Completion of ENGL 100B; OR completion of ENGL 104; OR completion of ENGL 100B or higher (V8).

Development of language and thinking skills required to write clear, concise, well-organized reports in business, science, engineering, and related technologies. (CSU)

AA/AS area A

### **ENGL 84B Intermediate Technical Writing**

4 units/4 hours lecture. CR/NC option. Prerequisite: Completion of ENGL 84A (or ENGL 84).

Continued development of language and thinking skills required for all genres of technical writing/editing conventions and workplace scenarios, e.g., carrying a document through all stages, from planning, research, organization, writing, and multiple revision through publication, within stated deadlines. (CSU)

### **ENGL 84C Advanced Technical Writing**

4 units/4 hours lecture. CR/NC option. Prerequisite: Completion of Engl 84B.

Development of editing skills and concepts required to professionally edit a range of technical documents and graphics; recommended for individuals pursuing careers as technical writers/editors. (CSU)

### **ENGL 100A Reading Improvement**

3 units/3 hours lecture. Grade only. Prerequisite: Qualifying English placement scores (APS & essay) or completion of ENGL 355 with "C" or better. For ESL students, completion of ESL 318 (formerly ENGL 318) and 319R with a "C" or better.

Developmental reading course focuses on organizational patterns, annotation of texts, note-taking from texts, identification of such elements of style as tone and voice, separation of fact and opinion, various analytical techniques.

### **ENGL 100B Writing Improvement**

4 units/4 hours lecture. Grade only. Prerequisite: Qualifying English placement scores (APS & essay); or concurrent enrollment in or completion of Engl 100A with a "C" or better; OR completion of Engl 357 and Engl 357L with credit. For ESL students, completion of ESL 318 with "C" or better and concurrent enrollment in Engl 100A. (Note: if prerequisite is met by concurrent enrollment in Engl 100A, withdrawal from Engl 100A during the semester will cause withdrawal from Engl 100B as well.)

Development of composition and critical thinking skills necessary for college work.

AA/AS area A

### **ENGL 104 Technical Report Writing**

4 units/4 hours lecture. Grade only. Prerequisite: Qualifying score on English Placement Test or completion of ENGL 100A with "C" or better, or completion of ENGL 355 with credit or completion of or concurrent enrollment in ENGL 100A.

Develops student fluency and accuracy in writing technical reports. Students practice various prewriting activities as well as learn basic revising and editing techniques.

AA/AS area A

### **ENGL 160 Humor in Literature and Media**

3 units/3 hours lecture. Grade only. Prerequisite: Eligibility for Engl 355.

Students will enjoy and analyze the persuasive power of humor, identifying vocabulary, tone, inference, and structure of comedy in fiction, non-fiction, theater, cartoons, and classic films. Reading, writing, and critical thinking skills will prepare students for next-level college courses.

### **ENGL 348 Selected Topics in English**

0.5-3 units/up to 3 hours lecture. CR/NC option. Prerequisite: Eligibility for Engl 100A/B (flexible). Recommended: Reading and writing at the college level.

Intensive study of a topic in English of current interest, selected by the English Department and presented by an instructor specializing in that area. The purpose is to stimulate serious thought by an in-depth analysis of a subject through lecture, seminar, discussion, research, film and other media.

May be repeated with different topics.

### **ENGL 348.2 Document Writing for Technology Industries**

1.5 units/3 hours lecture for 8 weeks. CR/NC option. Prerequisite: Completion of ENGL 355 or higher (V8); OR prior qualification for ENGL 348.

Intensive study of a topic in English of current interest, selected by the English Department and presented by an instructor specializing in that area. The purpose is to stimulate serious thought by an in-depth analysis of a subject through lecture, seminar, discussion, research, film and other media.

### **ENGL 355 Basic Reading Skills**

3.5 units/3 hours lecture, 2 hours laboratory. CR/NC option. Prerequisite: Completion of CSKL 350E (formerly ENGL 350, ENGL 107) OR ESL 316 (formerly ENGL 316, ENGL 116) OR ENGL 105 with a grade of "C" or better OR qualifying English placement scores.

Development of fundamental reading skills. Skills development in reading proficiency necessary for college work.

### **ENGL 357 Basic/Developmental Composition**

3.5 units/3 hours lecture, 2 hours laboratory. CR/NC option. Prerequisite: Placement at Engl 355 level by combined APS (Reading Assessment) and Essay (Writing Assessment). APS reading score of 26 of 35 correct answers and Engl 355-level writing placement score of 2 or 3 are required.

Basic/developmental composition parallel to English 355 (Basic Reading). This class is designed for Engl 355-level students whose reading scores indicate their primary need is Engl 100-level work rather than Engl 100-level reading skills. Class includes both lab and classroom instruction.

### **ENGL 360 English Laboratory**

(Formerly ENGL 106.1) 1 unit/2 hours laboratory. CR/NC only.

Individual instruction in English including reading comprehension, critical reading and analytical thinking, vocabulary and spelling.

May be taken for a total of 4 units.

### **ENGL 365 Writing Center**

(Formerly ENGL 106.2) 0.5 unit/2 hours laboratory for 8 weeks. CR/NC only.

Instruction and/or review of writing skills such as paragraphing, topic sentence, thesis idea, development, essay organization, sentence structure, basic sentence patterns, style, sentence mechanics.

May be taken for a total of 3 units.

## English as a Second Language

### ESL 302 Beginning Computer Skills for ESL Students

1 unit/2 hours lecture, 1 hour laboratory for 8 weeks. CR/NC option. Prerequisite: Completion of ESL 312 (formerly ENGL 312, ENGL 112) with a grade of "C" or better or "Credit," or qualifying English Placement Test score. Limited to non-native speakers of English. Recommended: BGN 350.01A (formerly BOT 299.3).

This lab and lecture course is designed for ESL students that are enrolled or plan to enroll in Computer and Information Science or Business Office Technology courses. This course includes reading, vocabulary, student and test-taking strategies, written and oral communication skills in preparation for CIS classes. Labwork includes an introductory hands-on experience with various software applications.

May be taken for a total of 3 times.

### ESL 304 English as a Second Language-Vocational ESL

(Formerly ENGL 304) 1-2 units/up to 3 hours lecture. CR/NC only. Prerequisite: Completion of ESL 310 (formerly ENGL 310, ENGL 110) or ESL 310B (formerly ENGL 310B) with "Credit" or qualifying English Placement Test score; limited to non-native speakers of English.

Development of job-related communication skills through English language activities and exercises relevant to the workplace.

May be taken for a total of 6 units.

### ESL 308 Grammar, Writing and Reading

8 units/10 hours lecture. CR/NC only. Prerequisite: Qualifying English Placement Test score; limited to non-native speakers of English.

A beginning communicative grammar, reading, and writing course introducing students to language skills necessary for survival in everyday social, academic, and employment situations.

May be taken for a total of 2 times.

### ESL 308A Grammar, Writing and Reading

4 units/5 hours lecture. CR/NC only. Prerequisite: Qualifying English Placement Test score; limited to non-native speakers of English.

A beginning communicative grammar, reading, and writing course introducing students to language skills necessary for survival in everyday social, academic, and employment situations. This course covers the first half of the ESL 308 curriculum.

May be taken for a total of 2 times.

### ESL 308B Grammar, Writing and Reading

4 units/5 hours lecture. CR/NC only. Prerequisite: Qualifying English Placement Test score or completion of ESL 308A with "Credit"; limited to non-native speakers of English.

A beginning communicative grammar, reading, and writing course introducing students to language skills necessary for survival in everyday social, academic, and employment situations. This course covers the second half of the ESL 308 curriculum.

May be taken for a total of 2 times.

### ESL 309C English as a Second Language-Conversation I

(Formerly ENGL 309C) 2 units/2 hours lecture, 1 hour laboratory. CR/NC only. Prerequisite: Qualifying English Placement Test score; limited to non-native speakers of English.

A beginning oral communication course designed to improve listening and speaking skills needed for successful interaction at school, on the job, and in the community. Students participate in a variety of speaking and listening activities to improve their oral/aural competency.

May be taken for a total of 6 units.

### ESL 309P English as a Second Language-Pronunciation I

(Formerly ENGL 309P) 2 units/2 hours lecture, 1 hour laboratory. CR/NC only.

A Level I course introducing the student to pronunciation concepts in the English language such as rhythm, stress, intonation, and the sound system through pronunciation and listening practice.

May be taken for a total of 6 units.

### ESL 310 English as a Second Language-Grammar/Writing/Reading

(Formerly ENGL 310) 8 units/10 hours lecture. CR/NC only. Prerequisite: Qualifying English Placement Test score or completion of ESL 308 or ESL 308B with "Credit"; limited to non-native speakers of English.

A high-beginning/low-intermediate communicative grammar, reading and writing course emphasizing the further development of those language skills required for survival in everyday social/academic/employment situations.

May be taken for a total of 2 times.

### ESL 310A English as a Second Language-Grammar/Writing/Reading

(Formerly ENGL 310A) 4 units/5 hours lecture. CR/NC only. Prerequisite: Qualifying English Placement Test score or completion of ESL 308 or ESL 308B with "Credit"; limited to non-native speakers of English.

A high-beginning/low-intermediate communicative grammar, reading, and writing course emphasizing the further development of those language skills required for survival in everyday social/academic/employment situations.

May be taken for a total of 2 times.

### ESL 310B English as a Second Language-Grammar/Writing/Reading

(Formerly ENGL 310B) 4 units/5 hours lecture. CR/NC only. Prerequisite: Qualifying English Placement Test score or completion of ESL 310A (formerly ENGL 310A) with "Credit"; limited to non-native speakers of English.

A high-beginning/low intermediate communicative grammar, reading and writing course emphasizing the further development of those language skills required for survival in everyday social/academic/employment situations.

May be taken for a total of 2 times.

### ESL 310SPL English as a Second Language Beginning Spelling

(Formerly ESL 399.1) 3 units/3 hours lecture. CR/NC option. Prerequisite: Limited to non-native speakers of English; ESL multiple measure assessment at the 308 level or above.

A beginning level elective designed to teach basic

spelling skills. Introduces ESL students to techniques that increase basic spelling skills. Presents spelling patterns through listening and writing practice. Focuses on spelling rules for short and long vowel sounds, difficult consonant sounds, and silent letters. Introduces the English- English dictionary for use in improving spelling and pronunciation.

May be taken for a total of 6 units.

### ESL 311C English as a Second Language-Oral Communication-Converse II

(Formerly ENGL 311C) 2 units/2 hours lecture, 1 hour laboratory. CR/NC only. Prerequisite: ESL 309C (formerly ENGL 309C, ENGL 109C) with "Credit" or qualifying English Placement Test score; limited to non-native speakers of English.

A high-beginning/low-intermediate oral communication course designed to improve those listening and speaking skills needed for cross-cultural understanding in social, academic, and work-related situations.

May be taken for a total of 6 units.

### ESL 311P English as a Second Language - Pronunciation II

(Formerly ENGL 311P) 2 units/2 hours lecture, 1 hour laboratory. CR/NC only. Prerequisite: Qualifying English Placement Test score or completion of ESL 309P (formerly ENGL 309P, ENGL 109P) with "Credit"; limited to non-native speakers of English.

A Level II course designed to build the student's pronunciation and listening skills through active participation in communicative activities. Develops those pronunciation concepts and listening strategies taught in ESL 309P.

May be taken for a total of 6 units.

### ESL 312 English as a Second Language-Grammar/Writing/Reading

(Formerly ENGL 312) 5 units/5 hours lecture, 1 hour laboratory. CR/NC option. Prerequisite: Completion of ESL 310 (formerly ENGL 310, ENGL 110) or ESL 310B (formerly ENGL 310B) with "Credit" or qualifying English Placement Test score; limited to non-native speakers of English.

A low-intermediate/intermediate communicative grammar and writing course focusing on grammatical structures and functions of increasing complexity, as well as basic writing strategies for academic and vocational purposes.

May be taken for a total of 10 units within 2 semesters.

### ESL 313C English as a Second Language-Oral Communication-Conv.

(Formerly ENGL 313C) 2 units/2 hours lecture, 1 hour laboratory. CR/NC option. Prerequisite: Completion of ESL 311C (formerly ENGL 311C, ENGL 111C) with "Credit" or qualifying English Placement Test score; limited to non-native speakers of English.

A low-intermediate/intermediate oral communication course designed to improve those listening and speaking skills needed for successful interaction in social, academic, or work-related situations. Emphasis on finding, getting and keeping a job in the United States and communicating more effectively in social and academic contexts.

Pronunciation activities include placement of stress and word and sentence focus.

May be taken for a total of 6 units.

### **ESL 313P English as a Second Language - Pronunciation III**

(Formerly ENGL 313P) 2 units/2 hours lecture, 1 hour laboratory. CR/NC option. Prerequisite: Completion of ESL 311P (formerly ENGL 311P, ENGL 111P) with "Credit" or qualifying English Placement Test score; limited to non-native speakers of English.

A Level III course focusing on the expansion of listening strategies and on the practical usage of the pronunciation concepts taught in ESL 309P & 311P. Activities will deal with English used in various academic, social and vocational settings.

May be taken for a total of 6 units.

### **ESL 313R English as a Second Language - Reading III**

(Formerly ENGL 313R) 3 units/3 hours lecture. CR/NC option. Prerequisite: Completion of ESL 310 (formerly ENGL 310, ENGL 110) or ESL 310B (formerly ENGL 310B) with "Credit" or qualifying English Placement Test score; limited to non-native speakers of English.

Designed to introduce the student to reading and vocabulary for school, the workplace and everyday life.

May be taken for a total of 6 units.

### **ESL 314 English as a Second Language-Grammar/ Writing/Reading**

(Formerly ENGL 314) 5 units/5 hours lecture, 1 hour laboratory. CR/NC option. Prerequisite: Completion of ESL 312 (formerly Engl 312, Engl 112) with a grade of "C" or better, "credit" or qualifying English Placement Test score. Limited to non-native speakers of English.

A high-intermediate communicative grammar and writing course focusing on more advanced grammatical structures and functions, as well as writing strategies for academic and vocational purposes. Emphasis on tense usage, subordination/ coordination of sentences and an introduction to the topic sentence and supporting detail.

May be taken for a total of 10 units within 2 semesters.

### **ESL 314SPL English as a Second Language Intermediate Spelling**

(Formerly ESL 399.2) 3 units/3 hours lecture. CR/NC option. Prerequisite: Limited to non-native speakers of English; ESL multiple measure assessment at or above the 312 level.

An intermediate ESL elective designed to sharpen spelling skills. Practices and expands spelling strategies for academic, vocational, and personal writing. Builds on basic understanding of English pronunciation and spelling patterns for one-syllable words through listening and writing practice. Introduces spelling patterns and exceptions for word families, compounds, multi-syllable and commonly misspelled words. Expands vocabulary and increases dictionary skills. Teaches how to proofread and effectively spell check using a computer word processor. Uses computer software programs for spelling practice and self-correction.

May be taken for a total of 6 units.

### **ESL 315C English as a Second Language-Oral Communication-Conv.**

(Formerly ENGL 315C) 2 units/2 hours lecture, 1 hour laboratory. CR/NC option. Prerequisite: ESL 313C (formerly ENGL 313C, ENGL 113C) with a grade of "C" or better, "Credit" or a qualifying English Placement Test. Limited to non-native speakers of English.

A high-intermediate oral communication course emphasizing those conversational skills needed to effectively participate in academic, social or work-related contexts. Students react orally and in writing to readings, summarize journal and newspaper articles, give short oral presentations and participate in group discussions and problem-solving activities.

May be taken for a total of 6 units.

### **ESL 315P English as a Second Language - Pronunciation IV**

(Formerly ENGL 315P) 2 units/2 hours lecture, 1 hour laboratory. CR/NC option. Prerequisite: ESL 313P (formerly ENGL 313P, ENGL 113P) with a grade of "C" or better, "Credit" or qualifying English Placement Test score. Limited to non-native speakers of English.

A Level IV course focusing on practical usage of English in the college classroom or in vocational settings through pronunciation and listening activities.

May be taken for a total of 6 units.

### **ESL 315R English as Second Language - Reading IV**

(Formerly ENGL 315R) 3 units/3 hours lecture. CR/NC option. Prerequisite: ESL 313R (formerly ENGL 313R) with a grade of "C" or better, "credit" or a qualifying English Placement Test. Limited to non-native speakers of English.

Designed to further develop reading, vocabulary and study skills for students' academic and employment needs.

May be taken for a total of 6 units.

### **ESL 316 English as a Second Language V-Writing and Grammar**

(Formerly ENGL 316) 5 units/5 hours lecture, 1 hour laboratory. CR/NC option. Prerequisite: Completion of ESL 314 (formerly ENGL 314, ENGL 114) with a grade of "C" or better, "credit" or qualifying English Placement Test score. Limited to non-native speakers of English. Recommended: BGN 350.01A (formerly BOT 299.3) or B.

A high intermediate writing and grammar course reviewing paragraph writing and emphasizing an introduction to the essay, including prewriting techniques, writing, revising and editing. Review of intermediate and advanced grammar structures and punctuation.

May be taken for a total of 10 units within 2 semesters.

### **ESL 317R English as a Second Language - Reading V**

(Formerly ENGL 317R) 3 units/3 hours lecture. CR/NC option. Prerequisite: ESL 315R (formerly Engl 315R & Engl 115R) with a grade of "C" or better, "credit" or qualifying English Placement Test score. Limited to non-native speakers of English.

Development of college-level reading skills with particular focus on comprehension, vocabulary and rate.

May be taken for a total of 8 units.

### **ESL 318 English as a Second Language VI**

(Formerly ENGL 318) 5 units/5 hours lecture, 1 hour laboratory. CR/NC option. Prerequisite: ESL 316 (formerly ENGL 316, ENGL 116) with grade of "C" or better, "Credit" or qualifying English Placement Test score; limited to non-native speakers of English. Recommended: BGN 350.01A (formerly BOT 299.3) or B.

An advanced writing course focusing on essay writing (prewriting, revising and editing techniques), grammar, idiomatic usage and vocabulary development.

May be taken for a total of 10 units within 2 semesters.

### **ESL 319R Advanced ESL Reading - VI**

3 units/3 hours lecture. CR/NC option. Prerequisite: Completion of ESL 317R (formerly ENGL 317R) with "C" or better, "Credit" or qualifying English Placement Test score for ESL 318 (formerly ENGL 318) level; limited to non-native speakers of English.

Development of college level reading skills with particular focus on comprehension, vocabulary, and analysis through exercises and written assignments in preparation for mainstreaming into native speaker classes.

May be taken for a total of 6 units.

### **ESL 334 Vocational English as a Second Language in Health Sciences**

(Formerly ESL 399.4) 1-3 units/up to 3 hours lecture. CR/NC option. Prerequisite: Limited to non-native speakers of English; placement by ESLPT at ESL 312 or above, or completion of ESL 310 (formerly ENGL 310, ENGL 110) or ESL 310B (formerly ENGL 310B) with Credit. Corequisite: None. Recommended: Completion of ESL 310 (formerly Engl 310 & Engl 110) or ESL 310B (formerly Engl 310B) with "credit", ESLPT results at 312 level or higher. Limits on enrollment: Limited to non-native speakers of English.

Development of English speaking, listening, reading and writing skills needed for students wishing to study or work in the health science fields.

May be taken for a total of 12 units.

### **ESL 365 Writing Center**

0.5 unit/2 hours laboratory for 8 weeks. CR/NC only. Instruction and/or review of writing skills such as paragraphing, topic sentence, thesis idea, development, essay organization, sentence structure, basic sentence patterns, style, sentence mechanics.

May be taken for a total of 3 units.

### **ESL 399 Selected Topics in ESL**

(Formerly ESL 303) 0.5-2 units/up to 3 hours lecture. CR/NC option. Prerequisite: Limited to non-native speakers of English; assignment by English Placement Test above 706 level.

Selected courses in speaking, listening, reading and writing workshop for students wishing to improve their overall English performance.

May be taken for a total of 12 units.

## Environmental Science

### ENVS 1 Rivers

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 1A or equiv.

An interdisciplinary program that combines concepts from the physical sciences and life sciences to explore the creation, evolution and current status of California's rivers. Using trips to and down the Russian River, we will study the river as habitat for riparian wildlife, as an economic and natural resource, as well as a source of ideological controversy. Students will explore the conflicting ideas as to the causes of degradation and analyze the remediation solutions suggested by adversaries on these issues. (CSU)

AA/AS area C; CSU area B1

### ENVS 12 Population, Resources & Environment

3 units/3 hours lecture. CR/NC option. Recommended: Completion of or concurrent enrollment in Engl 100B or eligibility for Engl 1A.

Interactions of population growth, technology, and resources, including land, water, air, energy, minerals, and food. Global and regional patterns of resource use and environmental impacts. (CSU/UC)

AA/AS area C; CSU area B1

## Environmental Technology

### ENVT 230 Industrial Waste Pretreatment Facility Inspection

3 units/3 hours lecture. Grade only.

The pre-treatment facility inspector, development and application of regulations, inspection of typical industries, safety in pre-treatment inspection work, sampling procedures for wastewater, wastewater flow monitoring, industrial wastewaters, pre-treatment technology (source control), industrial inspection procedures, emergency response, pre-treatment administration.

### ENVT 235 Wastewater Laboratory Chemistry

0.5 unit/1 hour lecture, 3 hours laboratory for 6 weeks. Grade only. Recommended: ENVT 320 or equivalent.

This course will cover basic wastewater laboratory information, including chemical terms and symbols, equipment, sampling, safety, and quality assurance. Students will perform lab tests, including pH, dissolved oxygen, solids (settleable, suspended, total, volatile), sludge volume index, biochemical oxygen demand, alkalinity, volatile acids, chlorine residual, and chloride.

### ENVT 300 Introduction to Environmental Technology

(Formerly ENVT 200) 3 units/3 hours lecture. Grade only.

Introduction to mathematics, chemistry, biology, bacteriology, hydraulics and electricity as related to

the field of water and wastewater treatment technology. Prepares students for the California Department of Health Services or the California Department of Water Resources Certification Examinations.

### ENVT 310 Water Treatment Plant Operator

(Formerly ENVT 210) 3 units/3 hours lecture. Grade only. Prerequisite: ENVT 200 or equivalent.

For water treatment plant operators, covering the areas of processes and treatment of various sources, safety, water quality standards, distribution and storage of water systems. Prepares students for the California Department of Health Services certification examination for Water Treatment Plant Operator.

### ENVT 320 Wastewater Treatment Plant Operator

(Formerly ENVT 220) 3 units/3 hours lecture. Grade only. Prerequisite: ENVT 200 or equivalent.

For wastewater treatment plant operators covering the areas of collection, processes and treatment of wastewater by various methods. Safety, quality standards, testing and maintenance in the treatment facility. Prepares qualified students for the California Resources Control Board Certification Examination.

### ENVT 399 Selected Topics in Environmental Technology

0.5-2 units/up to 2 hours lecture. CR/NC option.

Recommended: Environmental Technologies or related experience.

A series of short courses, each dealing with a specific topic of relevance to Environmental Technology.

May be repeated with different topics.

## Fashion Studies

### FASH 8 Introductory Textiles for Modern Usage

(Formerly CLTX 8) 3 units/2 hours lecture, 3 hours laboratory. CR/NC option. Recommended: Eligibility for English 100A or equiv.

The study of natural and man-made fibers including their characteristics, use and care for clothing and home furnishings. Topics include yarn and fabric construction and identification, dyeing and printing processes, finishes, fabric testing, performance and serviceability and legislation. (CSU/UC)

CAN FCS 6

### FASH 50 Fashion Careers

(Formerly FASHN 50) 3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv.

A basic study of the world of fashion merchandising: the economics, sociological and psychological factors affecting fashion merchandise. Exploration of career opportunities and requirements will be covered to help prepare students for employment in the field of fashion. (CSU)

### FASH 51 Fashion Apparel and Accessories

(Formerly FASHN 51) 3 units/3 hours lecture. Grade only. Recommended: Eligibility for English 100A or equiv.

This course explores current trends & product knowledge in ready-to-wear and accessories. Included are styles, designs, construction, details, sizing, terminology, and sales techniques for all types of apparel and home furnishing. (CSU)

### FASH 52 Fashion Display

(Formerly FASHN 52) 2 units/1.5 hours lecture, 1.5 hours laboratory. CR/NC option.

The study of how fashion shows sell merchandise. Students will learn how to plan all aspects of the show including the staging, lighting, music, models, modeling, writing commentary and rehearsals. Students will produce a full scale fashion show. (CSU)

May be taken for a total of 4 units.

### FASH 53 Fashion Analysis

(Formerly FASHN 53) 3 units/2 hours lecture, 3 hours laboratory. CR/NC option. Recommended: Eligibility for English 100A or equiv.

Study of color, line and design principles related to clothing and appearance. Wardrobe planning and management, figure analysis, accessorizing and grooming techniques provided to assist in image development. Social and psychological aspects of clothing, fashion cycles and trends, and consumer issues related to the selection and use of clothing included. (CSU)

### FASH 54 Bridal Consultant

(Formerly FASHN 54) 1 unit/2 hours lecture for 8 weeks. Grade only.

Planning a wedding from engagement through the ceremony and reception. To include wedding party responsibilities, proper attire, etiquette, correspondence, food, flowers, music and facilities. (CSU)

### FASH 55.1 History of Costume

(Formerly FASHN 55.1) 3 units/3 hours lecture. CR/NC option.

Study of fashion from ancient times to 20th century. Historic and social events which influenced dress will be included. Special emphasis is placed on how these styles affect today's fashions. (CSU)

### FASH 55.2 Contemporary Fashion Designers

(Formerly FASHN 55.2) 3 units/3 hours lecture. CR/NC option.

A study of fashion designers from Charles Worth and the beginning of Haute Couture in the 1850's to the prominent designers of today. Particular emphasis on major American and International designers for fashion and film from the past 50 years. (CSU)

### **FASH 56A Fashion Design and Illustration**

(Formerly FASHN 56A) 2 units/1 hour lecture, 3 hours laboratory. Grade only.

An introduction to the principles of fashion design, drawing and illustration. The basic principles of design as they apply to fashion are covered, and then utilized in creating sketches and renderings of fashion designs. Principles of figure drawing of women, men and children included. Students will create a portfolio of renderings using various techniques including pencil, ink and markers. (CSU)

### **FASH 56B Advanced Fashion Design and Illustration**

(Formerly FASHN 56B) 2 units/1 hour lecture, 3 hours laboratory. Grade only. Prerequisite: FASH 56A (formerly FASHN 56A).

Further development of student's designing and illustrating skills. Several color rendering techniques are explored, and a special emphasis placed on developing a professional quality portfolio. (CSU) May be taken for a total of 4 units.

### **FASH 57 Fashion Buying**

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for ENGL 100A.

This course will introduce students to all duties and responsibilities of a buyer with emphasis on buying strategy. The class will prepare students for careers in retailing. (CSU)

May be taken for a total of 3 units.

### **FASH 58 Fashion Entrepreneurship**

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A.

An in-depth study of the business of apparel, sewn product, and related small fashion enterprises, including legal aspects. Formerly CFS 302.3. (CSU)

### **FASH 60 Draped Design**

(Formerly CLTX 60) 2 units/1.5 hours lecture, 1.5 hours laboratory. CR/NC option. Prerequisite: Basic sewing knowledge.

Use of a dress form and draping techniques to create original designs without patterns. Students may use industry dress forms or create a personal, custom-fitted form in class. Resources for dress forms will be discussed in class. Construction of garment from an original draped design required. (CSU)

May be taken for a total of 4 units.

### **FASH 62A Flat Pattern Design I**

(Formerly CLTX 50A) 2 units/1.5 hours lecture, 1.5 hours laboratory. CR/NC option. Recommended: FASH 70A (formerly CLTX 70A, CLTX 7A).

In this course, the student will learn basic patternmaking skills using the Flat Pattern Method. A basic fitting pattern is developed and used to create patterns for original, individual designs. Patterns for skirts, pants, tops, dresses, sleeves, collars and knits are discussed. Construction of a garment from an original design and pattern required. (CSU)

May be taken for a total of 4 units.

### **FASH 62B Flat Pattern Design II**

(Formerly CLTX 50B) 2 units/1.5 hours lecture, 1.5 hours laboratory. CR/NC option. Prerequisite: Completion of FASH 62A (or CLTX 50A or CLTX 5A). Recommended: Previous or concurrent enrollment in FASH 60 (formerly CLTX 60, CLTX 6, CLTX 176). Pattern development using flat pattern & draping methods.

Further studies in patternmaking techniques, with an emphasis on professional skills, unique styling details, and more complex design components. Patterns for jackets, coats, activewear, men and children are discussed. Development of specialized slopers (such as pants, jackets, etc.) included. (CSU) May be taken for a total of 4 units.

### **FASH 70A Clothing Construction**

(Formerly CLTX 70A) 1.5-3 units/up to 2 hours lecture, 4 hours laboratory. CR/NC option.

This Clothing Construction class is designed to provide the student with basic sewing skills, fitting and alteration techniques of a commercial pattern, knowledge of basic sewing equipment and pressing techniques appropriate for the pattern design and fabric selected. Projects and samples required. (CSU) CAN FCS 10

May be taken for a total of 6 units.

### **FASH 70B Clothing Construction**

(Formerly CLTX 70B) 1.5-3 units/up to 2 hours lecture, 4 hours laboratory. CR/NC option. Recommended: Completion of FASH 70A (formerly CLTX 70A, CLTX 7A).

This Clothing Construction class is designed to provide the student with intermediate to advanced sewing skills to develop competence in working with designer patterns, specialty fabrics, plaids, stripes, napped fabrics and more complex sewing techniques. Projects and samples required. (CSU)

May be taken for a total of 6 units.

### **FASH 71 Advanced Clothing & Easy Tailoring**

(Formerly CLTX 71) 1.5-3 units/up to 2 hours lecture, 3 hours laboratory. CR/NC option.

This class is designed for the student with intermediate to advanced sewing skills and provides additional sewing techniques appropriate for all types of woven fabrics and pattern designs. Emphasis is given to the construction of tailored garments such as suits and coats for men and women. Fitting and alteration methods, custom tailoring techniques and contemporary tailoring techniques included. Projects and samples required. (CSU)

May be taken for a total of 9 units.

### **FASH 72A Sewing with Sergers**

(Formerly CLTX 72A) 1.5 units/1 hour lecture, 2 hours laboratory for 16 weeks. CR/NC option.

This course emphasizes how to use today's serger machine to its fullest potential. Fundamentals of tension adjustment for special effects and decorative uses and problem solving techniques are emphasized. A variety of threads, ribbons and yarns will be used. Students will construct a garment and samples using specific serger sewing techniques as they apply to contemporary fabrics and styles. Students must provide their own serger. (CSU)

May be taken for a total of 3 units.

### **FASH 72B Serger Update**

(Formerly CLTX 72B) 1.5 units/1 hour lecture, 2 hours laboratory for 16 weeks. CR/NC option. Prerequisite: Completion of FASH 72A (or CLTX 72A). Recommended: FASH 72A (formerly CLTX 72A).

New and updated serging techniques and effective use of serger accessories as applied to home decorating and apparel construction. Emphasis on building speed and creatively expanding the use of the serger. Student must provide own serger. (CSU) May be taken for a total of 3 units.

### **FASH 73 Stretch Apparel Construction**

(Formerly CLTX 73) 1.5 units/1 hour lecture, 2 hours laboratory. CR/NC option.

An in-depth study of stretch fabrics and their characteristics. Students will learn when and how these speciality fabrics are used in apparel. Emphasis will be given to special construction techniques necessary for completion of garments made of stretch fabrics. Professional and updated methods are utilized in addition to creative styling techniques. (CSU)

May be taken for a total of 6 units.

### **FASH 74.1 Menswear-Shirts**

1.5 units/1 hour lecture, 2 hours laboratory. CR/NC option.

This class is designed for the student who wants to develop their sewing skills as they apply to men's shirts. Students will learn fitting, alterations and sewing techniques for a custom tailored man's shirt. Time saving methods of pockets, collars, plackets and cuffs will be covered. (CSU)

May be taken for a total of 6 units.

### **FASH 74.2 Menswear-Pants**

1.5 units/1 hour lecture, 2 hours laboratory. CR/NC option.

Students will explore a variety of fabrics suitable for men's pants and will learn construction techniques for welt pockets, front pockets, fly front zipper and curtained waistband. A pair of custom fitted pants will be constructed in class. (CSU)

May be taken for a total of 6 units.

### **FASH 74.3 Menswear - Jackets/Coats**

1.5 units/1 hour lecture, 2 hours laboratory. CR/NC option.

This course is designed for the person with advanced sewing skills. Specialized tailoring techniques that apply to men's jackets and coats are covered. Students will learn to fit, alter patterns and construct a professional looking man's jacket or coat. (CSU)

May be taken for a total of 6 units.

### **FASH 75 Alterations of Readymade Clothes**

(Formerly FASHN 75) 1 unit/2 hours lecture, 1 hour laboratory for 8 weeks. CR/NC option.

Stresses fitting methods and altering women's, men's and children's ready-to-wear clothing. (CSU)

May be taken for a total of 3 units.



### **FASH 78 Silk Dyeing Techniques for Fashion and Art**

*(Formerly CLTX 75) 1.5 units/1 hour lecture, 2 hours laboratory. CR/NC option.*

Basic techniques of applying design to silk fabrics by dyeing, painting, air brush, stenciling, resists and block printing with dyes/paints; exploration of transfer paints; application of art principles; demo of thread dyeing techniques; adaptation of course to personal and commercial uses. (CSU)

*May be taken for a total of 3 units.*

### **FASH 79 Wearable Art**

*1.5 units/1 hour lecture, 2 hours laboratory. CR/NC option.*

An in-depth study of the creative process and the principles of art as applied to clothing. Advanced techniques in couture design, patterns, and fabric manipulation. Construction of garment required. Formerly FASH 300.17. (CSU)

*May be taken for a total of 6 units.*

### **FASH 99 Occupational Work Experience Education**

*0.5-8 units/up to 36 hours by arrangement. Grade only.*

Occupational Work Experience is supervised employment extending classroom learning at an on-the-job learning station relating to the student's educational or occupational goal. Students gain this experience by enrollment in the parallel or alternate plan. (CSU)

*May be taken for a total of 16 units.*

### **FASH 99I Occupational Work Experience-Intern Program**

*1-8 units/up to 40 hours by arrangement. Grade only.*

Occupational Work Experience Internship is supervised employment extending classroom learning at an on-the-job learning station relating to the student's educational or occupational goal. May be repeated for a total of sixteen (16) units, four (04) units maximum per semester (Repeat Code 25 for all Parallel Plan). Must be enrolled in 7 units including Work Experience units (for summer school - Work Experience and one other course). Alternate Plan - designed to offer students opportunities to attend college full-time one semester and work full-time the following semester. Job experience must relate directly to the student's educational goals. Up to eight (08) units may be earned in one semester. Students may not be enrolled in more than one other course or transfer from Alternate to Parallel or vice-versa without completing 7 units between plans. (CSU)

*May be taken for a total of 16 units.*

### **FASH 101 Basic Pant Fitting**

*(Formerly CLTX300.23) 0.5 unit/1 hour lecture, 2 hours laboratory for 8 weeks. CR/NC option.*

This course covers current methods of pants fitting and pattern alterations as applied to commercial patterns. Students will analyze and solve various fitting problems through the construction of a pants garment. Construction and design techniques to achieve professional pants will be emphasized.

*May be taken for a total of 2 units.*

### **FASH 102 Pattern Alteration**

*0.5 unit/1.5 hours lecture, 1.5 hours laboratory, 3 hours by arrangement for 8 weeks. CR/NC option.*

Demonstrate principles and techniques of pattern alteration to achieve custom fitting of garments. Students observe and solve various fitting problems and practice a variety of alteration techniques.

*May be taken for a total of 2 units.*

### **FASH 105 Pattern Grading**

*1 unit/1.5 hours lecture, 1.5 hours laboratory for 8 weeks. CR/NC option.*

Method for taking a single pattern and grading it up and down into multiple sizes. Overview of size ranges and grade rules included.

*May be taken for a total of 1 unit.*

### **FASH 108 Introductory Textiles for Modern Usage**

*(Formerly CLTX 108) 3 units/2 hours lecture, 3 hours laboratory. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*

The study of natural and man-made fibers including their characteristics, use and care for clothing and home furnishings. Topics include yarn and fabric construction and identification, dyeing and printing processes, finishes, fabric testing, performance, serviceability, and legislation.

### **FASH 170A Clothing Construction**

*(Formerly CLTX 170A) 1.5-3 units/up to 2 hours lecture, 4 hours laboratory. CR/NC option.*

For the beginning or intermediate sewer who wishes to develop competence in basic clothing construction techniques, selection of patterns and fabrics based on previous clothing experience. Fitting and alteration techniques emphasized. Projects required.

*May be taken for a total of 6 units.*

### **FASH 170B Clothing Construction**

*(Formerly CLTX 170B) 1.5-3 units/up to 2 hours lecture, 4 hours laboratory. CR/NC option. Recommended: Completion of FASH 170A (formerly CLTX 170A).*

For the advanced clothing student who wishes to work with designer patterns, unusual garment details and trims, alterations, or difficult fabrics. Fitting techniques stressed throughout. Experimentation and evaluation with advanced clothing construction techniques. Projects required.

*May be taken for a total of 6 units.*

### **FASH 300 Selected Topics in Fashion Studies**

*(Formerly CLTX 300) 0.5-2 units/up to 1 hour lecture, 2 hours laboratory. CR/NC option.*

An in-depth study of a specific area of knowledge in the Fashion Studies curriculum. Topics may include, but not limited to, clothing construction, tailoring, fashion analysis and fabric design.

*May be repeated with different topics.*

## **Fire Technology**

### **FIRE 56 Fire Hydraulics**

*3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent and CSKL 372 or equivalent, and completion of Fire 71 (formerly FIRE 51).* Review of applied mathematics; hydraulics laws as applied to the fire service; application of formulas and mental calculation to hydraulics and water supply problems. (CSU)

### **FIRE 57 Fire Apparatus & Equipment**

*3 units/3 hours lecture. Grade only. Prerequisite: Introduction to Fire Technology, employment in the Fire Service or related field, or with instructors' consent. Recommended: Eligibility for Engl 100A or equivalent.* Fire apparatus design, specifications, and performance capabilities; effective utilization of apparatus in fire service emergencies. (CSU)

### **FIRE 61 Fire Investigation**

*3 units/3 hours lecture. Grade only.* Determining cause of fires (accidental, suspicious, and incendiary); types of fires; related laws; introduction to arson and incendiarism; recognizing and preserving evidence; interviewing witnesses and suspects; arrest and detention procedures; court procedures and giving court testimony. (CSU)

### **FIRE 66 Wildland Fire Control**

*3 units/3 hours lecture. Grade only. Prerequisite: Not open to students who have completed NRM 72 (formerly FOR 72). Recommended: Eligibility for English 100A or equiv.* Cover all aspects of wildland fire prevention and control; resource preservation and utilization; manpower requirements and crew safety; various extinguishing agents and suppression methods; logistics and support activities. (CSU)

### **FIRE 68 Disaster Preparedness & Personal Safety**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.* Disaster and emergency preparedness for the home, school and workplace. Hazard identification, survival behavior and risk reduction techniques for earthquake, fire, flood, windstorm, landslide, home accidents and neighborhood security. Guidelines for organizing and training neighborhood emergency response teams in: firefighting, search and rescue, physical and psychological first aid, care and shelter, communications, and damage assessment. (CSU)

### **FIRE 71 Fire Protection Organization**

*(Formerly FIRE 51) 3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent.* Fire service and fire protection; career opportunities in fire protection and related fields; history of fire protection; fire loss analysis; public, quasi-public, and private fire protection services; specific fire protection services; fire chemistry and physics. (CSU)

### **FIRE 72 Fire Behavior and Combustion**

*(Formerly FIRE 60A) 3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent.*  
Theory and fundamentals of how fires start, spread, and are controlled. An in-depth study of fire chemistry and physics, fire characteristics of materials, extinguishing and fire control techniques. (CSU)

### **FIRE 73 Fire Prevention Technology**

*(Formerly FIRE 52) 3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent.*  
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 relationship of fire prevention with fire safety education and detection and suppression systems. (CSU)

### **FIRE 74 Fire Protection Equipment and Systems**

*(Formerly FIRE 54) 3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent.*  
Portable fire extinguishing equipment; protection systems for special hazards; sprinkler systems, fire detection, and alarm systems. (CSU)

### **FIRE 75 Fundamentals of Fire Service Operations (State Core FT-5)**

*(Formerly FIRE 53) 3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent.*  
Principles of fire control through the utilization of manpower, equipment, and extinguishing agents on the fireground. (CSU)

### **FIRE 76 Building Construction for Fire Protection**

*3 units/3 hours lecture. Grade only. Recommended: Eligibility for English 100A or equiv.*  
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, and studies in relationship to past fires in residential, commercial, and industrial occupancies. (CSU)

### **FIRE 77 Hazardous Materials for Public Safety**

*(Formerly FIRE399.61) 3 units/3 hours lecture. Grade only. Recommended: Eligibility for English 100A or equiv.*  
A comprehensive study of Hazardous Materials, and emergency response to Haz Mat incidents. Includes basic Haz Mat chemistry, regulation, toxicology, tactics and strategy of mitigation, decontamination, and scene management. Students will receive a certificate in Incident Commander, and First Responder Operations Decon from CSTI. This course is POST Certified. (CSU)

### **FIRE 99I Fire Technology Occupational Work Experience Internship**

*1-8 units/up to 40 hours by arrangement. Grade only.*  
Fire Occupational Work Experience Internship is supervised employment extending classroom learning at an on-the-job learning station relating to

the student's educational or occupational goal. May be repeated for a total of sixteen (16) units, four (04) units maximum per semester (Repeat Code 25 for all Parallel Plan). Must be enrolled in 7 units including Work Experience units (for summer school - Work Experience and one other course). Alternate Plan - designed to offer students opportunities to attend college full-time one semester and work full-time the following semester. Job experience must relate directly to the student's educational goals. Up to eight (08) units may be earned in one semester. Students may not be enrolled in more than one other course or transfer from Alternate to Parallel or vice-versa without completing 7 units between plans. (CSU)

*May be taken for a total of 16 units.*

### **FIRE 200A Fire Instructor 1A**

*2 units/40 hours lecture for 1 week. CR/NC only. Recommended: Eligibility for Engl 100A or equivalent, plus completion of the Fire Tech core courses plus Fire 208.1 or equivalent.*

Provides fire service personnel with a variety of methods and techniques for training their subordinates in accordance with the latest concepts of vocational instruction to select, develop, organize, and utilize instructional material appropriate for teaching situations. Emphasis is on skills used to teach manipulative lessons.

### **FIRE 200B Fire Instructor 1B**

*2 units/40 hours lecture for 1 week. CR/NC only. Prerequisite: Fire 200A. Recommended: Eligibility for Engl 100A or equivalent, plus completion of the Fire Tech core course plus Fire 208.1 or equivalent.*

Variety of methods and techniques for training subordinates in accordance with the latest concepts of vocational education: to select, develop, organize, and utilize instructional material appropriate for particular teaching situations. Emphasis is on skills used to teach technical Fire Technology lessons.

### **FIRE 201A Fire Prevention 1A**

*2 units/40 hours lecture for 1 week. CR/NC only. Recommended: Eligibility for Engl 100A or equivalent plus completion of Fire 73 (formerly Fire 52) or equivalent.*  
Review of the duties and responsibilities of fire prevention personnel; the storage, handling, and fire control requirements of flammable and combustible liquids, compressed gases, explosives and fireworks, various other hazardous materials and requirements for portable fire extinguishers.

### **FIRE 201B Fire Prevention 1B**

*2 units/40 hours lecture for 1 week. CR/NC only. Prerequisite: Fire 201A.*  
Review of water systems, fixed extinguishing systems, means of egress, life safety, heating and cooking equipment, and basic electricity.

### **FIRE 202A Fire Command 1A**

*2 units/40 hours lecture for 1 week. CR/NC only. Recommended: Eligibility for English 100A or equivalent plus completion of FIRE 75 (formerly FIRE 53) or equivalent.*  
Designed to develop the fireground command skills of all company officers. Provides information and

experience in command and control techniques used at the scene of an emergency. Emphasizes decision making, the act of commanding.

### **FIRE 202B Fire Command 1B**

*2 units/40 hours lecture for 1 week. CR/NC only. Prerequisite: Fire 202A.*

Designed to apply the principles contained in FIRE 202A to the problems associated with hazardous materials incidents and other specialized situations.

### **FIRE 203 Fire Management I**

*2 units/40 hours lecture for 1 week. CR/NC only. Recommended: Eligibility for Engl 100A or equivalent.*  
Overview of basic supervisory and managerial skills, decision making, delegating, motivating, communicating, record keeping, team building, disciplining, and resource management.

### **FIRE 204 Fire Investigation I**

*2 units/40 hours lecture for 1 week. CR/NC only. Recommended: Eligibility for Engl 100A or equivalent plus completion of Fire 61 or equivalent.*  
Review of the effects of fire behavior and building construction on cause and origin determination; investigating incendiary and accidental fires; collecting, preserving, and documenting evidence.

### **FIRE 205 Auto Extrication**

*1 unit/16 hours lecture for 1 week. CR/NC only. Recommended: Completion of EMC 290.*  
Intensive course in the stabilization, disentanglement, and extrication of vehicle accident victims; involves hands-on training in the use of a variety of hydraulic, air driven and manually-operated tools; emphasizes victim stabilization for safe removal from damaged vehicles. Satisfies the auto extrication requirement in the EMT-1 curriculum.

*May be taken for a total of 4 units.*

### **FIRE 206 CDF Wildland Firefighter Academy**

*(Formerly FIRE299.44) 3 units/18 hours lecture, 24 hours laboratory for 2 weeks. CR/NC only. Recommended: Fire 208.1 or equivalent.*  
Safety policies, wildland safety, and survival, fire control strategy and tactics, mobile attack, wildland hose lays and handline construction. A field skills day is included (live fire operations).  
*May be taken for a total of 2 times.*

### **FIRE 207 Advanced Vehicle Entrapment Rescue**

*(Formerly FIRE299.66) 1 unit/20 hours lecture, 12 hours laboratory for 1 week. CR/NC only. Recommended: Fire 208.1 or equivalent.*  
Intensive course in the assessment, stabilization, disentanglement, and safety precautions needed while performing extrication at motor vehicle accidents (auto, buses, and trucks). Involves hands-on training in the use of a variety of hydraulic, air-driven and manually-operated tools.  
*May be taken for a total of 2 times.*

### **FIRE 208.1 Firefighter I**

12 units/6 hours lecture, 10 hours laboratory for 24 weeks. Grade only. Prerequisite: Completion of FIRE 71 (or FIRE 51). Recommended: Eligibility for English 100A or equiv. An intensive series of theoretical and practical lessons and exercises which, when combined with Emergency Care, meet the educational requirements for certification by the State Board of Fire Services.

### **FIRE 212 Rescue Systems I**

1 unit/10 hours lecture, 30 hours laboratory for 1 week. CR/NC only. Prerequisite: Fire 208.1 or equivalent. Recommended: Eligibility of Engl 100A or equivalent. Hands-on training with heavy rescue equipment and facilitate major rescue operations. May be taken for a total of 2 units.

### **FIRE 299 Selected Topics in Fire Technology**

0.5-10 units/up to 1 hour lecture, 1 hour laboratory. CR/NC only. Prerequisite: Variable. Corequisite: Variable. Recommended: Eligibility for Engl 100A or equivalent. A series of courses designed to meet specific fire technology training needs in the college and community as they are identified. Each class carries a specific workshop title relating to the subject matter to be covered. Workshops may be offered as graded or credit/no credit courses depending upon the offering. May be repeated with different topics.

### **FIRE 399 Selected Topics in Fire Technology**

0.5-2 units/up to 1 hour lecture, 1 hour laboratory. CR/NC only. Recommended: Eligibility for Engl 100A or equivalent. A series of courses designed to meet specific fire technology training needs in the college and community as they are identified. Each class carries a specific workshop title relating to the subject matter to be covered. Workshops may be offered as graded or credit/ no credit courses depending upon the offering. May be repeated with different topics.

## **Floristry**

### **FLORS 83A Beginning Basic Floral Design**

2 units/1.5 hours lecture, 1.5 hours laboratory. CR/NC option. Recommended: Interest in floral design; desire to enter floral profession. Basic florist designs, mechanics, guides to design, identification of flower and foliage shapes and their use, cut flower care, corsage mechanics and practice, containers and designer's aids. (CSU) May be taken for a total of 4 units.

### **FLORS 83B Intermediate Floral Design**

2 units/1.5 hours lecture, 1.5 hours laboratory. CR/NC option. Prerequisite: Completion of FLORS 83A; OR prior qualification for FLORS 83B. Using skills of beginning floristry, practice arranging, using more elaborate designs, containers and flowers, striving for perfection and speed. (CSU) May be taken for a total of 4 units.

### **FLORS 83C Floristry Design/Exotic Flowers**

2 units/1.5 hours lecture, 1.5 hours laboratory. CR/NC option. Prerequisite: Completion of FLORS 83B. Introduction to the care, handling and use of orchids, tropical and exotic flowers and foliage. Some party work. More elaborate body flowers and advanced design: vertical negatives and garden designs. The students' creativity is expanded, using basic knowledge to bring out the individuality. (CSU) May be taken for a total of 4 units.

### **FLORS 84A Dry/Silk Floral Design**

2 units/1.5 hours lecture, 1.5 hours laboratory. CR/NC option. Prerequisite: Flors 83A. Students will learn about, and appreciate the versatility and long lasting quality of silk and dried flowers and supplies; which will enhance their overall floral skills. Designing many types and kinds of floral displays using contemporary, country and traditional styles. Mechanics, uses of many kinds of gluing and anchoring techniques will be presented. Preserving flowers; learning best methods for certain flowers; assets of many methods. Color and textures; salesmanship and pricing will be presented. (CSU) May be taken for a total of 4 units.

### **FLORS 84B Intermediate Creative Floristry Designs**

2 units/1.5 hours lecture, 1.5 hours laboratory. CR/NC option. Prerequisite: Flors 83A and 83B or equivalent. Students will increase their basic floristry skills. Emphasis on developing speed and exploring a wide range of design styles, containers, preserving techniques and product knowledge. Cost analysis and profit ratios included. (CSU) May be taken for a total of 4 units.

### **FLORS 85 Wedding Designs**

2 units/1.5 hours lecture, 1.5 hours laboratory. CR/NC option. Prerequisite: Flors 83B. Practice in methods used by florists in arranging flowers, instruction in principles of wedding design. (CSU) May be taken for a total of 4 units.

### **FLORS 86 Advanced Floral Design Specialties**

1-2 units/up to 1.5 hours lecture, 1.5 hours laboratory. CR/NC option. Design concepts for special occasions and places, such as funerals, fashion shows, galas, hotels and restaurants; dried material included. (CSU) May be taken for a total of 4 units.

### **FLORS 88 Contemporary and Japanese Flower Arrangements**

1-2 units/up to 1.5 hours lecture, 1.5 hours laboratory. CR/NC option. Prerequisite: Completion of FLORS 83B. Practice in basic style and freestyle Japanese Ikebana designs. (CSU) May be taken for a total of 4 units.

### **FLORS 89 Advanced Japanese Flower Arranging**

2 units/1.5 hours lecture, 1.5 hours laboratory. CR/NC option. Prerequisite: Flors 88. Practice in the basic principles of traditional and modern Japanese Ikebana arranging as expressed in the nageire style. (CSU)

May be taken for a total of 4 units.

### **FLORS 93 Sympathy Design, Selling and Management**

(Formerly FLORS200.3) 2 units/1.5 hours lecture, 1.5 hours laboratory. CR/NC option. Prerequisite: Flors 83B. Presents design work of casket covers, standing and flat sprays, set work, sympathy arrangements and lid pieces. The responsibility to the family, friends and mortuary. A mortuary and a cemetery will be visited to learn their needs and point of view concerning floral work. Selling sympathy work discussed. (CSU) May be taken for a total of 4 units.

### **FLORS 94 Floristry Business Merchandising and Display**

3 units/3 hours lecture. CR/NC option. Prerequisite: Flors 83B. Recommended: Engl 355 or equivalent. Aspects of owning/managing a flower shop. Merchandising/display; refrigeration, shrinkage; wire services; simple bookkeeping; permits and licenses; management and personnel procedures as applied to floral industry. (CSU) May be taken for a total of 4 units.

### **FLORS 98 Special Studies in Floristry**

1-3 units/up to 3 hours by arrangement. Grade only. Prerequisite: Application to department. Recommended: Eligibility for Engl 100A or equivalent. Seminars or individual conferences by arrangement to provide for independent studies and enriched academic experience. (CSU) Independent study including 49 and 98 courses - 6 unit total.

### **FLORS 220 Arts of the Professional Floral Designers**

(Formerly FLORS 320) 1 unit/3 hours lecture for 6 weeks. CR/NC option. Recommended: Knowledge of basic designing techniques. Six professional floral designers lecture and demonstrate floral design techniques and artistic presentation of floral designs. The information takes the student beyond the basics of floral designing. Each semester's offering presents new designers and, therefore, new learning experience for the student. May be taken for a total of 4 units.

### **FLORS 300 Selected Topics in Floristry**

0.5-2 units/up to 2 hours lecture. CR/NC option. In-depth study of topics for people interested in working and advancing in the floral industry. May be repeated with different topics.

## Foods and Nutrition

### FDNT 10 Elementary Nutrition

3 units/3 hours lecture. Grade only. Recommended: Completion of Engl 100B or equivalent & eligibility for Math CSKL 371 (formerly ACS 371) or equivalent.

Introduction to the basic principles of nutrition and the relationship of the human diet to health and lifestyle related diseases. Descriptions of individual nutrients, optimal daily intakes, food sources, and drug interactions. Discussions of factors that influence nutrient bioavailability, results of nutrient deficiencies and excesses, consumer food issues, reliable sources of food and nutrition information. (CSU/UC)

AA/AS area C; CSU area E; CAN FCS 2

### FDNT 57 Child Nutrition

1 unit/2 hours lecture for 8 weeks. Grade only.

Recommended: Eligibility for English 100A or equiv. Provides knowledge of the nutritional needs of young children, Federal Food Program requirements for childcare facilities, and basic information about nutrition education. (CSU)

### FDNT 60 Nutrition & Physical Fitness

1 unit/3 hours lecture for 6 weeks. Grade only.

Recommended: Eligibility for Engl 100A or equivalent. Contemporary findings in nutrition specifically related to performance in athletics and exercise. Computer analysis of calorie and nutrient intake and application of the results to improve and enhance performance, energy level, and general well-being. (CSU)

### FDNT 61 Nutrition Issues

1 unit/3 hours lecture for 6 weeks. Grade only.

Recommended: Eligibility for Engl 100A or equivalent. Current concepts and controversies. The changing American diet and its relation to longevity and quality of life. Safety and nutrition value of processed foods and government agencies responsible for food safety. A critical evaluation of U.S. dietary goals, health foods, and food advertising. Includes three-day computer analysis of nutrient intake. (CSU)

### FDNT 62 Nutrition & Diet Therapy

3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent; eligibility for Math 150A or equivalent.

Elementary nutrition concepts for dietary balance in health. Introduction to stress conditions of disease with appropriate nutritional care through modification of diets. Nutrient and drug interaction. (CSU)

### FDNT 63 Dimensions of Nutrition

2 units/2 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent; eligibility for Math 150A or equivalent.

Nutrition as a means to expand quality of life; provides guidelines to help with medical advice in an informed manner. (CSU)

### FDNT 64 Healthy Eating

(Formerly FCS 302.3) 1 unit/3 hours lecture for 6 weeks. CR/NC option.

Current nutrition information plus practical skills for adopting nutritious food preparation practices and healthy eating habits. Major focus will be on current nutritional practices that help lower cancer risk. (CSU)

May be repeated with different topics.

### FDNT 90 Selected Topics in Household Appliances

1 unit/2.5 hours lecture for 7 weeks. CR/NC option.

Demonstration of small and large appliances used in homes and commercial institutions; selection, cost, operation and care of appliances to save time, energy and money. (CSU)

May be repeated with different topics.

### FDNT 262 Nutrition & Diet Therapy Update

1 unit/3 hours lecture for 6 weeks. CR/NC option.

Recommended: FDNT 10 or FDNT 62.

Review of nutrition and diet therapy information. Modification of dietary requirements to satisfy physical or medical situations.

May be repeated with different topics.

### FDNT 351 Food Preservation

1 unit/1.5 hours lecture, 2 hours laboratory, 1 hour by arrangement for 8 weeks. CR/NC option.

Basic principles of food preservation including discussion and laboratory experience in purchasing food; cause of food spoilage; methods of food preservation, both commercially and at home; judging home preserved foods; storage and care of preserved foods.

### FDNT 352.2 Chinese Vegetarian Cuisine

(Formerly FDNT 52.2) 1 unit/1.5 hours lecture, 2 hours laboratory for 8 weeks. CR/NC option.

Introductory course in basic recipes and cooking methods emphasizing the fundamentals of Chinese cooking and how it can add zest and variation to special meals, different cutting and cooking techniques which help retain the original color, texture, and nourishment of food; the need to choose and buy good seasonal fruits and vegetables; the safety of handling sharp knives and cleavers and equipment. Nutritional information specifically related to vegetarian needs and Chinese food choices that provide those nutrients.

### FDNT 359 Weight Control

(Formerly FDNT 59) 1 unit/1.5 hours lecture for 12 weeks. CR/NC option.

Examines current research on weight control and provides a calorie and nutrient computer analysis of food habits. Behavior modification, evaluation of popular low calorie diets and selection of a nutritionally sound and personally satisfying low calorie diet to promote weight control throughout the lifespan. Diet records are kept throughout the course.

May be taken for a total of 2 units.

### FDNT 364 Culinary Hearts Kitchen Course

1 unit/3 hours lecture for 6 weeks. CR/NC option.

Food preparation demonstrations combined with lecture which examine current food and nutrition issues related to cardiovascular disease, along with food preparation techniques and food shopping for heart healthy choices. Explores creative, imaginative cooking methods for low-fat, low-cholesterol, and reduced sodium meals which adhere to the American Heart Association's dietary recommendations. An expanded version of the course developed by the American Heart Association.

### FDNT 365 Health Promoting Food Lab

1 unit/1 hour lecture, 2.5 hours laboratory, 1 hour by arrangement for 8 weeks. CR/NC option. Recommended: General knowledge of basic food handling techniques.

A hands-on class identifying and cooking with conventional and esoteric health promoting or wellness foods.

### FDNT 366 Living with a Special Diet

(Formerly FDNT 66) 1 unit/1 hour lecture, 2 hours laboratory for 8 weeks. CR/NC option.

The art of cooking for the person with a special diet. Dietary management, food selection, and preparation and use of exchange lists for the treatment of diabetes and other calorie/nutrient-controlled conditions are demonstrated and practiced.

### FDNT 385 Introduction to Cultural Cuisines

3 units/3 hours lecture. CR/NC option.

Instructor and/or guest chefs lecture and demonstrate food preparation techniques and artistic presentation of food from various countries including culture and customs.

### FDNT 390 Selected Topics in Household Appliances

1 unit/2.5 hours lecture for 7 weeks. CR/NC option.

Demonstration of small and large appliances used in homes and commercial institutions; selection, cost, operation, and care of appliances to save time, energy, and money.

May be repeated with different topics.

## French

### FREN 1 Elementary French-Part I

4 units/4 hours lecture, 2 hours by arrangement. CR/NC option. Recommended: Completion of Engl 100B or equivalent.

Fluent speech with accurate pronunciation, with correct oral and written grammatical and idiomatic sentence structure and essays illustrating control of linguistic and cultural principles. (CSU/UC)

AA/AS area E; CSU area C2; IGETC language; CAN FREN 2; FREN 1 + FREN 2 = CAN FREN SEQ A

## FREN 2 Elementary French-Part II

4 units/4 hours lecture, 2 hours by arrangement. Grade only.  
*Prerequisite:* Two years of high school French or Fren 1. Not open to students with three years of high school French with "A" or "B" average or equivalent within past three years.  
*Recommended:* Completion of Engl 100B or equivalent.  
Continuation of French 1; supplementary readings with oral and written essays to illustrate control of linguistic and cultural principles. (CSU/UC)  
AA/AS area E; CSU area C2; IGETC area 3B; CAN FREN 4; FREN 1 + FREN 2 = CAN FREN SEQ A

## FREN 3 Intermediate French-Part I

4 units/4 hours lecture, 2 hours by arrangement. Grade only.  
*Prerequisite:* Three years of high school French or Fren 2.  
*Recommended:* Completion of Engl 100B or equivalent (including parallel course in a native language other than English). Not recommended for students with four years of high school French with "A" or "B" or equivalent, within the past three years.  
Review of first-year linguistic and cultural principles. Speaking, reading, and writing with discussion and analytical essays and term papers for idiomatic use of language to show review of control of linguistic principles. (CSU/UC)  
AA/AS area E; CSU area C2; IGETC area 3B; CAN FREN 8; FREN 3 + FREN 4 = CAN FREN SEQ B

## FREN 4 Intermediate French

4 units/4 hours lecture, 2 hours by arrangement. Grade only.  
*Prerequisite:* Four years of high school French or Fren 3. Not open to students with 5 years pre-college French or 4 semesters college French with "A" or "B" or equivalent, within the past 3 years.  
*Recommended:* Completion of Engl 100B or equivalent.  
Research compositions, analytical essays, readings, and critical discussions of modern and classical foreign language literature and culture. (CSU/UC)  
AA/AS area E; CSU area C2; IGETC area 3B; CAN FREN 10; FREN 3 + FREN 4 = CAN FREN SEQ B

## FREN 39.1 French Literature in English Translation

(Formerly FREN 39A) 3 units/3 hours lecture. CR/NC option.  
*Recommended:* Completion of Engl 100B or equivalent.  
Lectures, collateral reading, analytical discussion and critical essays of representative works in English translation; survey of specific period or movement in literature. (CSU/UC)  
AA/AS area E; CSU area C2; IGETC area 3B

## FREN 39.2 French Literature in English Translation

(Formerly FREN 39B) 3 units/3 hours lecture. CR/NC option.  
*Recommended:* Completion of Engl 100B or equivalent.  
This course is a continuation of French 39A. Lectures, collateral reading, analytical discussion, and critical essays of representative works in English translation; survey of specific period or movement in literature. (CSU/UC)  
AA/AS area E; CSU area C2; IGETC area 3B

## FREN 48 Selected Topics in French

0.5-3 units/up to 3 hours lecture. CR/NC option.  
*Recommended:* Completion of Fren 4 or equivalent.  
Introduction to the study of a specific area in French literature and culture presented by an instructor specializing in that area. The purpose is to expose students to classic French writings and film, to

stimulate discussion in French of those works, and to initiate students into the process of analysis. (CSU/UC)  
*May be repeated with different topics.*

## FREN 49 Special Studies in French

1 unit/3 hours by arrangement. Grade only.  
Seminars or individual conferences by arrangement to provide for independent study, enriched academic experience, and the writing of research papers. (CSU/UC)  
*Independent study including 49 and 98 courses - 6 unit total.*

## FREN 50A Conversation for Beginners

3 units/3 hours lecture. CR/NC option.  
A beginning oral communication course designed to improve those listening and speaking skills needed for survival at school, on the job and in the community. Students participate in a variety of pronunciation, listening and conversational activities to improve their oral/aural competency. (CSU)

## FREN 50B Conversation for Beginners

3 units/3 hours lecture. CR/NC option. *Prerequisite:* Completion of or concurrent enrollment in FREN 50A.  
*Recommended:* Eligibility for Engl 100A or equivalent.  
A high-beginning/low intermediate oral communication course designed to improve those listening and speaking skills needed for cross-cultural understanding in social, academic, and work related situations. (CSU)  
*May be taken for a total of 6 units.*

## FREN 50C Intermediate Conversation

3 units/3 hours lecture, 1 hour by arrangement. CR/NC option. *Prerequisite:* Completion of FREN 50B; OR completion of FREN 2.  
An intermediate-level French conversation workshop. (CSU)  
*May be taken for a total of 6 units.*

## FREN 52 French Conversation for Beginners

1-3 units/up to 16 hours lecture, 5 hours laboratory for 1 week. CR/NC option.  
A beginning conversation course in immersion format with emphasis upon oral communication with secondary aims of developing listening, speaking, reading and writing skills needed for successful interaction in varied situations. (CSU)  
*May be taken for a total of 3 units.*

## FREN 58 High Intermediate Conversation: Contemporary Issues

2 units/2 hours lecture. CR/NC option. *Recommended:* Completion of FREN 2 or 50B with a grade of "C" or better.  
Active oral performance in idiomatic, practical, and grammatically correct language on contemporary issues, with some preparatory reading and writing. (CSU)  
*May be taken for a total of 18 units.*

## Geography

### GEOG 3 Regional Geography of the World

3 units/3 hours lecture. CR/NC option. *Recommended:* Eligibility for Engl 100A or equivalent.  
Basic cultural elements of geography (population distribution, general land-use patterns and trade) and their correlation with the physical elements. Delimitation of the major geographic regions of the world. (CSU/UC)  
AA/AS area D; CSU area D; IGETC area 4

### GEOG 4 Physical

3 units/3 hours lecture. CR/NC option. *Recommended:* Eligibility for Engl 1A or concurrent enrollment in Engl 100A or 100B.  
Introductory study of the earth's surface, including the earth's dimensions and motions; atmospheric processes; patterns of climate, vegetation, and soils; and features, processes, and interactions of land and water. (CSU/UC)  
AA/AS area C; CSU area B1; IGETC area 5A; CAN GEOG 2

### GEOG 7 Cultural

3 units/3 hours lecture. CR/NC option. *Recommended:* Eligibility for Engl 1A or concurrent enrollment in Engl 100A or 100B.  
Introductory study of the cultural landscape, including the human population and its migrations, races, languages, religions, agricultural systems, and settlements, and an overview of social, political, and economic systems related to human perceptions and uses of the environment. Map and airphoto interpretations. (CSU/UC)  
AA/AS area D; CSU area D; IGETC area 4; CAN GEOG 4

### GEOG 12 California

(Formerly GEOG 52) 3 units/3 hours lecture. CR/NC option. *Prerequisite:* Geography 4. *Recommended:* Eligibility for Engl 100A or equivalent.  
Survey of physical, cultural, and economic geography of California. Regional nature and variety of landforms, climates, vegetation, and water resources; urban and agricultural patterns, transportation systems, population trends, and environmental issues. Map and airphoto interpretations. (CSU/UC)

### GEOG 51 Place Name Geography

1 unit/1 hour lecture. CR/NC option. *Recommended:* Eligibility for Engl 100A or equivalent.  
General background in location of countries, cities, rivers, islands, and other geographical features of the world. Not a lecture/theory class—practice with maps, charts, diagrams, memory aids, and lists. (CSU)

## Geology

### GEOL 1 The Earth

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Not open to students who have completed Geology 4 or 10. Introduction to the basics of general geology, emphasizing the natural processes that govern and shape the earth. Overview of the origin and interpretation of rocks and minerals, volcanism, earthquakes and plate tectonics. (CSU/UC)  
AA/AS area C; CSU area B1; IGETC area 5A; GEOL 1 + GEOL 1L = CAN GEOL 2

### GEOL 1L Geology Lab

1 unit/3 hours laboratory. CR/NC option. Prerequisite: Completion of or concurrent enrollment in GEOL 1. Recommended: Eligibility for Engl 100A or equivalent. Not open to students who have completed Geology 4. Laboratory course designed as a basic introduction to the identification of minerals and rocks, identification of landforms on topographic maps and the interpretation of geologic maps. (CSU/UC)  
CSU areas B1, B3; IGETC area 5A; GEOL 1 + GEOL 1L = CAN GEOL 2

### GEOL 5 General Geology:Historical

3 units/2 hours lecture, 3 hours laboratory. Grade only. Recommended: Geol 1, 1L or PhysC 1; Eligibility for Engl 100A or equivalent.

Evolution of North America as realized through the theory of plate tectonics and sea floor spreading. Explanation of development of mountain systems, ocean basins and climatic changes throughout geologic history are viewed in the light of this theory. Geologic significance of national parks and monuments; development of earth's animal and plant inhabitants; interpretation of topographic and geologic maps and study of representative rocks, minerals and fossils. (CSU/UC)

AA/AS area C; CSU areas B1, B3; IGETC area 5A; CAN GEOL 4

### GEOL 6 Introduction to Mineralogy

3 units/2 hours lecture, 3 hours laboratory. Grade only. Prerequisite: Geol 1, 1L and 60. Recommended: Eligibility for Engl 100A or equivalent.

Basic principles of mineralogy, determination of common rock-forming minerals by physical and chemical tests; formation, occurrence and relationships of minerals and study of simple crystals. (CSU/UC)

### GEOL 7 Field Trip

1-3 units/up to 4.5 hours lecture, 36 hours by arrangement for 2 weeks. Grade only. Prerequisite: Geol 1, 1L, 5, 11, 60 or 61. Recommended: Eligibility for Engl 100A or equivalent.

Identification of landforms, rocks, minerals, and geologic processes in the field. (CSU/UC)  
May be taken for a total of 6 units within 4 semesters.

### GEOL 11 Geology of California

3 units/3 hours lecture. CR/NC option. Prerequisite: Geol 1, 1L or 61. Recommended: Eligibility for Engl 100A or equivalent. In-depth analysis of the geologic history of California and related physical processes. Application of

modern geologic concepts to development of physiographic provinces of California with emphasis on sea floor spreading and plate tectonics. (CSU/UC)

### GEOL 52 Geology of Sonoma County

(Formerly GEOL 12) 3 units/2 hours lecture, 3 hours laboratory. Grade only. Prerequisite: Geol 1 and 1L. Recommended: Eligibility for Engl 100A or equivalent.

In-depth analysis of the geology of Sonoma County and surrounding areas. Emphasis on field interpretation of geologic features. (CSU)

### GEOL 60 Rocks & Minerals

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Identification of rocks and minerals with emphasis on classification, occurrence and petrogenesis. (CSU)

### GEOL 61 Geology of Western National Parks

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Practical approach to elementary geology, covering geologic features of national parks and monuments in western United States. (CSU)

## German

### GERM 1 Elementary German-Part I

4 units/4 hours lecture, 2 hours by arrangement. CR/NC option. Recommended: Completion of Engl 100B or equivalent. Not open to students with 2 years of high school German or one semester of college German with grade of "A" or "B" or equivalent within past 3 years.

Fluent speech with accurate pronunciation, correct oral and written grammatical and idiomatic sentence structure, and essays illustrating control of linguistic and cultural principles. (CSU/UC)

AA/AS area E; CSU area C2; IGETC language; CAN GERM 2; GERM 1 + GERM 2 = CAN GERM SEQ A

### GERM 2 Elementary German-Part II

4 units/4 hours lecture, 2 hours by arrangement. CR/NC option. Prerequisite: Two years of high school German or GERM 1 or equivalent. Recommended: Eligibility for Engl 100A or equivalent.

Continuation of German 1; supplementary readings with oral and written essays to illustrate control of linguistic and cultural principles. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B; CAN GERM 4; GERM 1 + GERM 2 = CAN GERM SEQ A

### GERM 3 Intermediate German-Part I

4 units/4 hours lecture, 2 hours by arrangement. CR/NC option. Prerequisite: Three years of high school German or GERM 2. Recommended: Completion of Engl 100B or equivalent.

Review of first year linguistic and cultural principles. Speaking, reading, and writing with discussion and analytical essays and term papers for idiomatic use of language to show review of control of linguistic principles. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B; CAN GERM 8; GERM 3 + GERM 4 = CAN GERM SEQ B

### GERM 4 Intermediate German-Part II

4 units/4 hours lecture, 2 hours by arrangement. CR/NC option. Prerequisite: Four years of high school German or GERM 3. Recommended: Completion of Engl 100B or equivalent.

Research compositions, analytical essays, readings and critical discussions of modern and classical foreign language literature and culture. (CSU/UC)  
AA/AS area E; CSU area C2; IGETC area 3B; CAN GERM 10; GERM 3 + GERM 4 = CAN GERM SEQ B

### GERM 39 German Literature in English Translation

3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100B or equivalent.

Lectures, discussion of novels, drama and critical essays to English translation from the last half of the eighteenth century to the present. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B

### GERM 49 Special Studies in German

1-3 units/up to 3 hours by arrangement. Grade only. Prerequisite: Application to department. Recommended: Eligibility for Engl 100A or equivalent.

Seminars or individual conferences by arrangement to provide for independent study and enriched academic experience. (CSU/UC)  
Independent study including 49 and 98 courses - 6 unit total.

### GERM 50A Conversation for Beginners-Part I

3 units/3 hours lecture, 1 hour by arrangement. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

A beginning oral communication course designed to improve listening, speaking and writing skills needed for survival in Germany. Students participate in a variety of pronunciation, listening and conversational activities to improve their oral/aural competency, as well as grammar exercises and cultural presentations. Not open to students with 2 years high school German or 1 year college German, with "A" or "B" within past 3 years. (CSU)

### GERM 50B Conversation for Beginners

3 units/3 hours lecture. CR/NC option. Prerequisite: Completion of GERM 50A or equivalent. Not open to native speakers of German. Not open to students with two years of high school German or one year of college German with "A" or "B" grade within the past three years. Recommended: Eligibility for Engl 100A or equivalent.

A high-beginning/low intermediate oral communication course designed to improve those listening and speaking skills needed for cross-cultural understanding in social, academic and work-related situations. (CSU)

May be taken for a total of 6 units.

### GERM 58 High Intermediate Conversation

2 units/2 hours lecture. CR/NC option. Prerequisite: Completion of GERM 1 or 2 or 3 or 4 or 50B with a grade of "C" or better.

A high-intermediate oral communication course designed to improve those listening and speaking skills needed for successful interaction in social, academic or work-related situations. (CSU)

May be taken for a total of 18 units.

## Health Care

### HLC 50 Basic Physical & Biological Science

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Introduction to basic physical and biological sciences, including chemistry, physics, anatomy, physiology, microbiology, metric system and basic biotech. (CSU)

AA/AS area C

### HLC 55 Medical Microbiology

4 units/3 hours lecture, 3 hours laboratory. Grade only.

Prerequisite: Completion of Chem 60 or higher chemistry course, and completion of Bio 10 or higher biology course.

Concepts of classification, physiology, pathogenesis and prevention of human diseases caused by bacteria, fungi, protozoa and virus specific to nursing science. Emphasis on prevention of nosocomial infections, immunity, theories of diagnosis, treatment and nursing support. Laboratory training in cultivation, identification, and diagnosis.

Designed for Health Sciences students. (CSU)

May be taken for a total of 2 times.

### HLC 56 Applied Transcultural Health Care

4 units/11.5 hours lecture, 34 hours by arrangement for 3 weeks. CR/NC option. Prerequisite: Health care student or health care professional.

This course will allow the student an immersion experience in transcultural health care. Sites may vary from year to year. The student will explore various aspects of health care while living and working in another country. Theory will focus on health related beliefs and practices, cultural sensitivity and diversity. Health and illness across the life continuum from birth to death will be explored. Additionally, child rearing practices, transcultural communications while working in various health care settings will be discussed. Clinical experiences will focus on care of women and children, growth and development, immunizations, client and community assessments, screening, teaching and prevention. Clinical sites will include: hospitals, outpatient clinics, children's orphanage, and selected community development projects in both the rural and urban areas. (CSU)

### HLC 60 Medical Terminology

3 units/3 hours lecture. CR/NC option. Recommended: Health Sciences majors; eligibility for Engl 100A or equivalent.

Acquisition of basic medical terminology relevant to anatomy, pathology, diagnostic procedures, treatments, drug classifications, & abbreviations. Focus is on basic structure of medical terms & the ability to analyze & synthesize parts of words. Ability to utilize principles of medical word building is emphasized. (CSU)

### HLC 211 Survey of Health Occupations

1.5 units/2 hours lecture, 1 hour laboratory for 8 weeks. Grade only. Recommended: Knowledge of and access to computers and the Internet.

This is an online course to aid students interested in

careers in the medical field. During the 8-week course, various health occupations and career opportunities will be examined, as well as requirements for SRJC Health Sciences programs. We will meet at the SRJC campus twice for four hours during the 8-week session. A tour of the Health Sciences labs and student resources will be given, plus a sampling of basic reception and clinical skills, and resources for building a resume.

### HLC 230 Activity Coordinator Training

3 units/3 hours lecture, 0.2 hour by arrangement. Grade only. Corequisite: HLC 230L. Recommended: Eligibility for Engl 100B or equivalent.

Assessing needs and developing meaningful programs for residents of convalescent hospitals, adult day programs, board and care, and other long-term care settings. Concepts of psycho-social needs, medical disorders, documentation, group dynamics, therapeutic programs for the physically and cognitively impaired individual, both young and old. Adaptive devices and programming ideas. This course fulfills California Law, Title 22, requirements to be a qualified activity coordinator.

May be taken for a total of 2 times.

### HLC 230L Activity Coordinator Clinical Experience

0.5 unit/1.5 hours laboratory, 0.1 hour by arrangement. Grade only. Corequisite: Concurrent enrollment in HLC 230. Recommended: Eligibility for Engl 100B or equivalent.

Application of concepts of psycho-social needs activity programming skills, assessment and site differentiation. The 27 hours of clinical experience fulfill the state requirement for an Activity Coordinator. Must be completed along with HLC 230 to receive state certificate. Focus on resident assessment and individual programming, use of adaptive devices and hands-on experience.

May be taken for a total of 2 times.

### HLC 235A Residential Services for Developmentally Disabled

3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent.

The first of a two semester course. Current issues in working with persons who have Developmental Disabilities in Community Residential Settings. Content includes historical and philosophical foundation of developmental services, characteristics of developmental disabilities, Federal and State regulations and requirements, local resources, and critical program areas relevant to community living.

### HLC 235B Residential Services for Developmentally Disabled

3 units/3 hours lecture. Grade only. Prerequisite: HLC 235A. Recommended: Eligibility for Engl 100A or equivalent.

The second part of a two semester course. Current issues in working with persons who have Developmental Disabilities in Community Residential Settings. Content includes assessment and program development procedures, specific techniques and programming strategies for teaching skills for community living, behavior management techniques and overview of critical program areas relevant to community living and people with developmental disabilities.

### HLC 236 Foundations of Developmental Services & Special Education

1-3 units/up to 3 hours lecture. Grade only. Prerequisite: Eligibility for Engl 100A or equivalent.

For training paraprofessionals in the field of developmental services and special education. Prepares students who are considering entry into this field or are already working at jobs in this area with a basic foundation of knowledge and skills relevant to current jobs in adult services and special education for people with developmental disabilities.

### HLC 242 Understanding Aging and Caring for Older Adults

(Formerly HLC 299.19) 1 unit/4 hours lecture for 4 weeks. CR/NC option.

Explores normal physical changes that occur with age, common misconceptions about old age, ethical issues and effective communication for caregivers, and depression and suicide among older adults.

### HLC 243 Caring for the Mentally Confused Older Adult

(Formerly HLC 299.20) 1 unit/4 hours lecture for 4 weeks. CR/NC option.

Provides instruction in the effective care of older adults suffering from Alzheimer's disease or other forms of dementia, with focus on the effects and misuse of medication, recognizing signs of substance abuse, and recognition and prevention of elder abuse.

### HLC 244 Care Management of Older Adults

(Formerly HLC 299.21) 1 unit/4 hours lecture for 4 weeks. CR/NC option.

Instructions to help persons caring for older adults to better understand available community services, care for the terminally ill or grieving, and successfully manage caregiver stress.

### HLC 247 Volunteer Nursing Home Ombudsman Training

1.5 units/29.5 hours lecture for 1 week. CR/NC only.

Examination of long-term care issues, interpretation of state regulations for nursing homes and residential care facilities. Analysis of roles in advocacy and legal issues.

### HLC 265 Orientation for Health Care Volunteers

1 unit/20 hours lecture for 1 week. CR/NC option.

Examination of the role of volunteers in acute and long term settings. Demonstrations, practice and return demonstration of basic skills needed to participate as a volunteer.

### HLC 299 Selected Topics in Health Careers

0.5-3 units/up to 3 hours lecture. CR/NC option.

A series of courses designed to meet specific training needs of health care workers in community agencies. Each course carries a specific title related to the subject matter to be covered.

## Health Education

### HLE 6 Standard First Aid and CPR

1 unit/1 hour lecture, 2 hours laboratory for 8 weeks. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Specific procedures and general instructions for giving immediate care to a person who has been injured or is experiencing some other medical emergency. Aid for a choking victim, adult CPR and the importance of a healthful lifestyle to prevent some serious accidents and illnesses. (CSU/UC)  
May be taken for a total of 4 units.

### HLE 50 Health Choices

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Examination of current health issues and application of theory to every day life situations and decisions. Topics such as fitness, diet, stress, substance abuse, sexuality, as well as environmental health are explored and discussed. Stresses student evaluation of practices and attitudes that affect their health status throughout life. (CSU)  
CSU area E

### HLE 95 Introduction to Alcohol and Drug Studies

3 units/3 hours lecture. Grade only.

An overview of drugs (including alcohol) and how they affect the individual, families and society. How to prevent and treat drug abuse, public policy issues, community resources and needs of special groups. (CSU)

### HLE 97 Pharmacological & Physiological Effect of Alcohol & Drugs

3 units/3 hours lecture. Grade only.

Effects of alcohol and other drugs on the body. The physiological effects of the disease of alcoholism and the effects of other chronic drug usage. (CSU)

### HLE 99 Rehabilitation of Alcohol & Drug Problems

3 units/3 hours lecture. Grade only.

The treatment of dependency disorders and recovery from two divergent perspectives: the reformatory and transformative. Current treatment modalities will be compared and contrasted in terms of their view of the individual in the social and clinical context. (CSU)

### HLE 220 Alcohol Studies

3 units/3 hours lecture. CR/NC option.

Physiological and medical aspects of alcoholism, treatment modalities and prevention programs. Identification and analysis of issues in alcoholism relating to the family, the community and industry.

## History

### HIST 1.1 World History to 1500

3 units/3 hours lecture. CR/NC option. Recommended: Engl 100B or equivalent.

The growth of civilizations and the inter-relationships of peoples of Europe, Asia, Africa and America to 1500. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B; CAN HIST 14; HIST 1.1 + HIST 1.2 = CAN HIST SEQ C

### HIST 1.2 World History Since 1500

3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100B or equivalent.

The growth of civilizations and the inter-relationships of peoples of Europe, Asia, Africa and America since 1500. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B; CAN HIST 16; HIST 1.1 + HIST 1.2 = CAN HIST SEQ C

### HIST 4.1 History of Western Civilization to 1648

(Formerly HIST 4A) 3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100B or equivalent.

Survey of Western civilization beginning with Near Eastern civilization and including ancient Greece, Rome, the Middle Ages, the Renaissance, and the Reformation. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B; CAN HIST 2; HIST 4.1 + HIST 4.2 = CAN HIST SEQ A

### HIST 4.2 History of Western Civilization from 1648

(Formerly HIST 4B) 3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100B or equivalent.

History of Western Civilization is an exciting introductory survey of European history from 1648 to the present. The course includes the study of the Scientific Revolution, the Enlightenment, the French Revolution and Napoleon, the Industrial Revolution, the causes and impact of World War I, the rise of communism and Stalin, the rise of fascism and Hitler, the causes and impact of World War II, the collapse of communism, and the challenge of the global economy on contemporary Europe. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B; CAN HIST 4; HIST 4.1 + HIST 4.2 = CAN HIST SEQ A

### HIST 8.1 The Americas

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv.

Development of the Western Hemisphere during colonial times with emphasis on Latin America: pre-Columbian setting, European backgrounds, exploration and discovery, colonial institutions and revolutionary era. (CSU/UC)

CSU area D; IGETC area 4

### HIST 8.2 The Americas

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv.

Development of the Western Hemisphere from revolutionary origins to present time with emphasis on Latin America: organizing the new nations; political, economic, social and cultural forces; international ties that bind the hemisphere together.

Special attention to contemporary Latin America. (CSU/UC)

CSU area D; IGETC area 4

### HIST 17.1 History of the United States to 1877

(Formerly HIST 17A) 3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100B or equivalent.

History of the United States through the Reconstruction Era. (CSU/UC)

AA/AS areas F, D; CSU areas D, F1; IGETC area 4; CAN HIST 8; HIST 17.1 + HIST 17.2 = CAN HIST SEQ B

### HIST 17.2 History of the United States from 1877 to Present

(Formerly HIST 17B) 3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100B or equivalent.

History of the United States from the Reconstruction Era to present. (CSU/UC)

AA/AS areas F, D; CSU areas D, F1; IGETC area 4; CAN HIST 10; HIST 17.1 + HIST 17.2 = CAN HIST SEQ B

### HIST 18.1 Hist of Women & Social Chng in the US Thru Reconstruction

3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100B or equivalent.

An in-depth social historical study of the political, economic, cultural, and social developments in the U.S. from the perspective of the American woman - her experience, roles, achievements, and contributions from the Colonial Period to the Reconstruction era. (CSU/UC)

AA/AS areas F, D; CSU areas D, F1; IGETC area 4

### HIST 18.2 History of Women & Social Chng in the US from Reconstruction

3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100B or equivalent.

An in-depth social historical study of the political, economic, cultural, and social developments in the U.S. from the perspective of the American woman - her experience, roles, achievements, and contributions from Reconstruction through the present. (CSU/UC)

AA/AS areas F, D; CSU areas D, F1; IGETC area 4

### HIST 20 History of the US Since 1945

(Formerly HIST 17.3) 3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100B or equivalent.

Study of American political, social, and economic history since 1945 within the context of the U.S. as both an affluent society and the dominant world power after World War II. Main themes will include the Cold War and anticommunist crusades, the civil rights movement, Vietnam, the New Left and 60's counterculture, the Great Society and decline of liberalism feminism, Watergate, deindustrialization and economic crisis in the 70's, environmentalism, the second Cold War and nuclear arms race roles, the rise of neo-conservatism and the Reagan legacy. Lecture, video, small group discussion. (CSU/UC)

AA/AS area D; CSU area D; IGETC area 4



## HIST 21 Race, Ethnicity and Gender in American Culture

3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100B or equivalent.

An examination of the interrelated roles of race, ethnicity and gender in shaping political and cultural institutions in the United States. From pre-Columbian times to the present the course will explore and analyze the experiences, contributions, and interconnectedness of African, Asian, European, Latino and Native American peoples. (CSU/UC)  
AA/AS areas F, G; CSU areas D, FI; IGETC area 4

## HIST 22 History of California

3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100B.

A survey of California history from the precolonial period to the present with emphasis on the Native cultures, colonial era, the Gold Rush and statehood, urbanization and labor struggles, conflict over land, water, and natural resources, the Depression, World War II, suburbanization and post-war prosperity, the new social movements of the 60's and challenges of continuing growth and declining resources at centuries end. The course will emphasize California as a 'cultural crossroads' and will examine the distinctive contributions and interaction between European, Asian, Latino, African, and Native American peoples. Special attention is given to how political power and social inequality is shaped by race, gender, class, and ethnicity in different periods of the state's history. (CSU/UC)  
AA/AS area G; CSU area D; IGETC area 4

## HIST 30 African-American History

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv.

The history and development of African-American people and their contributions to American culture. Major topics include the rise of African civilization. The impact of the slave trade on Africa, Europe and the Americas, slavery and emancipation, and African-American political development from Reconstruction to the present. (CSU/UC)  
AA/AS areas D, G; CSU area D; IGETC area 4

## HIST 33 History of Mexico

3 units/3 hours lecture. CR/NC option. Recommended: Completion of ENGL 100B or equiv.

Study of Mexico from the pre-Columbian era to the present; political, economic, and social institutions. (CSU/UC)  
AA/AS area D; CSU area D; IGETC area 4

## Humanities

### HUMAN 4.1 Western Culture: Arts, Ideas, and Values

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 1A or equiv.

An interdisciplinary approach to the study of the arts, ideas, and values of Western culture. The course will

focus on the visual arts, drama, music, literature, philosophy and religion within a cultural context. The course will cover ancient Mesopotamia, ancient Egypt, ancient Greece, Rome, the Middle Ages, and the Renaissance. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B

### HUMAN 4.2 Western Culture: Arts, Ideas, and Values

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 1A or equiv.

An interdisciplinary approach to the study of the arts, ideas, and values of Western culture. The course will focus on the visual arts, drama, music, literature, philosophy, and religion within a cultural context. The course will cover the Baroque, Neoclassical, Romantic, Modern, and Postmodern periods (1600 to today). (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B

### HUMAN 6 American Cultures

(Formerly HUMAN 31) 3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 1A or equiv.

An interdisciplinary exploration of American identity and the invention of what it means to be an American. The course will explore the cultural contributions of at least three racial or ethnic groups, focusing on the visual arts, music, drama, film, literature and philosophical/religious thought within a cultural context of the United States. Course materials may be presented either chronologically or thematically. (CSU/UC)

AA/AS areas E, G; CSU area C2; IGETC area 3B

### HUMAN 7 Introduction to the Humanities

(Formerly HUMAN 30) 3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100A.

An introduction to the humanities focusing on the visual arts, drama, film, music, dance, literature, and philosophy/religion as forms of human expression. Emphasis will be on understanding and appreciating a variety of cultural expressions within their cultural context. The course may be taught thematically or may focus on a specific period of time. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B

### HUMAN 8 Comparative Mythology

3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100B.

Introductory survey of approaches to mythology, of themes common to the myths of many cultures, of representative specific myths, and the influence of myth on the arts and literature. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B

### HUMAN 9 An Introduction to the Study of Fairy Tale

(Formerly HUMAN 48.4) 3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100B.

The reading, discussion and comparison of a selection of fairy tales from different traditions, and the exploration of several different analytical approaches to them. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B

### HUMAN 10.1 Consciousness & the Literature of the Old Testament

(Formerly HUMAN 10A) 3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Growth and change of human consciousness demonstrated in a critical survey of the great stories, personalities, themes and history of the Hebrew Bible. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B

### HUMAN 10.2 Prophetic & New Testament Literature

(Formerly HUMAN 10B) 3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv.

A critical and historical exploration of Old Testament prophetic literature and the development of the New Testament with emphasis on the quest of the historical Jesus, Paul and the growth of the Early Church. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B

### HUMAN 10.3 History of God

(Formerly HUMAN 10C) 3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

An exploration of the personalities, ideas and movements in western monotheist religious traditions, emphasizing Christianity and its historic interaction with Judaism and Islam from the second century to the present. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B

### HUMAN 10.4 Religion in America

3 units/3 hours lecture. CR/NC option. Recommended: Engl 1A.

This course will look at the interaction between diverse ethnic and racial groups in the shaping of American religious discourse and institutions and the encounter between secular and religious forces by surveying the many multi-cultural personalities, ideas and movements of the past 400 years. (CSU/UC)

AA/AS areas E, G; CSU area C2; IGETC area 3B

### HUMAN 48 Selected Topics/Humanities

0.5-3 units/up to 3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Recurrent themes and issues relating to Western culture as expressed in the visual and performing arts, literature, philosophy, and the social sciences. Topics vary. (CSU/UC)

May be repeated with different topics for a total of 6 units.

### HUMAN 49 Special Studies in Humanities

1-3 units/up to 9 hours by arrangement. Grade only. Prerequisite: Student must apply to department for approval. Recommended: At least one prior course in the relevant discipline.

Seminars and individual conferences by arrangement to provide for independent study and enriched academic experience. (CSU/UC)  
Independent study including 49 and 98 courses - 6 unit total.

### **HUMAN 106 Exploring American Cultures**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv.*

An interdisciplinary exploration of American cultures focusing on the experiences and cultural contributions of various racial and ethnic groups within the context of the United States. The course may include the visual arts, music, drama, film, literature, philosophy and religion.

*AA/AS areas E, G*

## **Industrial Education**

### **IED 50 Survey of Trade/Technical Fields**

*2 units/2 hours lecture. CR/NC only. Recommended: Engl 100A or equivalent.*

Introductory course for students who are exploring possible careers in the trade/technical/industrial areas with special emphasis on non-traditional applicants. (CSU)

### **IED 84 Print Reading for Welders**

*1 unit/2 hours lecture for 8 weeks. Grade only. Prerequisite: Completion of or concurrent enrollment in a welding course. Recommended: Engl 100A or equivalent, one semester of drafting.*

Basic principles used by draftspersons in preparing shop drawings, topics such as lines, views, size, print format, fabrication drawings. (CSU)

### **IED 90A Technical Mathematics**

*3 units/3 hours lecture. Grade only. Recommended: Engl 100A or equivalent.*

Concepts of technical mathematics using electronic calculators to solve trade-related problems. Includes a study of fractions, decimals, percents, the metric system, area and volume, ratio, and proportion and fundamentals of algebra. (CSU)

*May be taken for a total of 3 units.*

### **IED 90B Technical Mathematics**

*3 units/3 hours lecture. Grade only. Prerequisite: Successful completion of IED 90A or equivalent. Recommended: Engl 100A or equivalent.*

Practical applications of mathematics for occupational students, using electronic calculators. It includes right angle trigonometry, equations, graphs, vectors, logarithms and algebra fundamentals. (CSU)

### **IED 98 Special Studies**

*1-3 units/up to 9 hours by arrangement. Grade only.* Seminars and individual conferences by arrangement to provide for independent study and enriched academic experience. (CSU)

*Independent study including 49 and 98 courses - 6 unit total.*

### **IED 186 Cabinet and Furniture Construction**

*2 units/1 hour lecture, 3 hours laboratory. CR/NC option.* IED 186 teaches the skills involved in the design and construction of cabinetry and furniture. Students will be required to pay for materials required for lab projects.

*May be taken for a total of 6 units within 4 semesters.*

### **IED 300 Introduction to Technical Mathematics/Reading**

*4 units/4 hours lecture, 1 hour laboratory, 5 hours by arrangement. Grade only.*

Introduction to the development of basic skills required for entry level technical training. Includes arithmetic and mathematics, including fundamentals of algebra, reading and English skills related to electronics training.

### **IED 346 Selected Topics in Building Trades**

*3 units/3 hours lecture. CR/NC option. Prerequisite: Completion of division of apprenticeship approved program or equivalent in a specific trade.*

Designed to provide journeypersons involved in building trades the upgrading of skills necessary to keep pace with industries needs.

*May be repeated with different topics.*

## **Interdisciplinary Studies**

### **INTDIS 1 Culture, Technology and the Arts**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 1A or equiv.*

An interdisciplinary study of art, culture, and technology which interweaves humanities, social sciences, and science. The course will focus on the global interconnections between the rise of technology since the 15th century and the changes that were brought about within cultural systems and in artistic production as a result. The course will examine block prints, book production, novels, prints, map-making, weaving, engraving, etching, lithography, photography, film, video, and computer-generated art. (CSU/UC)

*AA/AS area E; CSU area C2; IGETC area 3B*

### **INTDIS 2 Popular Culture in the United States**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 1A or equiv.*

Focusing on the twentieth century, this class examines the ways in which ethnicity, gender and personal identity become sites for expressions of cultural difference, actively contesting and transforming the aesthetics of the dominant culture in the United States. (CSU/UC)

*AA/AS areas E, G; CSU area C2; IGETC area 3B*

### **INTDIS 51 Leadership Dynamics**

*3-4 units/up to 2 hours lecture, 6 hours by arrangement. CR/NC option. Recommended: Eligibility for English 100A or equiv.*

Course is designed for students currently involved in campus or community leadership positions. Through the study and practice of leadership principles and group dynamics, students will learn leadership skills and have an opportunity to practice these skills through participation in student government, campus and community committees, conferences and activities. Emphasis is placed on personal development, understanding of organizational structure, mastery of leadership principles, and acquisition of leadership skills. (CSU)

*May be taken for a total of 16 units.*

### **INTDIS 301 Summer Foreign Tour**

*4 units/4 hours lecture, 36 hours laboratory for 4 weeks. CR/NC option.*

Twenty-nine day summer European study tour by air and coach through nine countries. Designed for the first time visitor to Europe and offers an opportunity to better understand European art, music, history, geography, customs and philosophy.

## **Interior Design**

### **INDE 61.1 Introduction to Interior Design**

*(Formerly INDE 61) 3 units/3 hours lecture. Grade only. Recommended: ENGL 100A or equiv.*

This course covers the study and application of design principles and elements; influences of historical, cultural and functional design factors and the selection and arrangement of interior furnishings and materials. An overview of career options in interior design will be included. (CSU)

### **INDE 61.2 Interior Design Studio I**

*3 units/2 hours lecture, 3 hours laboratory. Grade only. Corequisite: INDE 61.1 (formerly INDE 61). Recommended: ENGL 100A or equivalent.*

This course covers basic drawing and presentation techniques for interior designers. Development of floor plans, furniture arrangements, and elevations for interior space and presentation will be included. Both mechanical and freehand drawing will be utilized. Presentation boards and other methods of presentation will be explored. (CSU)

### **INDE 62.1 History of Furniture I**

*(Formerly INDE 62) 3 units/3 hours lecture. Grade only. Recommended: Engl 100A or equivalent.*

A major overview of furniture styles of Europe and North America. Representative furniture, historical backgrounds and significant designers from antiquity through the twentieth century. (CSU)

### **INDE 62.2 History of Furniture II**

*3 units/3 hours lecture. Grade only. Recommended: Engl 100A or equivalent.*

This course covers the study of architecture and interiors of the Western World from the beginning of the Industrial Revolution to the present day. It also includes Oriental influences and minor art periods that have affected these styles. (CSU)

### **INDE 63 Interior Products, Materials, and Lighting**

*3 units/3 hours lecture. Grade only. Recommended: ENGL 100A or equiv.*

An analysis and evaluation of products and materials such as plastics, woods, glass, and metals used in interior design. Floors, wall coverings, furniture, window treatments and accessories along with interior lighting as it relates to both residential and commercial interiors, design concerns and energy-saving techniques included. (CSU)

### **INDE 64.1 Professional Practices for Interior Design**

*(Formerly INDE 64) 3 units/3 hours lecture. Grade only. Recommended: Engl 100A or equivalent.*  
This course is designed to provide the students with a knowledge of the business aspects in creating interiors including topics on ethics, contracts, licensing, ordering, client-designer relationships, costs, billing and fee schedules. This course will include experience in measuring, estimating, and budgeting for a design project. (CSU)

### **INDE 64.2 International Practices of Interior Design**

*3 units/2 hours lecture, 3 hours laboratory. CR/NC option. Recommended: INDE 64.1 (formerly INDE 64). Engl 100A or equivalent.*  
This course shall cover international practices in the interior design industry. Students shall be trained to handle residential and commercial projects received from overseas clients, analyze, generate bill of quantities and prepare dynamic proposals in compliance with client specifications utilizing U.S., European and international resources. Emphasis shall be placed on business practices and procedures in handling and consolidating shipments, letters of credit, documentation & general banking practices in exports & import of materials related to the interiors industry. The role and activities of the international furnishings, decorative accessories, designers and textiles markets shall be discussed. (CSU)

### **INDE 66.1 Kitchen and Bath Design**

*(Formerly INDE 66) 3 units/2 hours lecture, 3 hours laboratory. Grade only. Prerequisite: Completion of INDE 82. Recommended: Engl 100A.*  
Design of efficient and aesthetic kitchens and baths including space considerations, equipment, appropriate materials, building codes and human factors. (CSU)

### **INDE 67 Interior Illustration and Rendering**

*3 units/2 hours lecture, 3 hours laboratory. CR/NC option. Prerequisite: Completion of INDE 61.2 with grade of "C" or better Recommended: Completion of Art 3 or Art 7A.*  
The student is expected to be familiar with drafting instruments and have some basic drafting skills. Introduction to the principles and techniques used in interior illustration. Emphasis on drawing in perspective using light, shade and shadow, and pencil rendering of furniture, interior finishes and accessories. (CSU)

### **INDE 68 Business Management for Interior Design**

*3 units/2 hours lecture, 3 hours laboratory. CR/NC option.*  
This course covers the business aspects of interior design: ethical practices, methods of compensation, estimating client budgets, billing and sales using a Design Manager Software geared to the interior design industry. (CSU)  
*May be taken for a total of 6 units.*

### **INDE 80.1 Interior Environment and Space Planning**

*(Formerly INDE 80A) 3 units/2 hours lecture, 3 hours laboratory. Grade only. Prerequisite: INDE 61.2.*  
This course covers the analysis and application of the design concepts, space planning techniques and resources necessary to creatively solve problems relative to the function and quality of our human environment. The concept of integrating barrier-free design, resource management and environmental psychology into design reality is explored. (CSU)

### **INDE 81 Portfolios**

*1.5 units/1.5 hours lecture, 1.5 hours laboratory. Grade only.*  
This course covers procedures for developing the interior designer's portfolios, which will include finished presentation boards for residential, kitchen and bath interiors, drawings, illustrations, business cards, elevations, perspectives of residential projects using rendering techniques, photography, computer graphics and commercial design. (CSU)

### **INDE 82 Working Drawings for Interior Design**

*3 units/2 hours lecture, 3 hours laboratory. Grade only. Prerequisite: CONS 270 (formerly CONS 370, CONS 82) INDE 80.1 (formerly INDE 80A), INDE 65.*  
This course will explore the technical aspects of creating interior design construction documents. Construction materials and building systems will be covered. A set of construction documents will be generated, utilizing standard building code requirements. Typical framing methods used in residential construction will be applied to plans, elevations, sections, details and schedules. (CSU)  
*May be taken for a total of 6 units.*

### **INDE 83 Lighting Design**

*3 units/2 hours lecture, 3 hours laboratory. Grade only.*  
This course includes lighting specifications, available equipment and aesthetic considerations for lighting design from concept to completed installation. (CSU)

### **INDE 84 Furniture and Product Design**

*3 units/2 hours lecture, 3 hours laboratory. Grade only. Prerequisite: INDE 80.1 (formerly INDE 80A) & INDE 67.*  
This course is the study of the design considerations for products used in interior spaces. It includes design for wall coverings, textiles, area rugs, case goods, upholstered goods and other products of concern to the interior designer. (CSU)

### **INDE 85 Practices in Interior Design**

*3 units/1 hour lecture, 7 hours by arrangement. Grade only. Prerequisite: INDE 61.1 (formerly INDE 61), INDE 61.2, INDE 63. Corequisite: Enrollment in Work Experience 99I or INDE 99I.*  
This course provides opportunity for supervised site experiences based on skills and knowledge obtained in Interior Design courses. Job placement is not guaranteed, but assistance is provided by the coordinator. (CSU)

### **INDE 86 Commercial Design**

*3 units/2 hours lecture, 3 hours laboratory. Grade only. Prerequisite: INDE 82.*  
This course is an introduction to the field of nonresidential interior design. It will include a survey of career options in commercial design and an overview of programming, space planning, specifications and use of building and barrier free codes in public spaces. Practical problems in small office design will be utilized. (CSU)  
*May be taken for a total of 6 units.*

### **INDE 87 Advanced Interior Design Studio II**

*3 units/2 hours lecture, 3 hours laboratory. Grade only. Prerequisite: INDE 82.*  
This course covers the complete design process in planning space that is consistent with program requirements, applicable codes and professional standards. A variety of team and individual design assignments selected to develop proficiency in the design process will be utilized. (CSU)  
*May be taken for a total of 6 units.*

### **INDE 88 Interior Design Computerized Project Accounting Management**

*3 units/2 hours lecture, 3 hours laboratory. CR/NC option. Recommended: Engl 100A or equivalent.*  
This course covers business transactions for the interior design industry for merchandising, partnership, sole proprietorship, corporation and manufacture ring, utilizing the use of Computer Accounting with Peachtree for Microsoft Windows as well as other software programs including electronic spreadsheets, database management and special accounting applications most often encountered in the interiors industry. The differences between manual and computerized methods shall be explored as well as the steps of the accounting cycle change when accounting software is used. The integration of computers and computer software into the accounting classroom, program and information blocks shall be explored. (CSU)  
*May be taken for a total of 6 units.*

### **INDE 180A Housing: from Vacant Land to Finished Product**

*2 units/2 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent.*  
A comprehensive introduction to the factors influencing the development of housing. The course will provide an overview of the principal factors determining housing design and cost; the effect of local, state, and federal housing policies; and the housing market. Housing trends, issues and problems. Examples from Sonoma County and the Bay Area.

### **INDE 182 Interior Design Laboratory**

*1 unit/1 hour lecture, 2 hours laboratory for 12 weeks. CR/NC option. Recommended: Recommend IN DE 58.1 & 58.2 completed or taken concurrently.*  
Review of window coverings, pillow, and cushions used in decorating the home. Completion of sample projects in each area required.

## Italian

### ITAL 1 Elementary Italian-Part I

4 units/4 hours lecture, 2 hours by arrangement. CR/NC option. Prerequisite: Not open to students with 2 years HS Italian or 1 semester college Italian with "A" or "B" or equiv. within past 3 years. Recommended: Memorization of grammatical patterns, vocab., idioms. 2 hrs aural oral exercises in lab weekly for class performance. Eligibility for Engl 100B or equivalent.

Intensive instruction in understanding, speaking, reading, and writing elementary Italian. Basic grammar, regular and some irregular verbs in indicative mood. Daily practice in speaking and writing. 2-hour lab. Basic Italian culture. (CSU/UC) AA/AS area E; CSU area C2; IGETC language; CAN ITAL 2; ITAL 1 + ITAL 2 = CAN ITAL SEQ A

### ITAL 2 Elementary Italian Part II

4 units/4 hours lecture, 2 hours by arrangement. CR/NC option. Prerequisite: 2 years of HS Ital or Ital 1 or equivalent. Not open to students with 3 yrs or HS Ital with "A" or "B" or equiv. within the past 3 years. Recommended: Eligibility for Engl 100B. Memorization of grammatical patterns, vocabulary, idioms. 2 hour aural/oral exercises in lab weekly for class performance.

Continuation of Ital 1. Intensive instruction in understanding, speaking, reading, and writing elementary Italian. Completion of basic grammar, regular and frequent irregular verbs in subjunctive mood. Daily practice in speaking and writing. 2 hr. lab. Continuation of Italian culture. (CSU/UC) AA/AS area E; CSU area C2; IGETC area 3B; CAN ITAL 4; ITAL 1 + ITAL 2 = CAN ITAL SEQ A

### ITAL 3 Intermediate Italian Part I

4 units/4 hours lecture, 1 hour by arrangement. CR/NC option. Prerequisite: 3 years of HS Ital or Ital 2. Not open to students with 4 years of HS Ital with "A" or "B" within the past 3 years. Recommended: Completion of Engl 100B.

Intermediate proficiency in understanding, speaking, reading, and writing Italian. Review of grammar. Reading, compositions, and class discussions of intermediate prose on contemporary Italian culture. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B; CAN ITAL 8; ITAL 3 + ITAL 4 = CAN ITAL SEQ B

### ITAL 4 Intermediate Italian Part II

4 units/4 hours lecture, 1 hour by arrangement. CR/NC option. Prerequisite: 4 yrs HS Italian or Ital 3 or equiv. Not open to students with 5 years of pre-college Ital or 4 semesters of college Ital with "A" or "B" within the past 3 years. Recommended: Completion of Engl 100B.

Continuation of Italian 3. Increased proficiency in understanding, speaking, reading, and writing intermediate Italian. Reading, compositions, and class discussion of short literary passages on Italian culture. Conducted in Italian. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B; CAN ITAL 10; ITAL 3 + ITAL 4 = CAN ITAL SEQ B

### ITAL 39.1 Italian Literature in English Translation

(Formerly ITAL 39A) 3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100A or equivalent. Lecture, collateral reading, analytical discussion and critical essays of representative works in English translation; survey of specific period or movement in literature. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B

### ITAL 39.2 Italian Literature in English Translation

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Lectures, collateral readings and discussions of representative works in English translation. Each semester emphasizes a specific period, movement or genre in Italian literature. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B

### ITAL 49 Special Studies in Italian

1-3 units/up to. Grade only. Prerequisite: Application to the dept. An independent study. Recommended: Eligibility for Engl 100A or equiv. Reading and compositions of short cultural passages for class discussion in Italian.

Ital 49 is an equivalent alternative to Ital 3 or Ital 4. Proficiency in understanding, speaking, reading, and writing Italian. Compositions and discussions on Italian culture. Conducted only in Italian. (CSU/UC) Independent study including 49 and 98 courses - 6 unit total.

### ITAL 50A Conversation for Beginners

3 units/3 hours lecture. CR/NC option.

A beginning oral communication course designed to improve those listening and speaking skills needed for survival at school, on the job and in the community. Not open to students with two years of high school Italian or one year of college Italian with "A" or "B" grade within the past three years. Not open to native speakers of Italian. (CSU)

### ITAL 50B Conversation for Beginners

3 units/3 hours lecture. CR/NC option. Prerequisite: Completion of ITAL 1 or 2 or 50A with a grade of "C" or better.

Oral performance in conversation for practical use with some reading and writing; laboratory optional. (CSU)

May be taken for a total of 6 units.

### ITAL 58 Intermediate Conversation

2 units/2 hours lecture. CR/NC option. Prerequisite: Completion of ITAL 1 or 2 or 50B with a grade of "C" or better.

A high-intermediate oral communication course designed to improve those listening and speaking skills needed for successful interaction in social, academic or work-related situations. Emphasis on finding, getting and keeping a job in the U.S. and communicating more effectively in social and academic contexts. Pronunciation activities include placement of stress and word and sentence focus. (CSU)

May be taken for a total of 18 units.

## Japanese

### JAPAN 39 Modern Japanese Literature in English Translation

3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100B or equivalent.

Extensive reading in Japanese literature in translation. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B

### JAPAN 50A Conversation for Beginners

3 units/3 hours lecture, 1 hour by arrangement. CR/NC option. Recommended: Eligibility for English 100A or equiv.

A beginning oral communication course designed to improve those listening and speaking skills needed for survival at school, on the job and in the community. Students participate in a variety of pronunciation, listening and conversational activities to improve their oral/aural competency. Some writing skills will be introduced as well as recognizing selected street signs in Japanese. Not open to students with 2 years of high school Japanese or 1 year of college Japanese with "A" or "B" grade within the past three years. Not open to native speakers of Japanese. (CSU)

### JAPAN 50B Conversation for Beginners

3 units/3 hours lecture. CR/NC option. Prerequisite: Completion of Japan 50A or equivalent. Recommended: Eligibility for Engl 100A or equivalent.

A high-beginning/low intermediate oral communication course designed to improve those listening and speaking skills needed for cross-cultural understanding in social, academic, and work-related situations. (CSU)

May be taken for a total of 6 units.

### JAPAN 58 High Intermediate Conversation

2 units/2 hours lecture. CR/NC option. Recommended: Completion of Japan 50B or equivalent.

A high-intermediate oral communication course designed to improve those listening and speaking skills needed for successful interaction in social, academic, or work-related situations. Emphasis on finding, getting and keeping a job in the U.S. and communicating more effectively in social and academic contexts. (CSU)

May be taken for a total of 18 units.

## Journalism

### JOUR 1 Introduction

(Formerly JOUR 1A) 3 units/2 hours lecture, 3 hours by arrangement. Grade only. Prerequisite: Eligibility for Engl 1A or equivalent. Recommended: Basic knowledge of Macintosh or Windows computers.

Introduction to journalism, news-gathering and news dissemination in the world today, with emphasis on the changing role of reporters and editors. The course emphasizes new Internet/World Wide Web job opportunities as well as traditional newspaper, magazine and book publication. Students act as reporters/producers for the Oak Leaf, the college newspaper and for various Web publications. (CSU/UC)

CAN JOUR 4

### JOUR 2 News Gathering & News Writing

(Formerly JOUR 1B) 3 units/2 hours lecture, 3 hours laboratory. CR/NC option. Prerequisite: Eligibility for Engl 1A or equivalent. Recommended: Completion of JOUR 1 (formerly JOUR 1A). Basic knowledge of Macintosh or Windows computers.

Writing for print and Internet media, and how those media alter and affect world events. Critical evaluation of news and information. Students act as reporters/producers for The Oak Leaf, the college newspaper, and for various Web publications. (CSU/UC)

CAN JOUR 2

### JOUR 52A Newspaper Practice

5 units/2 hours lecture, 8 hours laboratory, 1 hour by arrangement. Grade only. Recommended: Completion of Jour 1. Basic knowledge of Macintosh computer. All course work is done on the computer.

A laboratory course in newspaper production. This class produces The Oak Leaf, the college newspaper, and students enrolled in the course learn writing, editing, design, and desktop publishing skills required in modern newspaper production. (CSU)

### JOUR 52B Newspaper Practice

5 units/2 hours lecture, 8 hours laboratory, 1 hour by arrangement. Grade only. Prerequisite: Jour 52A with a grade of "C" or better or permission of instructor. Recommended: Basic knowledge of Macintosh computer. All course work is done on computer.

A laboratory course in newspaper production. This class produces The Oak Leaf, the college newspaper, and students enrolled in the course learn writing, editing, design and desktop publishing skills required in modern newspaper production. (CSU)

### JOUR 52C Newspaper Practice

5 units/2 hours lecture, 8 hours laboratory, 1 hour by arrangement. Grade only. Prerequisite: Jour 52B with a grade of "C" or better or permission of instructor. Recommended: Basic knowledge of Macintosh computer. All course work is done on computer.

A laboratory course in newspaper production. This class produces The Oak Leaf, the college newspaper, and students enrolled in the course learn writing, editing, design, and desktop publishing skills required in modern newspaper production. (CSU)

### JOUR 54 Magazine Article Writing

3 units/2 hours lecture, 3 hours by arrangement. CR/NC option. Recommended: Eligibility for Engl 1A OR equivalent. Basic knowledge of Macintosh or Windows computers.

Introductory course in writing non-fiction magazine articles for print and the Internet. Course examines magazine industry, job opportunities, staff and freelance writing and provides basic instruction in writing standard genre articles. Student work is written for possible publication in The Oak Leaf, the college newspaper, and for online sites. (CSU)

May be taken for a total of 9 units.

### JOUR 66 Electronic Journalism Production

3 units/2 hours lecture, 3 hours by arrangement. CR/NC option. Recommended: Eligibility for English 100A or equiv.

Electronic Journalism Production prepares students for careers in Internet and online information industries. Provides hands-on production of news and information World Wide Web sites. Students prepare projects in such areas as digital photography/graphics, interactive multimedia, computer conferencing, electronic publishing and other non-paper-based media. (CSU)

May be taken for a total of 9 units.

### JOUR 68 Living in the Information Age

3 units/2 hours lecture, 3 hours by arrangement. CR/NC option. Recommended: Ability to type 10-20 words per minute. Coursework will be done on computer.

Living in the Information Age is a course that analyzes current events in terms of journalism/media/audience/outcomes. Through in-depth analysis of events, their historical antecedents and their representations in the news media students achieve a more complex, multi-disciplinary investigation of both events and their coverage in contemporary journalism. The course includes special emphasis on the importance of emerging specialized media which complement traditional media. (CSU)

May be taken for a total of 9 units.

### JOUR 88 Book Publishing Today

3 units/2 hours lecture, 3 hours by arrangement. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent. Basic knowledge of Macintosh or Windows computers.

How to write and publish non-fiction books in print and electronically. Includes topics such as research, writing, editing, market analysis, promotion and self-publishing. (CSU)

May be taken for a total of 9 units.

### JOUR 399 Selected Topics in Journalism

0.5-3 units/up to 3 hours lecture. CR/NC option. Intensive study of topic in Journalism of current interest, selected by the English department and presented by an instructor specializing in that area. Purpose is to stimulate serious thought by an in-depth analysis of subject through lecture, seminar, discussion, research, film and other media.

May be repeated with different topics.

## Latin

### LATIN 1 Elementary Latin-Part I

3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100B or equivalent.

Fluent speech with accurate pronunciation, correct oral and written grammatical and idiomatic sentence structure and essays illustrating control of linguistic and cultural principles. (CSU/UC)

AA/AS area E; CSU area C2; IGETC language

### LATIN 2 Elementary Latin-Part II

3 units/3 hours lecture. CR/NC option. Prerequisite: Latin 1. Recommended: Completion of Engl 100B or equivalent.

Continuation of Latin 1; supplementary readings with oral and written essays to illustrate control of linguistic and cultural principles. (CSU/UC)

AA/AS area E; CSU area C2

### LATIN 3 Intermediate Latin-Part I

3 units/3 hours lecture. CR/NC option. Prerequisite: Latin 2 or equivalent or three years of high school Latin. Recommended: Completion of ENGL 100B or equiv.

Review of first-year linguistic and cultural principles. Speaking, reading, and writing with discussion and analytical essays and term papers for idiomatic use of language to show review of control of linguistic principles. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B

### LATIN 4 Intermediate Latin-Part II

3 units/3 hours lecture. CR/NC option. Prerequisite: Latin 3 or equivalent or 4 years of high school Latin. Recommended: Completion of ENGL 100B or equiv.

Research compositions, analytical essays, readings and critical discussions of modern and classical foreign language literature and culture. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B

### LATIN 49 Special Studies in Latin

1-3 units/up to 3 hours by arrangement. Grade only. Prerequisite: Application to department. Recommended: Eligibility for Engl 100A or equivalent.

Seminar or individual conferences by arrangement to provide for independent study, enriched academic experience, and the writing of research papers. (CSU/UC)

Independent study including 49 and 98 courses - 6 unit total.

## Library and Information Resources

### LIR 10 Introduction to Information Competency

(Formerly LIR 59) 1 unit/2 hours lecture for 8 weeks. CR/NC option. Recommended: Completion of Engl 100A or higher and familiarity with basic computer operations.

A course designed to be taken as a stand-alone course or concurrently with 1A level discipline courses or other courses with information components. This introductory course will teach the skills needed to find, evaluate, use and communicate information in print, electronic and Internet formats. Course projects for concurrent sections will coordinate with concurrent course assignments. (CSU/UC)

### LIR 22 Locating Knowledge: Access to the Study of American Cultures

(Formerly LIBSC 22) 3 units/3 hours lecture. CR/NC option. Recommended: Experience with computers. Completion of Engl 100A or equivalent.

An introduction to the research process and access to information resources from the point of view of cultural experience, power and representation. Information systems are culturally based and a library is a major knowledge-transferring and culture-reinforcing institution. The course comparatively examines ways in which topics dealing with Native Americans, African Americans, Latinos/Latinas, Asian Americans, and European Americans are treated in library classification, subject description, indexing practices and in the traditions of literacy that libraries represent and preserve. Parallel to the examination of library systems there is a comparative evaluation of the representation of the heritage of these cultural groups in high-technology formats including the World Wide Web. (CSU/UC)

AA/AS area G

### LIR 50 Research Skills for Papers, Reports & Essays

(Formerly LIBSC 50) 1 unit/2 hours lecture for 8 weeks. CR/NC option. Recommended: Completion of or concurrent enrollment in ENGL 100A; OR completion of or concurrent enrollment in ENGL 100B; OR eligibility for ENGL 1A.

An introduction to methods, strategies and resources for preparing research papers, reports and essays. Develop search strategies in print; gather electronic and Internet resources, and evaluate information on a focused topic; organize ideas for written form; and use an appropriate citation and bibliographic style. (CSU)

May be taken for a total of 3 units.

### LIR 54.1 Finding Info in Electronic Age: the Internet

(Formerly LIBSC 54.1) 1.5 units/2 hours lecture, 2 hours laboratory, 1 hour by arrangement for 9 weeks. CR/NC option. Recommended: Completion of Engl 100A or higher. Familiarity with basic microcomputer operation. Some previous experience with electronic library catalogs, indexes or databases will be helpful, but is not required.

An introduction to the use of the Internet to find information. Course will discuss Internet resources,

location tools, evaluation of information found, and options for obtaining Internet access. (CSU)

### LIR 54.2 Findg Info in Elec Age: Search Technq for Computer Databases

(Formerly LIBSC 54.2) 1.5 units/3 hours lecture for 8 weeks. CR/NC option. Recommended: Completion of Engl 100A or higher and familiarity with basic personal computer operation. Previous experience with electronic library catalogs or other databases is helpful but not necessary.

A course to develop and refine search skills for effectively finding information in electronic databases. Apply basic and advanced search techniques to databases such as commercial magazine databases and the Internet. Specific databases vary from semester to semester. (CSU)

### LIR 57.1 Introduction to the Internet

(Formerly LIR 84.1) 0.5 unit/8 hours lecture for 1 week. CR/NC option. Recommended: Completion of Engl 100A or higher and familiarity with basic computer operations.

This is an introductory course for individuals with little or no experience using the Internet. A hands-on approach will stress Internet basics, how to use a Web browser, types of information available on the Internet, basics of formulating and performing Internet searches and criteria for evaluating information located on the Internet. Students will explore Internet sites and web-based databases, learn about the differences between using menus and search engines to locate information, and gain a general understanding of the Internet. (CSU)

May be taken for a total of 1 unit.

### LIR 57.2 Beyond the Basics: More Search Techniques for the Internet

(Formerly LIR 84.2) 0.5 unit/8 hours lecture for 1 week. CR/NC option. Recommended: Completion of Engl 100A or higher and familiarity with basic computer operations.

This is a more advanced course on doing effective research on the Internet for students who have already had some experience using Internet directories and search engines, who now want to improve their search skills and get better results when searching. The course covers how to form a search query, how to do a search which gets good results, and how to analyze and evaluate the usefulness of information which is found. (CSU)

May be taken for a total of 1 unit.

### LIR 57.3 How to Do Internet Research for Humanities & History

(Formerly LIR 84.42) 0.5 unit/8 hours lecture for 1 week. CR/NC option. Recommended: Completion of Engl 100A or higher and familiarity with basic computer operations.

The focus of this course is on locating text, image and sound resources on the Internet related to studies in the humanities. Designed for students familiar with surfing on the Internet that are ready to learn search strategies for finding the best resources at time of need. Students use Internet databases, directories and search engines, opacs and webpacs to search for information on focused topics. Emphasis placed on formulating search strategies, writing and revising effective search statements, evaluating the point of view, the authority, voice and intended audience of resources found. Students are introduced to citation

practices and to issues about the ethical use of information discovered on the Internet. (CSU)

May be taken for a total of 1 unit.

### LIR 57.4 How to Do WWW Research for American Cultures

(Formerly LIR 84.4) 0.5 unit/8 hours lecture for 1 week. CR/NC option. Recommended: Completion of Engl 100A or higher and familiarity with basic computer operations.

The focus of this course is on finding access to resources about American cultures on the World Wide Web. Designed for students familiar with surfing on the Internet and are ready to learn search strategies for finding the best resources at time of need. Students use Internet databases, directories & search engines, opacs & webpacs, to search for information on focused topics. Emphasis is placed on formulating search strategies, writing and revising effective search statements, evaluating the point of view of the authority, voice and intended audience of resources found. Students are introduced to citation practices and to issues about the ethical use of information discovered on the Internet. (CSU)

May be taken for a total of 1 unit.

### LIR 57.5 Internet Research for Writers and Editors

(Formerly LIR 84.5) 0.5 unit/8 hours lecture for 1 week. CR/NC option. Recommended: Completion of Engl 100A or higher and familiarity with basic computer operations.

The focus of this course is research methods and resources of use to writers, editors and publishers. It is designed for students familiar with surfing on the World Wide Web who are ready to learn search strategies for finding the best resources at time of need. Students use Internet databases, directories and search engines, opacs and webpacs to search for information on focused topics. Emphasis is placed on formulating search strategies, writing and revising effective search statements, evaluating the point of view, the authority, voice and intended audience of resources found. Students are introduced to citation practices and to issues about the ethical use of information discovered on the Internet. (CSU)

May be taken for a total of 1 unit.

### LIR 57.7 How to Do WWW Research for Controversial Issues

(Formerly LIR 84.24) 0.5 unit/8 hours lecture for 1 week. CR/NC option. Recommended: Completion of Engl 100A or higher and familiarity with basic computer operations.

The focus of this course is on finding resources related to controversial political and social issues. Designed for students familiar with surfing on the Internet and are ready to learn search strategies for finding the best resources at time of need. Students use Internet databases, directories and search engines, opacs and webpacs to search for information on focused topics. Emphasis is placed on formulating search strategies, writing and revising effective search statements, evaluating the point of view, the authority, voice and intended audience of resources found. Students are introduced to citation practices and to issues about the ethical use of information discovered on the Internet. (CSU)

May be taken for a total of 1 unit.

### LIR 57.8 Internet Research for Environment & Ecology Studies

(Formerly LIR 84.3) 0.5 unit/8 hours lecture for 1 week. CR/NC option. Recommended: Completion of Engl 100A or higher and familiarity with basic computer operations.

The focus of this course is on searching for ecology and environmental studies resources on the Internet. It is designed for students familiar with searching on the World Wide Web who are ready to learn search strategies for finding the best resources at time of need. Students use Internet databases, directories, and search engines, opacs and webpacs to search for information on focused topics. Emphasis is placed on formulating search strategies, writing and revising effective search statements, evaluating the point of view, the authority, voice and intended audience of resources found. Students are introduced to citation practices and to issues about the ethical use of information discovered on the Internet. (CSU)  
May be taken for a total of 1 unit.

### LIR 57.32 Medical & Health Sources on the World Wide Web

(Formerly LIR 84.32) 0.5 unit/8 hours lecture for 1 week. CR/NC option.

This is an introductory course on using the World Wide Web to locate medical and health information resources. Emphasis will be placed on effective search techniques, identification of appropriate sites and resources, and evaluation of the information. The course will emphasize a hands-on approach combined with online demonstrations. (CSU)  
May be taken for a total of 1 unit.

### LIR 57.34 Business Sources on the World Wide Web

(Formerly LIR 84.34) 0.5 unit/8 hours lecture for 1 week. CR/NC option. Recommended: Completion of Engl 100A or higher and familiarity with basic computer operations.

This course is for students familiar with surfing on the Internet and now want to learn search strategies to find the best resources in business. Students use Internet resources including databases, subject directories, & search engines for searching on focused topics. Emphasis is placed on formulating search strategies, evaluating the relevancy and quality of results. Ethical use of information is also discussed. (CSU)

May be taken for a total of 1 unit.

### LIR 60A Library Resources: Where & How

(Formerly LIBSC 60A) 0.5 unit/1.5 hours by arrangement. CR/NC only.

An introduction to major library resources and basic library skills in a self-paced format. Includes access to books, magazine and newspaper indexes in print and electronic form, and an introduction to the Internet. (CSU)

### LIR 60B Library Resources: Where & How

(Formerly LIBSC 60B) 0.5 unit/1.5 hours by arrangement. CR/NC only. Prerequisite: LIR 60A (formerly LIBSC 60A).

An introduction to major print and electronic information resources, in a self-paced format. Explores useful sources for a variety of research assignments including term papers, and teaches search strategies for the Internet. (CSU)

### LIR 84 Selected Topics in Library Science

(Formerly LIBSC 84) 0.5-3 units/up to 2 hours lecture, 2 hours laboratory, 1.5 hours by arrangement for 16 weeks. CR/NC option.

Selected topics including library research techniques, use of online systems, database searching, Internet and network resources, and bibliographic instruction. This course will stress search techniques, utilization of electronic services and resources, and evaluation of information sources. (CSU)  
May be repeated with different topics.

### LIR 98 Special Studies in Library Science

(Formerly LIBSC 98) 1-3 units/up to 9 hours by arrangement. Grade only. Prerequisite: Application to department. Recommended: Completion of or concurrent enrollment in Engl 100A or equivalent, Engl 100B or equivalent or eligibility for Engl 1A.

Seminar or individual conferences by arrangement to provide for independent study and enriched academic experience. (CSU)  
Independent study including 49 and 98 courses - 6 unit total.

### LIR 110 Finding and Using Information

1 unit/2 hours lecture for 8 weeks. CR/NC option.

A course designed to be taken as a stand-alone course or concurrently with 100 level discipline courses or other courses with information components. This introductory course will teach the basic skills needed to find, evaluate, and use information sources in variety of formats. Course projects for concurrent sections will coordinate with concurrent course assignments.

May be taken for a total of 4 times.

## Machine Tool Technology

### MACH 51A Beginning Machine Tool Technology

2 units/1 hour lecture, 3 hours laboratory. Grade only. Recommended: Eligibility for English 100A or equiv.

Use and care of the lathe, drill press and common hand tools. Measurement, layout and heat treatment of metal. Recommended for students in related vocational areas. (CSU)

### MACH 51B Beginning Machine Tool Technology

2 units/1 hour lecture, 3 hours laboratory. Grade only. Recommended: Eligibility for English 100A or equiv.

Use and care of lathe, drill, drill press, and common hand tools. Measurement, layout and heat treatment of metal. Processes in manufacturing and industry. (CSU)

### MACH 51C Gear Processes

2 units/1 hour lecture, 3 hours laboratory. Grade only. Recommended: Eligibility for English 100A or equiv.

Set up and operation of the indexing gear, gear shaper, gear milling machine and special attachments. (CSU)

### MACH 51D Grinding & Shaping

2 units/1 hour lecture, 3 hours laboratory. Grade only. Recommended: Eligibility for English 100A or equiv. Use and care of shaper, surface grinder, and cam milling operations. (CSU)

### MACH 52 Blueprint Reading for Machine and Related Industries

3 units/3 hours lecture, 1 hour by arrangement. Grade only. Blueprint Reading for Machine and Related Industries is a course in reading blueprints, sketches, and drawings used in manufacturing, assembly, and other industrial applications. Students will become familiar with how to read angles, dimensions, sectional drawings, industrial prints, title blocks, shop notes, etc. (CSU)  
May be taken for a total of 6 units within 4 semesters.

### MACH 53 Metrology

3 units/3 hours lecture, 1 hour by arrangement. Grade only. Prerequisite: Completion of MACH 52.

Metrology is the study of the science of precision measurement used in manufacturing, assembly, and inspection. Students will become familiar with all types of handheld measuring devices and electronic and optical measuring/inspection tools and systems currently in use. Visits to sites where Coordinate Measuring Machine applications are used are required. (CSU)

May be taken for a total of 6 units within 4 semesters.

### MACH 61A Ferrous Metallurgy

3 units/2 hours lecture, 2 hours laboratory, 1 hour by arrangement. Grade only.

Study of ferrous metals including alloying, heat treating, testing and applications in industry. (CSU)  
May be taken for a total of 6 units within 4 semesters.

### MACH 61B Non-Ferrous Metallurgy

3 units/2 hours lecture, 2 hours laboratory, 1 hour by arrangement. Grade only.

Study of non-ferrous metals including alloying, heat treating, testing and applications in industry. (CSU)  
May be taken for a total of 6 units within 4 semesters.

### MACH 80A Machine Tool Technology

5 units/4 hours lecture, 4 hours laboratory. Grade only. Prerequisite: MACH 51A.

Mach 80A is a course in all aspects of CNC lathe operation. Emphasis is on programming, CNC lathe operation, Computer Aided Drawing (CAD) and Computer Aided Machining (CAM) applicable to entry-level CNC lathe operators. (CSU)  
May be taken for a total of 10 units within 2 semesters.

### MACH 80B Machine Tool Technology

5 units/4 hours lecture, 4 hours laboratory. Grade only. Prerequisite: MACH 80A.

Mach 80B is a course in all aspects of CNC mill operation. Emphasis is on programming, CNC mill operation, Computer Aided Drawing (CAD), and Computer Aided Machining (CAM) applicable to entry-level CNC mill operators. (CSU)  
May be taken for a total of 10 units within 2 semesters.

## **MACH 98 Special Studies in Machine Tool Technology**

*1 unit/3 hours by arrangement. Grade only.*

Seminars or individual conferences by arrangement to provide for independent study and enriched academic experience. (CSU)

*Independent study including 49 and 98 courses - 6 unit total.*

## **MACH 99 Machine Technology Occupational Work Experience**

*0.5-8 units/up to 36 hours by arrangement. Grade only.*

Machine Occupational Work Experience is supervised employment extending classroom learning at an on-the-job learning station relating to the student's educational or occupational goal. Students gain this experience by enrolling in the parallel or alternate plan. (CSU)

*May be taken for a total of 16 units.*

## **MACH 99I Machine Technology Occupational Work Experience Internship**

*0.5-8 units/up to 36 hours by arrangement. Grade only.*

Machine Occupational Work Experience Internship is supervised employment extending classroom learning at an on-the-job learning station relating to the student's educational or occupational goal. Students gain this experience by enrolling in the Parallel or Alternate plan. (CSU)

*May be taken for a total of 16 units.*

## **MACH 315A Ferrous Metallurgy**

*(Formerly MACH 215A) 1.5 units/1 hour lecture, 2 hours laboratory. Grade only. Recommended: Eligibility for English 100A or equiv.*

Properties, production methods, heat treating, plating and testing procedures of ferrous metals.

## **MACH 315B Non-Ferrous Metallurgy**

*(Formerly MACH 215B) 1.5 units/1 hour lecture, 2 hours laboratory. Grade only. Recommended: Eligibility for English 100A or equiv.*

Properties, production methods, heat treating, plating and testing procedures on non ferrous metals.

## **MACH 399 Selected Topics in Machine Tool Technology**

*0.5-2 units/up to 1 hour lecture, 2 hours laboratory. CR/NC option.*

Variety of machine tool technology and related topics offered in a short, time-intensive format.

*May be repeated with different topics.*

# Mathematics

## **MATH 1A Calculus, First Course**

*5 units/5 hours lecture. Grade only. Prerequisite: MATH 27 (formerly MATH 57).*

Topics include limits and continuity, differentiation, applications of the derivative, integration, applications of the integral, methods of integration. (CSU/UC)

*AA/AS area B; CSU area B4; IGETC area 2; CAN MATH 18; MATH 1A + MATH 1B = CAN MATH SEQ B; MATH 1A + MATH 1B + MATH 2A = CAN MATH SEQ C*

## **MATH 1B Calculus, Second Course**

*5 units/5 hours lecture. Grade only. Prerequisite: MATH 1A.*

Topics include indeterminate forms, conic sections, polar coordinates, infinite series, parametric equations, solid analytic geometry, and vectors. (CSU/UC)

*AA/AS area B; CSU area B4; IGETC area 2; CAN MATH 20; MATH 1A + MATH 1B = CAN MATH SEQ B; MATH 1A + MATH 1B + MATH 2A = CAN MATH SEQ C*

## **MATH 2A Calculus, Third Course**

*3 units/3 hours lecture. Grade only. Prerequisite: Math 1B*

Multivariable calculus including partial differentiation and multiple integration, vector analysis including vector fields, line integrals, surface integrals, and the Theorems of Green, Gauss & Stokes. (CSU/UC)

*AA/AS area B; CAN MATH 22; MATH 1A + MATH 1B + MATH 2A = CAN MATH SEQ C*

## **MATH 2B Calculus, Fourth Course-Differential Equations**

*3 units/3 hours lecture. Grade only. Prerequisite: Math 2A.*

First and second order differential equations with applications. Series solution, numerical methods, introduction to Laplace transforms. Systems of differential equations with applications. (CSU/UC)

*AA/AS area B; CAN MATH 24*

## **MATH 4 Discrete Mathematics**

*4 units/4 hours lecture. Grade only. Prerequisite: Completion of Math 27 (formerly MATH 57). Recommended: Math 1A.*

A lower division Discrete Mathematics course including formal logic, Boolean logic, and logic circuits, mathematical induction, introduction to number theory, set theory, principles of combinatorics, functions, relations, recursion, algorithm efficiency, and graph theory. (CSU/UC)

*AA/AS area B; CSU area B4; IGETC area 2*

## **MATH 5 Linear Algebra**

*3 units/3 hours lecture. Grade only. Prerequisite: Math 1B. Recommended: Concurrent enrollment in Math 2A or 2B.*

A complete lower division course in Linear Algebra including the theory of matrices, determinants, vector spaces, linear transformations, eigenvectors, eigenvalues and applications. (CSU/UC)

*CAN MATH 26*

## **MATH 8A Brief Calculus I**

*3 units/3 hours lecture. Grade only. Prerequisite: MATH 27 (formerly MATH 57).*

Limits continuity; differentiation; analytic geometry; maxima and minima; rates of change and differentials; integration; calculus for exponential and logarithmic functions; calculus of the trigonometric functions; applications. This sequence is intended for majors in the life sciences and social sciences. Students will not receive credit for both MATH 8A and MATH 1A. (CSU/UC)

*AA/AS area B; CSU area B4; IGETC area 2; CAN MATH 30; MATH 8A + MATH 8B = CAN MATH SEQ D*

## **MATH 8B Brief Calculus II**

*3 units/3 hours lecture. Grade only. Prerequisite: Math 8A.*

Continuation of Math 8A. Probability and calculus; differential equations; partial derivatives; maximization with constraints; double integrals; applications; series and Taylor polynomials. Students will not receive credit for both Math 8B and Math 1B. (CSU/UC)

*AA/AS area B; CSU area B4; CAN MATH 32; MATH 8A + MATH 8B = CAN MATH SEQ D*

## **MATH 9 Finite Mathematics**

*3 units/3 hours lecture. CR/NC option. Prerequisite: Math 155.*

Sets, matrices, and systems of equations and inequalities, linear programming, combinatorial techniques and probability, mathematics of finance, Markov chains, game theory. (CSU/UC)

*AA/AS area B; CSU area B4; IGETC area 2; CAN MATH 12*

## **MATH 10 Nature of Mathematics**

*3 units/3 hours lecture. CR/NC option. Prerequisite: Math 155.*

Mathematical reasoning with four additional topics selected from number systems, computers, probability, statistics and mathematical modeling. Recommended for liberal arts and elementary education students. (CSU/UC)

*AA/AS area B; CSU area B4; IGETC area 2; CAN MATH 2*

## **MATH 15 Elementary Statistics with Computer**

*4 units/4 hours lecture. CR/NC option. Prerequisite: Math 155.*

Computer investigation, exploration and simulations of concepts in statistics, descriptive statistics, probability theory including the uniform, binomial, hypergeometric, Poisson, normal, chi-square and Student's t distributions, central limit theorem, estimation of population parameters from a sample, hypothesis testing including parametric and nonparametric methods, confidence intervals, correlation and linear regression, introduction to analysis of variance computer simulations and Monte Carlo methods. (CSU/UC)

*AA/AS area B; CSU area B4; IGETC area 2; CAN STAT 2*  
*May be taken for a total of 4 units.*



**MATH 16 Introduction to Mathematical Analysis**  
4 units/4 hours lecture. CR/NC option. Prerequisite: MATH 155.

Exponential and logarithmic function, limits, differential and integral calculus in one variable with applications, partial derivatives. Emphasis on applications in business and economics. (CSU/UC)  
AA/AS area B; CSU area B4; IGETC area 2; CAN MATH 34

**MATH 27 College Algebra and Trigonometry**  
(Formerly MATH 57) 5 units/5 hours lecture. Grade only. Prerequisite: MATH 155.

Topics from college algebra and trigonometry, including analytic geometry, functions and their graphs, trigonometric functions of angles, trigonometric identities, trigonometric solution of triangles, complex numbers, vectors, sequences and series. (CSU/UC)

AA/AS area B; CSU area B4; IGETC area 2

**MATH 32 BASIC Programming for Science**

(Formerly MATH 52) 3 units/2 hours lecture, 3 hours by arrangement. Grade only. Prerequisite: Math 155 or Math 156 or qualifying placement score equivalent to high school intermediate algebra course. Recommended: That prerequisite courses have been taken within the last year.

Using the BASIC language, students design, code, execute, debug and document structured programs with emphasis on mathematical concepts. Includes decision points, looping, functions, random numbers, arrays, subroutines, iterative and sorting techniques, disk data files, and applications. Recommended for mathematics, engineering and science students. (CSU/UC)

AA/AS area B; CSU area B4; CIS 16A + MATH 32 = CAN CSCI 6

**MATH 36 FORTRAN Programming for Science**

(Formerly MATH 17) 4 units/3 hours lecture, 3 hours by arrangement. Grade only. Prerequisite: MATH 27 (formerly MATH 57).

The solution of mathematical, scientific and engineering problems using the FORTRAN language. Emphasis on structured programming, including documentation, formatted input/output, control statements, arrays and subprograms. (CSU/UC)

AA/AS area B; CSU area B4; CAN CSCI 4

**MATH 38 Pascal Programming for Science**

4 units/3 hours lecture, 3 hours by arrangement. Grade only. Prerequisite: MATH 27 (formerly MATH 57) or MATH 58 or four years of high school college preparatory mathematics with qualifying placement score, and a previous computer programming course with grades of "C" or better.

Recommended: That prerequisite courses have been taken within the last year. If a student's record shows a duplication of equivalent courses the most recent course must satisfy the prerequisite.

The solution of mathematical, scientific and engineering problems using the Pascal language. Emphasis on structured programming, including documentation, procedures, structured data types and pointer variables. (CSU/UC)

AA/AS area B; CSU area B4

**MATH 49 Special Studies in Mathematics**

1-3 units/up to 3 hours laboratory, 6 hours by arrangement. Grade only. Prerequisite: Eligibility for Math 150A or equivalent and application to the department.

Seminars or individual conferences by arrangement

to provide for independent study and enriched academic experience. (CSU/UC)

Independent study including 49 and 98 courses - 6 unit total.

**MATH 150A First Half of Elementary Algebra**

3 units/3 hours lecture. Grade only. Prerequisite: CSKL 372. This course is the first half of a standard beginning algebra course, including equations and inequalities in one variable, integer exponents, polynomials, and equations and inequalities in two variables. The sequence MATH 150A/MATH 150B constitutes a complete course in beginning elementary algebra equivalent to a standard first year high school algebra course. Not open to those who have taken MATH 151 within the past 3 years with a grade of "C" or better.

**MATH 150B Second Half of Elementary Algebra**

3 units/3 hours lecture. Grade only. Prerequisite: Math 150A. This course is the second half of a standard beginning algebra course, including rational expressions, radicals and rational exponents, quadratic equations, and the graphs of parabolas. The sequence MATH 150A/MATH 150B constitutes a complete course in beginning algebra equivalent to a standard first year high school algebra course. Not open to those who have taken MATH 151 within the past 3 years with a grade of "C" or better.

**MATH 151 Elementary Algebra**

5 units/5 hours lecture. Grade only. Prerequisite: CSKL 372. This course is a standard beginning algebra course, including equations and inequalities in one variable, integer exponents, polynomials, equations and inequalities in two variables, rational expressions, radicals and rational exponents, quadratic equations, and the graphs of parabolas. Not open to those who have taken MATH 150B within the past 3 years with a grade of "C" or better.

**MATH 153 Elementary Algebra for Tech Prep**

5 units/4 hours lecture, 3 hours laboratory, 7 hours by arrangement. Grade only. Prerequisite: CSKL 372 or CSKL 382 or qualifying placement score equivalent to elementary algebra course. Recommended: That prerequisite courses have been taken within the last year.

A comprehensive course in elementary algebra designed to provide practical experience in the applications of mathematics concepts through hands-on activities and laboratories. The course is part of the Applied Academics component of the Tech Prep program, but may be taken by any student who wishes to learn in a cooperative, participatory environment oriented toward technical applications. The course is equivalent to MATH 151. Not open to those who have taken MATH 150B or MATH 151 in the past three years with a grade of "C" or better.

**MATH 155 Intermediate Algebra**

4 units/4 hours lecture. CR/NC option. Prerequisite: Either MATH 151, or MATH 150B.

This course is an intermediate algebra course which incorporates the use of technology. The topics in this course include functions, equations and inequalities in one variable, systems of linear equations in two or

three variables, exponential and logarithmic functions and equations, and discrete topics. Graphing calculators and/or computer algebra systems will be incorporated into the above, as appropriate.

AA/AS area B

## Media Studies

**MEDIA 4 Introduction to Mass Communication**

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 1A or equivalent.

The public arts and the individual in relation to broadcasting, advertising and popular culture - how media of mass communication works. (CSU/UC)  
AA/AS area E; CSU area C1; IGETC area 3A

**MEDIA 41 Introduction to Film History**

3 units/4 hours lecture. CR/NC option. Recommended: Eligibility for Engl 1A.

A survey of film history from 1895 to the present, with emphasis upon D.W. Griffith, German Expressionism, Soviet Montage, Hollywood Studio System, New Wave, and international trends through screenings, lecture, and discussion. (CSU/UC)

AA/AS area E; CSU area C1; IGETC area 3A

**MEDIA 42 Introduction to Film Form**

3 units/4 hours lecture. CR/NC option. Recommended: Eligibility for Engl 1A or equivalent.

Emphasis upon film's various language systems, grammar, and aesthetics. Attention will also be given to selected genres, directors, or movements through screenings, lecture, and discussion. (CSU/UC)

AA/AS area E; CSU area C1; IGETC area 3A

**MEDIA 73 Understanding Television**

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent. Media 4.

Television as communication. Viewing/listening and discussion of representative examples from the past and present of the electronic media with background information. (CSU)

**MEDIA 74 Broadcast News**

3 units/3 hours lecture. CR/NC option. Development of basic writing and presentation skills for Electronic News. Special emphasis on news selection process, preparation of commentaries and broadcast editorials. (CSU)

**MEDIA 75 Radio Station Operation**

3 units/3 hours lecture, 1 hour laboratory. CR/NC option. Recommended: Completion of Engl 100A or equivalent.

Practices and procedures in broadcast performance and non-technical station operation. (CSU)

May be taken for a total of 6 units.

### **MEDIA 76 Radio Production Workshop**

3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100A or equivalent. Supervised group and individual instruction in techniques of audio production with emphasis on writing and producing commercials, dramatic programs and general announcing. (CSU)  
May be taken for a total of 6 units.

### **MEDIA 76L Radio Practicum**

4-5 units/up to 15 hours by arrangement. Grade only. Prerequisite: Application to department. Practical instruction using facilities of local radio stations. (CSU)  
May be taken for a total of 10 units within 2 semesters.

### **MEDIA 77 Video Field Production Workshop**

3 units/2 hours lecture, 3 hours by arrangement. CR/NC option. Small format video production. Introduction to scripting, shooting, lighting, audio, and non-linear editing techniques in a group production setting. (CSU)  
May be taken for a total of 9 units.

### **MEDIA 78 Writing for Film & Television**

3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 357, Media 41, 42, 77, 79A. Writing for the visual media is one of the most important modern communication skills. This course covers theory and practice of writing drama and comedy scripts for film and television. (CSU)  
May be taken for a total of 6 units.

### **MEDIA 79A Television Production Workshop**

3 units/2 hours lecture, 3 hours laboratory. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent. Basic television production techniques with practice in the use of cameras, recording devices, lighting instruments, audio gathering/mixing tools, editing equipment and preproduction practices for both multiple camera studio and single camera field production. (CSU)

### **MEDIA 79B Advanced Television Production**

3 units/2 hours lecture, 3 hours laboratory. CR/NC option. Prerequisite: Completion of Media 79A or equivalent. Advanced production class which emphasizes the technical/theoretical aspects of television production in the field and in the studio. (CSU)  
May be taken for a total of 6 units.

### **MEDIA 79L Television/Film Practicum**

4-5 units/up to 20 hours by arrangement. Grade only. Prerequisite: By successful application to the department. Limits on enrollment: Media 79L is an internship course at local TV stations and film production houses. Practical instruction using facilities of local television stations. On occasion, internships are possible with film production companies on location. (CSU)  
May be taken for a total of 10 units within 2 semesters.

## **Medical Assisting**

### **MA 60 Introduction to Medical Office Practice**

(Formerly MSR 60) 3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent. Consideration of the multiple functions performed by the Administrative Medical Assistant: appointment scheduling; verbal, nonverbal, and written communication skills; record management including confidentiality; interpersonal skills. Focus is on the development of organizational, decision-making and computer skills utilized by the Administrative Medical Assistant. (CSU)

### **MA 61 Law and Ethics in the Medical Office**

(Formerly MSR 61) 1 unit/1 hour lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent. Interrelationships between the medical office worker's role and responsibilities and the legal and ethical guidelines are explored. Emphasis is on analysis and decision making encountered in health care settings in which the MS/R would need to demonstrate legal, ethical, and safety behaviors. (CSU)

### **MA 62 Advanced Medical Terminology**

(Formerly MSR 62B) 4 units/4 hours lecture. CR/NC option. Prerequisite: HLC 60 and 2 units of Anat 51. Recommended: Eligibility for Engl 100A or equivalent. Emphasis on body systems and terminology of medical specialties with development, analysis, interpretation and application of advanced medical terminology used in a variety of medical settings. This includes advanced terminology related to body systems and medical specialties and associated with anatomic terms, diagnoses, symptoms, conditions, medical and surgical procedures, clinical and diagnostic laboratory, and medications. (CSU)

### **MA 63A Clinical Procedures I**

3 units/2 hours lecture, 3 hours laboratory. CR/NC option. Prerequisite: Preq: HLC 60 & ANAT 58 (or ANAT 52), & MA 61 (formerly MSR 61), & MA 62 (formerly MSR 62B). Recommended: Eligibility for Engl 1A & MA 60 (formerly MSR 60, MSR 69) or experience in a medical office. Student will develop knowledge of medical assisting skills & responsibilities for the clinical area of the medical office, including medical & surgical aseptic procedures; vital signs determination; assisting with physical examinations, including positioning & draping; height, weight, vision, and hearing testing; obtaining patient history; disinfection & sterilization techniques; eye & ear assessments & procedures. (CSU)

### **MA 63B Clinical Procedures II**

3 units/2 hours lecture, 3 hours laboratory. CR/NC option. Prerequisite: MA 63A Recommended: Eligibility for Engl 1A & MA 60 (formerly MSR 60, MSR 69) or 6 months' experience in a medical office. Emphasis on assessing and preparing for medical office emergencies. Students will practice procedures and instructions for giving First Aid and performing CPR techniques. Electrocardiography procedures

will be examined, recording a 12-lead electrocardiogram, applying a Holter monitor, and recognizing cardiac arrhythmias. (CSU)

### **MA 64 Laboratory Techniques**

2 units/1 hour lecture, 3 hours laboratory. CR/NC option. Prerequisite: HLC 60 & ANAT 58 & MA 61 (formerly MSR 61) & MA 62 (formerly MSR 62B) & MA 63A. Recommended: Eligibility for ENGL 1A & MA 60 (formerly MSR 60, MSR 69) or 6 months experience in a medical office. This course provides students with an introduction to the clinical laboratory. Students will perform low-complexity lab tests. Urine specimens are collected for dipstick or examination. Hematology, blood chemistry, serology testing, and normal ranges are studied. Medical microbiology techniques are used to set up slides for examination by the physician, & specimens are examined under the microscope. (CSU)

### **MA 65 Pharmacology & Administration of Medications**

2 units/1 hour lecture, 3 hours laboratory. CR/NC option. Prerequisite: HLC 60, & ANAT 58 (OR ANAT 52), & MA 61 (formerly MSR 61), & MA 62 (formerly MSR 62B), & MA 63A. Recommended: Eligibility for ENGL 1A & MA 60 (formerly MSR 60, MSR 69) or 6 months experience in a medical office. Basic pharmacology includes principles of drug administration & preparation & administration of medications by oral, intradermal, subcutaneous, and intramuscular routes. Students review basic math calculations & conversions for administration of medication. Lab includes return demonstration by students. Drugs are identified by their clinical use, mechanism of action, side effects, & adverse reactions. Risk factors for drug & alcohol abuse are presented along with drug addiction & withdrawal symptoms. (CSU)

### **MA 66.1 Medical Assisting Externship**

(Formerly MSR 66.1) 3.5 units/0.5 hour lecture, 1 hour laboratory, 9 hours by arrangement. Grade only. Prerequisite: Completion of Administrative Medical Assisting Course requirements: MA 60 (formerly MSR 60, MSR 69), HLC 60 & ANAT 51 [2 units], BGN 70 & BOT 77.3 or equivalent. Completion of or concurrent enrollment in MA 61 (formerly MSR 61), MA 62 (formerly MSR 62B), MA 68.1 (formerly MSR 68.1, MSR 68), MA 68.2 (formerly MSR 68.2), MA 68.4 (formerly MSR 68.4), MA 70A (formerly MSR 70A, MSR 70), physical examination, TB clearance, immunizations, and CPR course required before clinical externship. Recommended: Eligibility for Engl 100A or equivalent. Practical experience in medical offices and hospitals to develop office and interpersonal skills in preparation for entry-level employment as administrative medical assistants. Emphasis is on the ability to function under stress, identify priorities and organize specific tasks necessary for office efficiency. (CSU)

### MA 66.2 Medical Transcription Externship

(Formerly MSR 66.2) 3.5 units/0.5 hour lecture, 10 hours by arrangement. Grade only. Prerequisite: Completion of HLC 60 & ANAT 51 [2 UNITS], MA 70A (formerly MSR 70A, MSR 70), MA 70B (formerly MSR 70B), MA 71 (formerly MSR 71), BGN 70 or challenge exam, BOT 77.3 or knowledge of WP 5.1, completion of or concurrent enrollment in MA 62 (formerly MSR 62B) or equivalent or instructor approval; TB and immunization clearance. Typing of 50 wpm on IBM or IBM compatible on 5-minute timed test. Recommended: Eligibility for Engl 100A or equivalent.

Practical experience in hospitals, clinics, or offices to develop medical transcription skills in preparation for entry-level employment as a medical transcriptionist. Emphasis on the ability to function under stress with accuracy, speed, and utilization of resources in challenging medical transcription settings. (CSU)

### MA 66.3 Medical Insurance Billing Externship

(Formerly MSR 66.3) 3.5 units/0.5 hour lecture, 9 hours by arrangement. CR/NC option. Prerequisite: Completion of or concurrent enrollment in Administrative Medical Assisting courses MA 60 (formerly MSR 60, MSR 69) or 6 months experience, MA 61 (formerly MSR 61), 2 units ANAT 5, BBK 50A, BGN 70 or challenge examination, HLC 60, MA 62 (formerly MSR 62B), MA 68.1 (formerly MSR 68.1, MSR 68), MA 68.2 (formerly MSR 68.2), MA 68.3 (formerly MSR 68.3), MA 68.4 (formerly MSR 68.4), MA 67A (formerly MA 68.5, MSR 68.5) and immunization clearance and TB test. Recommended: Eligibility for Engl 100A or equivalent.

Practical experience in hospitals, clinics, or offices to develop medical insurance billing skills in preparation for entry-level employment as a medical insurance biller. Emphasis on the ability to function under stress with accuracy, speed, and utilization of resources in challenging medical insurance billing settings. (CSU)

### MA 66.4 Externship, Clinical Medical Assisting

3.5 units/0.5 hour lecture, 9 hours by arrangement. CR/NC option. Prerequisite: HLC 60 & ANAT 58 & MA 61 (formerly MSR 61) & MA 62 (formerly MSR 62B) & MA 63A. Corequisite: MA 63B & MA 64 & MA 65. Recommended: Eligibility for ENGL 1A & MA 60 (formerly MSR 60, MSR 69) or 6 months experience in a medical office.

Practical experience in offices, clinics, and/or hospitals to develop clinical medical assisting skills in preparation for entry-level employment as a clinical medical assistant. Emphasis on the ability to function under stress with accuracy, speed, & utilization of resources in challenging clinical medical assisting settings. (CSU)

### MA 67A Basic Diagnostic Coding

(Formerly MA 68.5) 1.5 units/2 hours lecture, 3 hours laboratory for 8 weeks. CR/NC option. Prerequisite: HLC 60. Recommended: Quality for Engl 100A.

Introduction to basic ICD-9CM diagnosis coding. Students will utilize their knowledge of medical terminology and human anatomy to convert diagnostic statements into numerical codes. Basic coding guidelines and logic will be presented as diagnoses related to each body system are studied. The course also includes an overview of other medical nomenclatures and classification systems. (CSU)

May be taken for a total of 3 times.

### MA 67B Intermediate Diagnostic and Procedural Coding

1.5 units/2 hours lecture, 3 hours laboratory for 8 weeks. CR/NC option. Prerequisite: MA 67A (formerly MA 68.5, MSR 68.5).

Continuation of MA 67A, Basic Diagnostic Coding, with emphasis on intermediate ICD-9CM diagnostic coding, and ICD-9CM and CPT procedure coding. Both coding systems will be used in coding various types of ambulatory cases, such as physician office records, outpatient surgery records, and emergency department records, as well as some inpatient cases. The course also includes an overview of reimbursement systems, medical record documentation, and medical data abstraction. (CSU) May be taken for a total of 3 times.

### MA 68.1 Basic Medical Office Insurance

(Formerly MSR 68.1) 1.5 units/2 hours lecture, 3 hours laboratory for 8 weeks. CR/NC option. Prerequisite: For certificate, student must have completed or be enrolled in MA 62 (formerly MSR 62B). Recommended: Eligibility for Engl 100A or equivalent; open enrollment with 3 units of medical terminology with grade of "C" or better.

Students develop basic knowledge and skills for processing insurance claims in the physician's office. Emphasis is on accuracy in completing basic medical insurance forms for major health plans, familiarity with basic coding books, filing claims for prompt and full reimbursement, developing manual and computer skills in insurance billing and implementing prior authorization procedures. Interpretation of benefits, and treatment of payments, adjustments and balances are summarized. (Letter grade only for certificate, or CR/NC) (CSU) May be taken for a total of 3 times.

### MA 68.2 Computerized Medical Office Bookkeeping

(Formerly MSR 68.2) 0.5 unit/1 hour lecture, 1 hour laboratory, 3 hours by arrangement for 8 weeks. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent; electronic calculator skills, computer skills. Using medical management software, students develop knowledge of basic medical office billing and insurance claims as performed on the computer and for which the medical office worker assumes responsibility. This self-paced instructional computer course requires completion of computer exercises, report generation and self-evaluation activities. (CSU)

### MA 68.3 Insurance Coding Techniques

(Formerly MSR 68.3) 0.5 unit/1 hour lecture for 8 weeks. CR/NC option. Recommended: Quality for Engl 100A or equivalent. Experience in a medical office, or knowledge of medical terminology, or instructor approval. Student will develop knowledge of current health insurance coding regulations, use coding procedures and regulations to increase the accuracy of insurance claims and problem solve to develop techniques and procedures to promote accurate reimbursement. (CSU)

May be taken for a total of 3 times.

### MA 68.4 Procedural Coding

(Formerly MSR 68.4) 1.5 units/2 hours lecture, 3 hours laboratory for 8 weeks. CR/NC option. Recommended: Quality for ENGL 100A, MSR 68.1 (formerly MSR 68.1, MSR 68) or one year employment in a medical office and medical terminology and anatomy.

Students integrate their knowledge of medical terminology, anatomy, surgery, diagnoses, and procedures to correctly identify services and procedures provided in a variety of medical settings. They abstract information and transfer data to coding systems to obtain payment from third parties. They use coding procedures and regulations to develop strategies and techniques which promote accurate reimbursement. (CSU) May be taken for a total of 3 times.

### MA 70A Introduction to Medical Transcription

(Formerly MSR 70A) 2 units/2 hours lecture, 3 hours laboratory, 3 hours by arrangement for 8 weeks. CR/NC option. Prerequisite: HLC 60 and 2 units of ANAT 51 or equivalent; BOT 77.3 or knowledge of WordPerfect software; typing speed of 40 wpm on IBM or IBM compatible machine on a 5-minute timed writing; completion of or concurrent enrollment in MA 62 (formerly MSR 62B); BGN 70 or challenge examination. Recommended: Eligibility for Engl 100A or equivalent. MA 61 (formerly MSR 61).

Involves the transcription of basic medical dictation most frequently encountered in a physician's office. Students use transcription machines and computers with word processing software. Students apply principles of English grammar, punctuation, spelling and proofreading; improve keyboarding skills; and apply the knowledge of the language of medicine. (CSU)

### MA 70B Intermediate Medical Transcription

(Formerly MSR 70B) 2 units/2 hours lecture, 3 hours laboratory, 3 hours by arrangement for 8 weeks. CR/NC option. Prerequisite: Completion of MA 70A (formerly MSR 70A, MSR 70) and all 70A prerequisites, or instructor approval. Recommended: Eligibility for Engl 100A or equivalent.

Designed to introduce the student to the medical reports, formats, and vocabulary required to transcribe medical dictation in the hospital, clinic, or medical office. Students use transcription machines and computers with word processing software to transcribe physician dictation of graduated difficulty using a variety of medical reports. Students apply principles of English grammar, punctuation, spelling, improve keyboarding skills and apply the knowledge of the language of medicine. (CSU)

May be taken for a total of 3 times.

### MA 71 Advanced Medical Transcription

(Formerly MSR 71) 3 units/2 hours lecture, 4 hours laboratory, 7 hours by arrangement for 9 weeks. CR/NC option. Prerequisite: Completion of MA 70A (formerly MSR 70A, MSR 70) & 70B (formerly MSR 70B) and all 70A prerequisites. Recommended: Eligibility for Engl 100A or equivalent.

Designed to introduce the student to the demands of an acute hospital transcription unit. Students type actual physician dictation of graduated difficulty from a variety of medical specialties. Application of medical terminology in the medical specialties. (CSU)

May be taken for a total of 3 times.

## MA 287 Selected Topics in Medical Secretary/ Receptionist

*(Formerly MSR 287) 0.5-3 units/up to 3 hours lecture. Grade only. Prerequisite: Employment in medical office; enrollment in MS/R program; or consent of instructor. Recommended: Employment in medical office.*

Content focus is on health insurance coding, and clinical and administrative skills in the medical office. Emphasis is on application of content. Information presented may be general in nature or apply to a specific medical specialty. May be repeated with different topics.

## Meteorology

### METRO 10 Introduction to Meteorology

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for ENGL 100A or equivalent.*

A descriptive, non-mathematical introduction to the dynamics of the earth's atmosphere. Weather instrumentation and measurement of precipitation, wind speed and direction, relative humidity, air pressure, temperature, and solar radiation. Topics of atmospheric circulation, cyclones and anticyclones, cloud forms and development of precipitation, air masses, weather fronts, and weather forecasting. (CSU/UC)

*AA/AS area C; CSU area B1; IGETC area 5A*

### METRO 10L Weather Analysis Forecasting & Climatology Lab

*1 unit/3 hours laboratory. CR/NC option. Recommended: Concurrent enrollment in METRO 10 or completion of METRO 10.*

The study, interpretation, and analysis of surface weather maps. The preparation of weather forecasts from surface maps and their integration with analysis from upper level air charts and the GOES weather satellite photographs. (CSU/UC)

*CSU areas B1, B3; IGETC area 5A*

### METRO 11 Weather Charts & Climatology

*3 units/3 hours lecture. CR/NC option. Prerequisite: Metro 10.*

A sequential course to Meteorology 10 which investigates the basic meteorology of extreme weather events in the United States. A detailed descriptive analysis of droughts, floods, hurricanes, severe thunderstorms, and tornadoes. Additional emphasis on the relationship of weather variability in California to short term meteorological effects and long range climatic changes. (CSU/UC)

## Microbiology

### MICRO 5 General Microbiology

*5 units/3 hours lecture, 6 hours laboratory. Grade only. Prerequisite: Completion of CHEM 60 or higher (V6), and completion of BIO 10 or higher (V7).*

Physiology and genetics of micro-organisms with

emphasis on the bacteria. Principles of host-parasite interaction. Usually offered fall and summer. (CSU/UC)

*AA/AS area C; CSU areas B2, B3; IGETC area 5B; CAN BIOL 14*

### MICRO 60 Fundamentals of Microbiology

*4 units/3 hours lecture, 3 hours laboratory. CR/NC option. Prerequisite: Completion of CHEM 60 or higher (V6), and completion of BIO 10 or higher (V7). Recommended: Eligibility for ENGL 100B.*

Survey of the major concepts of microbiology with emphasis on those related to infectious disease. Basic techniques for cultivation and identification of micro-organisms, principles of genetics, physiology, and disease resistance. (CSU)

*AA/AS area C; CSU areas B2, B3*

## Music

### MUS 1 Basic Music Reading

*(Formerly MUS 4) 3 units/3 hours lecture. Grade only.*

The course is designed for students with little or no music background. Students are introduced to basic music concepts, terminology, and music reading. Classroom and outside activities include reading and written assignments, vocal and piano practice at a beginning level. (CSU/UC)

### MUS 2A Fundamentals of Music Theory

*3 units/3 hours lecture. Grade only. Recommended: Concurrent enrollment in MUS 3A (formerly MUS 1A), MUS 370 (formerly MUS 170) and eligibility for ENGL 100A or equiv. Concurrent private or classroom piano study as recommended.*

First of a four semester sequence required of lower division music majors and minors in most colleges and universities. MUS 2A covers the basic concepts which are common to all composition and improvisation styles in western world; terminology, notation, rhythm, scales, modes, intervals, and chords in both common practice and jazz/pop symbols. (CSU/UC)

*MUS 2A + MUS 3A = CAN MUS 2; MUS 2A + MUS 2B + MUS 3A + MUS 3B = CAN MUS SEQ A*

### MUS 2B Theory of Harmony

*3 units/3 hours lecture. Grade only. Prerequisite: Completion of MUS 2A or equivalent. Recommended: Concurrent enrollment in MUS 3B and concurrent private or classroom piano study; Eligibility for ENGL 100A.*

Diatonic harmony as practiced in the 17th and 18th centuries. Students learn basic 3, 4 and 5 voice part writing from a figured bass, how to write melodic lines, make harmonic choices regarding appropriate chords, arrange basic four-part textures into compositions for piano or solo instrument with piano accompaniment. Includes survey of basic musical styles in the history of western art music regarding harmonic and formal structure. (CSU/UC)

*MUS 2B + MUS 3B = CAN MUS 4; MUS 2A + MUS 2B + MUS 3A + MUS 3B = CAN MUS SEQ A*

### MUS 2C Harmony

*3 units/3 hours lecture. Grade only. Prerequisite: MUS 2B. Corequisite: MUS 3C. Recommended: Eligibility for ENGL 100A or equivalent. MUS 10A & B.*

Diatonic & chromatic harmony including borrowed chords, secondary 7th and chromatically altered chords, modulation, analysis of form. (CSU/UC)

### MUS 2D Harmony

*3 units/3 hours lecture. Grade only. Prerequisite: MUS 2C. Corequisite: MUS 3D. Recommended: Concurrent enrollment in appropriate level of MUS 10BC, 11AB or 44.1 (formerly MUS 19.1); eligibility for ENGL 100A or equivalent.*

Review modulation and figured bass, study of all seventh chords; ninth, eleventh and thirteenth chords; chromatically altered chords; augmented sixth chords; French, Italian and German types; harmonic analysis; study of simple forms.

Harmonize hymns, songs and chorales; compose, using the rules of four-part harmony writing; write cadences and modulations; practice rules of doubling, inverting and voice leading. Prepare and present original compositions for recital audience and basic practices of jazz notation of chords. (CSU/UC)

### MUS 2.1A Counterpoint

*2 units/2 hours lecture. Grade only. Prerequisite: MUS 2B & 3B. Recommended: MUS 2C or D. Concurrent enrollment in appropriate level of MUS 10BC, MUS 11AB or MUS 44.1 (formerly MUS 19.1).*

Introduction to modal and tonal counterpoint through analysis and writing in two, three, and four parts. (CSU/UC)

### MUS 2.1B Counterpoint

*2 units/2 hours lecture. Grade only. Prerequisite: MUS 2.1A. Recommended: MUS 2C or D. Concurrent enrollment in appropriate level of MUS 10BC, 11AB, or 44.1 (formerly MUS 19.1).*

Introduction to modal and tonal counterpoint through analysis and writing in two, three and four parts. (CSU/UC)

### MUS 3A Musicianship

*(Formerly MUS 1A) 2 units/2 hours lecture, 1 hour by arrangement. Grade only. Recommended: Concurrent enrollment in MUS 2A and MUS 370 (formerly MUS 170).*

Basic sight singing and ear training, development of aural discrimination skills in pitch, intervals, rhythm and harmony. Systems of sight singing include solfege, scale numbers and kodaly rhythm syllables. (CSU/UC)

*MUS 2A + MUS 3A = CAN MUS 2; MUS 2A + MUS 2B + MUS 3A + MUS 3B = CAN MUS SEQ A*

### MUS 3B Musicianship

*2 units/2 hours lecture, 1 hour by arrangement. Grade only. Prerequisite: Completion of MUS 3A (formerly MUS 1A). Recommended: Concurrent enrollment in MUS 2B.*

*Concurrent private or classroom piano study.* Continuing development of sight singing, ear training, and aural discrimination skills, including simple and compound intervals, scale and modes patterns, harmonic progressions and rhythm. (CSU/UC)

*MUS 2B + MUS 3B = CAN MUS 4; MUS 2A + MUS 2B + MUS 3A + MUS 3B = CAN MUS SEQ A*

### **MUS 3C Musicianship**

2 units/2 hours lecture, 1 hour by arrangement. Grade only. Prerequisite: MUS 3B & concurrent enrollment in MUS 2C. Recommended: Eligibility for Engl 100A or equivalent. Continuing development of sight-singing, ear training, and aural discrimination skills utilizing the harmonic material of MUS 2C. (CSU/UC)

### **MUS 3D Musicianship**

2 units/2 hours lecture, 1 hour by arrangement. Grade only. Prerequisite: MUS 3C & concurrent enrollment in MUS 2D. Recommended: Eligibility for Engl 100A or equivalent. Continuing development of sight-singing, ear training, and aural discrimination skills, utilizing the harmonic material of MUS 2D. (CSU/UC)

### **MUS 4A Jazz, Rock, and Pop Theory**

3 units/3 hours lecture. Grade only. Recommended: Ability to read music. Basic knowledge of scales and triads. The study of music theory as it pertains to jazz, rock, and popular music; including analysis and construction of chord progressions, analysis of rhythmic elements, transposing for wind instruments, and rhythm section writing. Students complete one arranging project. (CSU/UC)

### **MUS 4B Jazz, Rock, and Pop Theory**

3 units/3 hours lecture. Grade only. Prerequisite: MUS 4A. Continuation of study of Music Theory relative to contemporary musical styles. Emphasis is on four part harmonization of a melodic line and its applications in small and large ensembles. Study also includes accompaniment practices and counterpoint. (CSU/UC)

### **MUS 5A Beginning Jazz Improvisation**

3 units/3 hours lecture. Grade only. Recommended: Ability to play all major scales on a musical instrument. Beginning study of jazz improvisation through the elements of jazz harmony, blues, and characteristic chord progressions. (CSU/UC)  
Music 5A,5B,5C & 5D,5E,5F - 4 times total in any combination.

### **MUS 5B Beginning Jazz Improvisation**

3 units/3 hours lecture. Grade only. Prerequisite: MUS 5A with grade of "C" or better, or equivalent skills. Beginning study of jazz improvisation through the elements of jazz harmony, blues and characteristic chord progressions. (CSU/UC)  
Music 5A,5B,5C & 5D,5E,5F - 4 times total in any combination.

### **MUS 5C Beginning Jazz Improvisation**

3 units/3 hours lecture. Grade only. Prerequisite: MUS 5B with grade of "C" or better, or equivalent skills. Beginning study of jazz improvisation through the elements of jazz harmony, blues, and characteristic chord progressions. (CSU/UC)  
Music 5A,5B,5C & 5D,5E,5F - 4 times total in any combination.

### **MUS 5D Intermediate Jazz Improvisation**

3 units/3 hours lecture. Grade only. Prerequisite: MUS 5A with grade of "C" or better or equivalent. Intermediate study of jazz improvisation through elements of jazz harmony, blues, and characteristic chord progressions. (CSU/UC)  
Music 5A,5B,5C & 5D,5E,5F - 4 times total in any combination.

### **MUS 5E Intermediate Jazz Improvisation**

3 units/3 hours lecture. Grade only. Prerequisite: MUS 5D with grade of "C" or better or equivalent. Intermediate study of jazz improvisation through elements of jazz harmony, blues, and characteristic chord progressions. (CSU/UC)  
Music 5A,5B,5C & 5D,5E,5F - 4 times total in any combination.

### **MUS 5F Intermediate Jazz Improvisation**

3 units/3 hours lecture. Grade only. Prerequisite: MUS 5E with grade of "C" or better or equivalent. Intermediate study of jazz improvisation through elements of jazz harmony, blues, and characteristic chord progressions. (CSU/UC)  
Music 5A,5B,5C & 5D,5E,5F - 4 times total in any combination.

### **MUS 6.1 Music History & Literature**

(Formerly MUS 6A) 3 units/3 hours lecture, 3 hours laboratory. Grade only. Recommended: Completed Engl 100A or equivalent. A history of music in Western civilization from classical Greece to the eighteenth century (1700) Baroque, surveyed through stylistic analysis of scores, listening programs, and appropriate assigned reading. Designed for music majors or others with an interest in the Arts and the Humanities. (CSU/UC)  
AA/AS area E; CSU area C1; IGETC area 3A; CAN MUS 8; MUS 6.1 + MUS 6.2 = CAN MUS SEQ B

### **MUS 6.2 Music History & Literature**

(Formerly MUS 6B) 3 units/3 hours lecture, 3 hours laboratory. Grade only. Recommended: Completion of Engl 100A or equivalent. A history of music in Western civilization from the eighteenth century (1700) to Wagner, through stylistic analysis of scores, listening in and out of class, and appropriate assigned reading. Designed for music majors or others with an interest in the Arts and the Humanities. (CSU/UC)  
AA/AS area E; CSU area C1; IGETC area 3A; CAN MUS 10; MUS 6.1 + MUS 6.2 = CAN MUS SEQ B

### **MUS 6.3 Music History & Literature**

3 units/3 hours lecture, 3 hours by arrangement. Grade only. Recommended: Completed Engl 100A or equivalent. A history of music in Western Civilization from the death of Wagner (1883) to the present, using stylistic analysis of scores, listening in and out of class, and appropriate assigned reading. Designed for music majors and others with an interest in the Arts and the Humanities. (CSU/UC)  
AA/AS area E; CSU area C1; IGETC area 3B

### **MUS 7.1 Introduction to Music Appreciation**

(Formerly MUS 7A) 3 units/3 hours lecture. Grade only. Recommended: Completion of Engl 100A or equivalent. A survey of principles and practices in music as a serious art form. Analysis of the nineteenth century instrumental and vocal repertory as well as some developments of the modern scene. (CSU/UC)  
AA/AS area E; CSU area C1; IGETC area 3A

### **MUS 7.2 Introduction to Music Appreciation**

(Formerly MUS 7B) 3 units/3 hours lecture. Grade only. Recommended: Completion of Engl 100A or equivalent. An introduction to the principle forms and styles in serious music with emphasis on works from the late

Renaissance, Baroque, Viennese Classical period, and important examples from the Post-Romantic repertory. (CSU/UC)  
AA/AS area E; CSU area C1; IGETC area 3A

### **MUS 7.3 Introduction to Music Appreciation**

3 units/3 hours lecture. Grade only. Recommended: Completion of Engl 100A or equivalent. An introduction to the major forms and styles of art music with an emphasis on music of the twentieth century. (CSU/UC)  
AA/AS area E; CSU area C1; IGETC area 3A

### **MUS 8 The Popular Songs of America**

3 units/3 hours lecture. Grade only. Popular songs of America from the Civil War to the present, including Broadway music, Tin Pan Alley, Hollywood, Nashville and Rock. Emphasis placed on aural awareness of the five elements of a song: melody, harmony, rhythm, lyrics and form. (CSU/UC)

### **MUS 9 Jazz Appreciation**

(Formerly MUS 51) 3 units/3 hours lecture. CR/NC option. Lecture survey of past and present jazz styles, performers, and composers. Special attention will be given to improvisation and jazz as a serious art form. (CSU/UC)  
AA/AS area E; CSU area C1; IGETC area 3A

### **MUS 10A Elementary Piano**

1 unit/2 hours lecture, 1 hour laboratory. Grade only. Recommended: MUS 370 (formerly MUS 170). Eligibility for Engl 100A. Develops rudimentary knowledge of music notation and playing skills through a study of technique, sight playing, harmonization, improvisation, and repertoire. Designed for students with little or no background. (CSU/UC)  
Music 10A,10B,10C,10D,11A,&11B - 4 times total in any combination.

### **MUS 10B Elementary Piano**

1 unit/2 hours lecture, 1 hour laboratory. Grade only. Prerequisite: MUS 10A with grade of "C" or better equivalent skill. Recommended: Concurrent enrollment in appropriate level of MUS 2A-D and MUS 3A (formerly MUS 1A) and MUS 3B-D. Also MUS 370 (formerly MUS 170). Continuation of reading fluency, functional skills, technical facility and basic piano literature. (CSU/UC)  
Music 10A,10B,10C,10D,11A,&11B - 4 times total in any combination.

### **MUS 10C Elementary Piano**

1 unit/2 hours lecture, 1 hour laboratory. Grade only. Prerequisite: MUS 10B grade of "C" or better or equivalent skill. Recommended: Concurrent enrollment in appropriate level of MUS 2A-D and MUS 3A (formerly MUS 1A) and MUS 3B-D. Also MUS 370 (formerly MUS 170). Continuation of reading fluency, functional skills, technical facility and basic piano literature. (CSU/UC)  
Music 10A,10B,10C,10D,11A,&11B - 4 times total in any combination.

### **MUS 10D Elementary Piano**

1 unit/2 hours lecture, 1 hour laboratory. Grade only. Prerequisite: MUS 10C with grade of "C" or better or equivalent skill. Recommended: Concurrent enrollment in appropriate level of MUS 2A-D and MUS 3A (formerly MUS 1A) and MUS 3B-D. Also MUS 370 (formerly MUS 170). Continuation of reading fluency, functional skills, technical facility, and basic piano literature. (CSU/UC)  
Music 10A,10B,10C,10D,11A,&11B - 4 times total in any combination.

### **MUS 10AS.1 Elementary Piano for Music Readers**

1 unit/4 hours lecture, 2 hours laboratory for 6 weeks. Grade only. Prerequisite: MUS 1 (formerly MUS 4) or equivalent skill by examination. Recommended: MUS 370 (formerly MUS 170); eligibility for ESL 318 (formerly ENGL 318) or equivalent. Develops rudimentary knowledge of keyboard playing skills sufficient to cope with simple practical situations. (CSU/UC)  
Music 10A,10B,10C,10D,11A,&11B - 4 times total in any combination.

### **MUS 11A Intermediate Piano**

1 unit/3 hours lecture. Grade only. Prerequisite: MUS 10D with grade of "C" or better or equivalent skill as determined by audition. Recommended: Concurrent enrollment in appropriate level of Mus 2A-D and MUS 3A (formerly MUS 1A) and MUS 3B-D. Also MUS 370 (formerly MUS 170), MUS 7.1 (formerly MUS 7A), MUS 7.2 (formerly MUS 7B) or MUS 7.3. Intermediate repertoire beginning with Clementi or Kuhlau sonatinas and samples of keyboard literature from the seventeenth through twentieth centuries. A graded sequence of materials is used for development of technical facility and functional harmony skills. (CSU/UC)  
Music 10A,10B,10C,10D,11A,&11B - 4 times total in any combination.

### **MUS 11B Intermediate Piano**

1 unit/3 hours lecture. Grade only. Prerequisite: MUS 11A with grade of "C" or better or equivalent skill. Recommended: Concurrent enrollment in appropriate level of MUS 2A-D and MUS 3A (formerly MUS 1A) and MUS 3B-D. Also MUS 370 (formerly MUS 170), MUS 7.1 (formerly MUS 7A), MUS 7.2 (formerly MUS 7B), and MUS 7.3. Intermediate repertoire beginning with Clementi or Kuhlau sonatinas and samples of keyboard literature from the seventeenth through twentieth centuries. A graded sequence of materials is used for development of technical facility & functional harmony skills. (CSU/UC)  
Music 10A,10B,10C,10D,11A,&11B - 4 times total in any combination.

### **MUS 13A Jazz/Pop Keyboard**

1 unit/3 hours laboratory. CR/NC option. Prerequisite: MUS 10B or equivalent. Recommended: Major scales in 13 keys (including F-Sharp Major and G-Flat Major). Basic chords, voicings, progressions, cadences, and rhythm patterns used in pop/jazz keyboard styles. Jazz chord symbols (no figured bass) are utilized with emphasis on simple improvisation and reading lead sheets and "fake books". (CSU/UC)  
May be taken for a total of 4 units.

### **MUS 13B Jazz/Pop Keyboard**

1 unit/3 hours laboratory. CR/NC option. Prerequisite: MUS 13A or equivalent. Recommended: Major scales in all keys. A continuation of Music 13A with more expected in

the areas of basic chords, progressions, cadences and rhythm patterns used in pop/jazz keyboard styles. Jazz chord symbols (not figured bass) are used for improvisation and reading lead sheets and "fake books." (CSU/UC)  
May be taken for a total of 4 units.

### **MUS 13C Jazz/Pop Keyboard**

1 unit/3 hours laboratory. CR/NC option. Prerequisite: MUS 13B or equivalent. Recommended: Major, minor, "blues," and pentatonic scales in all keys. A continuation of Music 13B with more difficult use of basic chords, progressions, cadences, and rhythm patterns used in pop/jazz styles. More difficult jazz chord symbols (not figured bass) are used for improvisation, reading lead sheets and fake books. All at a more difficult level. (CSU/UC)  
May be taken for a total of 4 units.

### **MUS 13D Jazz/Pop Keyboard**

1 unit/3 hours laboratory. CR/NC option. Prerequisite: Recommended MUS 13C or equivalent. Recommended: Major, minor, "blues", and pentatonic scales in all keys. Concluding course in the 13 series. Highest level of difficulty with regard to compositions, chords, voicings, progressions, cadences, and rhythm patterns used in pop/jazz keyboard styles. More difficult jazz chord symbols (not figured bass) are utilized with emphasis on more demanding improvisation, lead sheets, and "fake books." (CSU/UC)  
May be taken for a total of 4 units.

### **MUS 14A Elementary Organ**

1 unit/2 hours laboratory. Grade only. Basic techniques of organ playing using a standard pipe organ. Emphasizes standard organ literature, hymns and church service playing. Music 14C and 14D emphasizes performance of classical organ literature. (CSU/UC)

### **MUS 14B Elementary Organ**

1 unit/2 hours laboratory. Grade only. Prerequisite: MUS 14A. Basic techniques of organ playing using a standard pipe organ. Emphasizes standard organ literature, hymns and church service playing. Music 14C and 14D emphasize performance of classical organ literature. (CSU/UC)

### **MUS 14C Elementary Organ**

1 unit/2 hours laboratory. Grade only. Prerequisite: Music 14B. Basic techniques of organ playing, using a standard pipe organ. Emphasizes standard organ literature, hymns, and church service playing. Music 14C and 14D emphasize performance of classical organ literature. (CSU/UC)

### **MUS 14D Elementary Organ**

1 unit/2 hours laboratory. Grade only. Prerequisite: MUS 14C. Basic techniques of organ playing using a standard pipe organ. Emphasizes performance of classical organ literature, hymns and church service playing. Music 14C and 14D emphasize performance of classical organ literature. (CSU/UC)

### **MUS 15A Recorder - Beginning Soprano, Alto, and Tenor**

1 unit/3 hours laboratory. Grade only. Ability to read music not required for Music 15A. For Music 15B, C, D, ability to read music required. Emphasis on learning to read music, learning recorder technique and playing of ensemble repertoire from medieval Renaissance, Baroque, Modern. (CSU/UC)  
May be taken for a total of 4 units in any combination.

### **MUS 15B Recorder - Beginning Soprano, Alto, and Tenor**

1 unit/3 hours laboratory. Grade only. Prerequisite: MUS 15A with grade of "C" or better, or by audition. Corequisite: " For Music 15A, ability to read music not required. For Music 15B C D ability to read music required. Emphasis on learning to read music, learning recorder technique and playing of ensemble repertoire from medieval Renaissance, Baroque, Modern. (CSU/UC)  
May be taken for a total of 4 units in any combination.

### **MUS 15C Recorder - Intermediate Soprano, Alto and Tenor**

1 unit/3 hours laboratory. Grade only. Prerequisite: MUS 15B with grade of "C" or better, or by audition. Ability to read music required. Emphasis on improving reading skills, learning recorder technique and playing of ensemble repertoire from medieval Renaissance, Baroque, Modern. (CSU/UC)  
May be taken for a total of 4 units in any combination.

### **MUS 15D Recorder - Intermediate Soprano, Alto, and Tenor**

1 unit/3 hours laboratory. Grade only. Prerequisite: MUS 15C with grade of "C" or better, or by audition. Ability to read music required. Emphasis on improving reading skills, learning recorder technique, and playing of ensemble repertoire from medieval Renaissance, Baroque, Modern. (CSU/UC)  
May be taken for a total of 4 units in any combination.

### **MUS 16 Band & Orchestra Instruments**

1 unit/2 hours laboratory. Grade only. Individual and group instruction on band and orchestra instruments. (CSU/UC)

### **MUS 17A Elementary Voice**

1 unit/2 hours lecture. Grade only. Recommended: Singing experience in a choir. Theory and practice of singing. Individual voice development. Level I. (CSU/UC)  
May be taken for a total of 4 units in any combination.

### **MUS 17B Intermediate Voice**

1 unit/2 hours lecture. Grade only. Prerequisite: MUS 17A or Level I voice, or equivalent as determined by audition. Recommended: Sight-singing and ear training skills. Theory and practice of singing. Individual voice development. Level II. (CSU/UC)  
May be taken for a total of 4 units in any combination.

### **MUS 18.1 Singers' Repertoire**

*1 unit/2 hours lecture. Grade only. Prerequisite: MUS 17A or equivalent. Corequisite: Concurrent enrollment in MUS 17B and a college choir. Recommended: MUS 3A (formerly MUS 1A).*

The art song: French, German, Italian, and English and their literal translations, pronunciation and interpretation. (CSU/UC)

### **MUS 18.2 Singers' Repertoire**

*1 unit/2 hours lecture. Grade only. Prerequisite: MUS 17A or equivalent. Corequisite: Concurrent enrollment in MUS 17B and a college choir. Recommended: MUS 3A.*

The art song: French, German, Italian, and English and their literal translations, pronunciation and interpretation. (CSU/UC)

### **MUS 18.3 Singers' Repertoire**

*1 unit/2 hours lecture. Grade only. Prerequisite: MUS 17A or equivalent. Corequisite: Concurrent enrollment in MUS 17B and a college choir. Recommended: MUS 3A (formerly MUS 1A).*

The art song: French, German, Italian, and English and their literal translations, pronunciation and interpretation. (CSU/UC)

### **MUS 18.4 Singers' Repertoire**

*1 unit/2 hours lecture. Grade only. Prerequisite: MUS 17A or equivalent. Corequisite: Concurrent enrollment in MUS 17B and a college choir. Recommended: MUS 3A (formerly MUS 1A).*

The art song: French, German, Italian, and English and their literal translations, pronunciation and interpretation. (CSU/UC)

### **MUS 19A Beginning Guitar**

*1 unit/3 hours laboratory. CR/NC option. Recommended: Student should have own acoustic guitar.*  
Designed to teach beginners guitar skills through the use of exercises, songs, solo pieces, lecture-demonstration and recordings. Student must provide own instrument. (CSU/UC)  
*May be taken for a total of 2 units in any combination.*

### **MUS 19B Intermediate Guitar**

*1 unit/3 hours laboratory. CR/NC option. Recommended: MUS 19A or equivalent.*  
Further develops chord knowledge, melody reading, accompaniment styles, finger picking and singing through the use of folk, country, and pop songs. Solo and ensemble playing. (CSU/UC)  
*May be taken for a total of 2 units in any combination.*

### **MUS 19.1A Classical Guitar**

*1 unit/3 hours laboratory. CR/NC option. Recommended: Student should have own acoustic guitar.*  
Teaching beginners and guitarists of other styles fundamental classic guitar techniques. Ability to read music in the first position, melodic and harmonic functions through solo pieces, duets, and ensemble playing. (CSU/UC)  
*May be taken for a total of 2 units in any combination.*

### **MUS 19.1B Classical Guitar**

*1 unit/3 hours laboratory. CR/NC option. Prerequisite: MUS 19.1A or qualified performer. Corequisite: Theory suggested. Recommended: Student should have own acoustic guitar.*  
Students continue to develop hand technique and reading skills to the 5th fret, through exercises,

studies, solos, duets, and ensemble playing. Students start to explore literature from different periods, Renaissance to popular. (CSU/UC)  
*May be taken for a total of 2 units in any combination.*

### **MUS 20 Varsity Choir**

*1 unit/3 hours lecture. Grade only.*  
Beginning choir with emphasis on the development of blend, intonation, music reading and performance. (CSU/UC)  
*May be taken for a total of 4 units.*

### **MUS 21 Concert Choir**

*1 unit/3 hours lecture. Grade only. Prerequisite: Audition.*  
Study and performance of representative accompanied and unaccompanied works for a mixed choir. Choir tours annually. (CSU/UC)  
*May be taken for a total of 4 units.*

### **MUS 22 Santa Rosa Symphonic Chorus**

*1 unit/3 hours lecture. CR/NC option. Prerequisite: Audition.*  
Rehearsal and public performance of such choral music as Messiah (Handel), Elijah (Mendelssohn), Creation (Haydn), Christmas Oratorio (Bach), King David (Honegger), Requiem (Brahms). (CSU/UC)  
*May be taken for a total of 4 units.*

### **MUS 23 Northern California Chamber Chorale**

*1 unit/3 hours lecture. CR/NC option. Prerequisite: Audition.*  
Reading and rehearsal of choral chamber music, primarily from the American choral heritage of both secular and religious background. Chorus performs and tours regularly. (CSU/UC)  
*May be taken for a total of 4 units.*

### **MUS 25.1 Chamber Singers Ensemble**

*1 unit/3 hours lecture. Grade only. Prerequisite: Audition. Recommended: Previous choral experience.*  
Study and performance of choral works designed for the small vocal ensemble. Ensemble performs regularly and tours annually. (CSU/UC)  
*May be taken for a total of 4 units.*

### **MUS 25.2 Harmony Corporation Ensemble**

*1 unit/3 hours lecture. Grade only. Prerequisite: Audition.*  
Vocal ensemble which specializes in the performance of close harmony choral music such as jazz, swing, pop, and barbershop harmony. The ensemble sings with and without accompaniment depending on the style of music and occasion. Importance is placed on singing without a conductor, memorization, stage deportment, vocal improvisation and "backing up" soloist. Group performs frequently in public. (CSU/UC)  
*May be taken for a total of 4 units.*

### **MUS 25.3 Mixed Vocal Ensemble**

*1 unit/3 hours laboratory. Grade only. Prerequisite: Audition. Recommended: MUS 370 (formerly MUS 170) or MUS 3A (formerly MUS 1A) and MUS 10A. Previous choral experience.*  
Ensemble studies and performs works from antiquity to present style periods. (CSU/UC)  
*May be taken for a total of 4 units.*

### **MUS 25.4 Jazz Vocal Ensemble**

*1 unit/3 hours laboratory. Grade only. Prerequisite: Qualified performer. MUS 21 taken concurrently. Recommended: School, college, or church choral experience.*  
Acquisition and development of techniques and skills appropriate to the style. Ensemble may utilize certain instruments appropriate to the style. (CSU/UC)  
*May be taken for a total of 4 units.*

### **MUS 25.5 Vocal Ensemble**

*1 unit/2 hours lecture. Grade only. Prerequisite: Qualified performer. MUS 20, 21, 22, or 23 to be taken concurrently. Recommended: School and/or church choir experience.*  
Ensemble devoted to study and performance of music for like voices, as treble ensemble, etc. Music of all styles and periods may be utilized. (CSU/UC)  
*May be taken for a total of 4 units.*

### **MUS 26 Redwood Chordsmen Male Chorus**

*1 unit/3 hours lecture. CR/NC option. Prerequisite: Qualified performer. Recommended: Some choral experience: church choir, school chorus, ensemble singing.*  
Male chorus which sings mainly Barbershop Harmony. Emphasis placed on blending, tuning, memorization, choreography, and choral discipline. Frequent public performances. (CSU/UC)  
*May be taken for a total of 4 units.*

### **MUS 27 Women's Chorus**

*1 unit/3 hours lecture. CR/NC only. Prerequisite: Audition. Recommended: Some choral experience: school, church, and/or community choral groups, recommended.*  
Music 27 is a treble voice ensemble which performs choral music written for SA (soprano-alto), SSA and SSAA. The group performs frequently and thus requires memorization and retention skills. Various styles of music are used during the semester/year, including folk, popular, sacred and art music. Areas of choral emphasis are: blend, balance, music reading, intonation, expansion of voice range and power, choral discipline and memorization. Other related areas include vocal posture, proper voice warm-ups, attentive rehearsal habits, singing with or without a conductor and punctual and regular attendance. Special concert attire is required. (CSU/UC)  
*May be taken for a total of 4 units.*

### **MUS 30 Symphonic Band**

*1-2 units/up to 5 hours lecture. Grade only. Prerequisite: Audition.*  
Non-marching organization devoted to the study of symphonic band literature. Solo opportunities for advanced students. Band performs regularly. (CSU/UC)  
*May be taken for a total of 8 units.*

### **MUS 31 Redwood Empire Wind Ensemble**

*1 unit/3 hours lecture. Grade only. Prerequisite: Audition. Recommended: College level of performance on a wind or percussion instrument.*  
Explores the concert band's repertory with emphasis on sight reading and an occasional public performance. (CSU/UC)  
*May be taken for a total of 4 units.*

### **MUS 32 Jazz Band**

1-2 units/up to 5 hours lecture. Grade only. Prerequisite: Audition. Recommended: Concurrent enrollment in MUS 30. Study and performance of Jazz Band literature and techniques. The band performs regularly. (CSU/UC) May be taken for a total of 8 units.

### **MUS 33 Orchestra**

1 unit/3 hours lecture. CR/NC option. Prerequisite: Audition. Recommended: Proficiency on an orchestral instrument and some orchestral experience. Study, rehearsal, and performance of orchestral literature. The orchestra performs at least two concerts each year. (CSU/UC) May be taken for a total of 4 units.

### **MUS 34 Baroque Sinfonia**

1 unit/3 hours lecture. CR/NC option. Prerequisite: Audition. Recommended: Some orchestral experience. The study, rehearsal, and performance of chamber and full orchestra literature from Bach to Bernstein, including outstanding vocal and instrumental soloists. Performs at least four pairs of concerts each school year. (CSU/UC) May be taken for a total of 4 units.

### **MUS 35.1 Brass Ensemble**

1 unit/3 hours laboratory. Grade only. Prerequisite: Audition. Recommended: Concurrent enrollment in MUS 30. Study and performance of literature for various brass ensembles. (CSU/UC) May be taken for a total of 4 units.

### **MUS 35.2 Percussion Ensemble**

1 unit/3 hours laboratory. Grade only. Prerequisite: Qualified performer. Study and performance of literature for various percussion ensembles. (CSU/UC) May be taken for a total of 4 units.

### **MUS 35.3 Woodwind Ensemble**

1 unit/3 hours laboratory. Grade only. Prerequisite: Audition. Recommended: Concurrent enrollment in MUS 30. Study and performance of literature for various woodwind ensembles. (CSU/UC) May be taken for a total of 4 units.

### **MUS 35.4 Flute Ensemble**

1 unit/3 hours laboratory. Grade only. Prerequisite: Audition. Recommended: One year of flute instruction. Study and performance of literature for flute ensembles. (CSU/UC) May be taken for a total of 4 units.

### **MUS 35.5 String Ensemble (Chamber Music)**

1 unit/3 hours laboratory. Grade only. Prerequisite: Audition. Recommended: Some instrumental experience in school or community group. Development of the art and technique of ensemble playing. (CSU/UC) May be taken for a total of 4 units.

### **MUS 35.6 Strings & Keyboard Ensemble**

1 unit/3 hours laboratory. Grade only. Prerequisite: Audition. Recommended: MUS 10D with a grade of "C" or better or equivalent keyboard or string skills. Study and performance of literature for piano and strings, organ and strings, depending upon the instrumentation. (CSU/UC) May be taken for a total of 4 units.

### **MUS 35.7 Chamber Music Ensemble**

1 unit/3 hours laboratory. Grade only. Prerequisite: Audition. Recommended: MUS 10D with a grade of "C" or better or equivalent keyboard or instrumental skills. Any combination of instruments which may be found in the extant music literature may be formed depending on the instrumentation. Various instruments usually combine with keyboard, but not always. (CSU/UC) May be taken for a total of 4 units.

### **MUS 35.8 Recorder Ensemble**

1 unit/3 hours laboratory. Grade only. Prerequisite: Audition. Rehearses and performs literature for the recorder consort. (CSU/UC) May be taken for a total of 4 units.

### **MUS 35.9 Jazz Combo Ensemble**

1 unit/3 hours laboratory. Grade only. Prerequisite: Audition. Recommended: MUS 5A. Study and performance of standard jazz combo tunes. Emphasis on trios, quartets, and quintets combining wind instruments and rhythm sections. (CSU/UC) May be taken for a total of 4 units.

### **MUS 35.10 Piano Ensemble**

(Formerly MUS 37.2) 0.5-1 unit/up to 3 hours laboratory, 1 hour by arrangement. Grade only. Prerequisite: Audition. Recommended: MUS 2.C, MUS 2.D, MUS 3.C and MUS 3D or equiv. Also recommended MUS 6.2 (formerly MUS 6B), MUS 7.1 (formerly MUS 7A), MUS 7.2 (MUS 7B) and/or MUS 7.3. Study and performance of duet and multi-piano literature. Emphasis on ensemble techniques, sight playing, and performance. (CSU/UC) May be taken for a total of 4 units.

### **MUS 36 Woodwind Choir**

1-3 units/up to 9 hours laboratory. Grade only. Prerequisite: Audition. Rehearsal and study of original compositions and transcriptions for woodwind choir. Emphasis on study and performance of original woodwind choir literature. (CSU/UC) May be taken for a total of 12 units within 4 semesters.

### **MUS 37 Piano Performance & Literature**

2 units/2 hours lecture, 2 hours by arrangement. Grade only. Prerequisite: Audition. Recommended: Concurrent enrollment in appropriate level of MUS 2C, MUS 2D and MUS 3C & MUS 3D. Also recommended: MUS 6.2 (formerly MUS 6B) and/or MUS 7.1 (formerly MUS 7A), MUS 7.2 (formerly MUS 7B) and MUS 7.3. Preparation for a recital; survey of piano literature. (CSU/UC) May be taken for a total of 4 times.

### **MUS 38 Synthesizer and Computer in Music**

3 units/3 hours lecture. CR/NC option. Introduction to electronic music utilizing synthesizer, computer, sampler, and M.I.D.I. (musical instrument digital interface) technology. Compositional, technical, and performance skills are developed using lecture, demonstration, and lab work with electronic equipment. (CSU/UC) May be taken for a total of 12 units within 4 semesters.

### **MUS 41 Functional Keyboard Skills**

1 unit/2 hours laboratory, 2 hours by arrangement. Grade only. Prerequisite: MUS 10B or equivalent piano proficiency. Basic chords, cadences and progressions played at the piano. Study of both pop/jazz and traditional chord symbols. Designed to parallel theory musicianship. (CSU/UC)

### **MUS 43 Summer Jazz Workshop**

2 units/5 hours lecture for 6 weeks. Grade only. Prerequisite: Audition. Recommended: Ability to read music; ability to play all major scales. Develops the essential skills for jazz performance: interpretation, improvisation, sight reading, knowledge of fundamental theory. (CSU/UC) May be taken for a total of 8 units.

### **MUS 44.1 Applied Music/Keyboard**

(Formerly MUS 19.1) 1 unit/1 hour by arrangement. Grade only. Prerequisite: Student must be studying privately with an approved teacher. Recital period for students studying privately; each student may perform once or twice during semester. (CSU/UC) May be taken for a total of 4 units in any combination.

### **MUS 44.2 Applied Music/Voice**

(Formerly MUS 19.2) 1 unit/1 hour by arrangement. Grade only. Prerequisite: Student must be studying privately with an approved teacher. Recital period for students studying privately; each student may perform once or twice during semester. (CSU/UC) May be taken for a total of 4 units in any combination.

### **MUS 44.3 Applied Music/String**

(Formerly MUS 19.3) 1 unit/1 hour by arrangement. Grade only. Prerequisite: Student must be studying privately with an approved teacher. Recital period for students studying privately; each student may perform once or twice during semester. (CSU/UC) May be taken for a total of 4 units in any combination.

### **MUS 44.4 Applied Music/Woodwind**

(Formerly MUS 19.4) 1 unit/1 hour by arrangement. Grade only. Prerequisite: Student must be studying privately with an approved teacher. Recital period for students studying privately; each student may perform once or twice during semester. (CSU/UC) May be taken for a total of 4 units in any combination.

### **MUS 44.5 Applied Music/Brass**

(Formerly MUS 19.5) 1 unit/1 hour by arrangement. Grade only. Prerequisite: Student must be studying privately with an approved teacher. Recital period for students studying privately; each student may perform once or twice during semester. (CSU/UC) May be taken for a total of 4 units in any combination.

### **MUS 44.6 Applied Music/Percussion**

(Formerly MUS 19.6) 1 unit/1 hour by arrangement. Grade only. Prerequisite: Student must be studying privately with an approved teacher. Recital period for students studying privately; each student may perform once or twice during semester. (CSU/UC) May be taken for a total of 4 units in any combination.



### **MUS 45 Vocal Ensemble Techniques**

*1-3 units/up to 3 hours laboratory. CR/NC option.*

*Prerequisite: Completion of at least one semester in vocal groups: MUS 20 or MUS 21 or MUS 22 or MUS 23 or MUS 25.3 or MUS 26; audition. Corequisite: Participation in a designated choral ensemble as assigned by the instructor. Recommended: Previous choral experience, in school, church, or community.*

Enables vocalists to gain additional experience in choral related fields, utilizing projects and studies supervised by an ensemble instructor. Each project is relevant to one of the above courses. Content varies each semester and the student can re-enroll without repeating subject matter. Participation in the designated ensemble is required. Project development and evaluation is by DHR arrangement. (CSU/UC)  
*May be taken for a total of 12 units within 4 semesters.*

### **MUS 46 Instrumental Ensemble Techniques**

*1-3 units/up to 9 hours laboratory. CR/NC option.*

*Prerequisite: Completion of at least one semester in instrumental ensembles: MUS 30, 31, 32, 33, 34, 35.1, 35.9, 37.1 or 35.10 (formerly 37.2); or department chair approval; audition.*

Enables instrumental ensemble student to learn the technical facets involved in ensemble organization. Presents a series of projects under the direction of an ensemble instructor, each relevant to one of the above courses. (CSU/UC)

*May be taken for a total of 12 units within 4 semesters.*

### **MUS 48 Rehearsal & Performance**

*1-3 units/up to 9 hours laboratory. Grade only. Prerequisite: Audition; qualified performer. Recommended: MUS 17A or 17B.*

Vocalist's and instrumentalist's preparation and performance of music and musical plays for public performance. (CSU/UC)

*May be taken for a total of 12 units within 4 semesters.*

### **MUS 48.1 Study and Performance of Vocal and Instrumental Compositions**

*1-2 units/up to 3 hours lecture. Grade only. Prerequisite: Completion of MUS 21; OR completion of MUS 22; OR completion of MUS 25.1; OR completion of MUS 25.2; OR completion of MUS 30; OR completion of MUS 31; OR completion of MUS 32; OR completion of MUS 33; OR completion of MUS 34; OR completion of MUS 35.9; OR completion of MUS 37; OR completion of MUS 17A; OR completion of MUS 17B.*

Vocalist's and instrumentalist's preparation and performance of music for public performance. (CSU/UC)

*May be taken for a total of 8 units within 4 semesters.*

### **MUS 48.2 Study and Performance of Vocal and Instrumental Compositions**

*1-3 units/up to 3 hours laboratory, 9 hours by arrangement. Grade only. Prerequisite: Completion of MUS 19.1A; OR completion of MUS 19.1B; OR completion of MUS 35.1; OR completion of MUS 35.3; OR completion of MUS 35.5; OR completion of MUS 35.6; OR completion of MUS 35.7; OR completion of MUS 317A.*

Vocalist's and instrumentalist's preparation and performance of music for public performance. (CSU/UC)

*May be taken for a total of 12 units within 4 semesters.*

### **MUS 48.3 Study and Performance of Keyboard Compositions**

*1-2 units/up to 2 hours lecture, 1 hour laboratory. Grade only. Prerequisite: Completion of MUS 11B; OR completion of MUS 11A; OR completion of MUS 10C; OR completion of MUS 10D.*

Keyboard study, preparation, and performance of music for public performance. (CSU/UC)

*May be taken for a total of 8 units within 4 semesters.*

### **MUS 49 Special Studies in Music**

*1-3 units/up to 9 hours by arrangement. Grade only.*

Seminars or individual conferences by arrangement to provide for independent study and enriched academic experience. (CSU/UC)

*Independent study including 49 and 98 courses - 6 unit total.*

### **MUS 50 Careers in Music**

*1 unit/1 hour lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent.*

Survey of musical careers and related vocations with emphasis on the creative, business, and performance aspects of professional music and its support professions. Includes recording, rehearsal, staging, and performance techniques and also guest lecturers and field trips. (CSU)

### **MUS 52A The Performance of Popular Song**

*1 unit/2 hours laboratory. Grade only. Prerequisite: One semester of MUS 17A or 17B. Recommended: MUS 3A (formerly MUS 1A) and MUS 10A.*

Solo performance and study of the best in American popular songs with skilled pianist and microphone. Emphasis on artistic interpretation, stage presence, song repertory which includes jazz, swing, rock, folk, country-western, Broadway and gospel songs. Proper singing techniques are stressed. (CSU)

### **MUS 52B The Performance of Popular Song**

*1 unit/2 hours laboratory. Grade only. Prerequisite: One semester of MUS 17A or 17B. Recommended: MUS 3A (formerly MUS 1A) and MUS 10A.*

Solo performance and study of the best in American popular songs with skilled pianist and microphone. Emphasis on artistic interpretation, stage presence, song repertory which includes jazz, swing, rock, folk, country-western, Broadway and gospel songs. Proper singing techniques are stressed. (CSU)

### **MUS 52C Performance of Popular Song**

*1 unit/2 hours laboratory. Grade only. Prerequisite: One semester of MUS 17A or 17B. Recommended: MUS 3A (formerly MUS 1A) and MUS 10A.*

Solo performance and study of the best in American popular songs with skilled pianist and microphone. Emphasis on artistic interpretation, stage presence, song repertory which includes jazz, swing, rock, folk, country-western, Broadway and gospel songs. Proper singing techniques are stressed. (CSU)

### **MUS 52D Performance of Popular Song**

*1 unit/2 hours laboratory. Grade only. Prerequisite: One semester of MUS 17A or 17B. Recommended: MUS 3A (formerly MUS 1A) and MUS 10A.*

Solo performance and study of the best in American popular songs with skilled pianist and microphone. Emphasis on artistic interpretation, stage presence,

song repertory which includes jazz, swing, rock, folk, country-western, Broadway and gospel songs. Proper singing techniques are stressed. (CSU)

### **MUS 53 Commercial Repertoire for the Professional Musician**

*3 units/3 hours lecture. Grade only. Prerequisite: Audition. Recommended: Ability to read music and to perform competently on a musical instrument.*

Study and performance of compositions that are essential to the repertoire of the professional instrumentalist. (CSU)

### **MUS 55 Songwriting**

*1-3 units/up to 3 hours lecture. CR/NC option. Prerequisite: Eligibility for Engl 100A or equivalent. Recommended: MUS 2A and MUS 3A (formerly MUS 1A).*

Amateur and semi-professional songwriters present their songs for evaluation and refinement. Musical structure and form are emphasized along with copyright and publishing information. The five elements of songs (melody, harmony, rhythm, form, and lyrics) are studied. (CSU)

*May be taken for a total of 6 units.*

### **MUS 56 Music Notation and Copying**

*1 unit/0.5 hour lecture, 1.5 hours laboratory. Grade only. Prerequisite: MUS 1 (formerly MUS 4) or equivalent.*

*Eligibility for Engl 100A or equivalent. Recommended: A knowledge of basic music fundamentals.*

Students learn to transcribe music to paper in a legible, correct and understandable form. (CSU)

*May be taken for a total of 2 units.*

### **MUS 60A Recording Techniques & Equipment**

*2 units/2 hours lecture. Grade only. Recommended: Elec 50A completed or in progress.*

Fundamentals of recording for musicians; microphone placement, usage; understanding the eight-track system, basic mixing, acoustics in recording, playback systems, speakers and connections. Field trip to a recording studio is included. (CSU)

### **MUS 60B Recording Techniques & Equipment**

*2 units/2 hours lecture. Grade only. Prerequisite: MUS 60A. Recommended: A performing ensemble.*

Continuation of Music 60A with emphasis on four- and eight-track recording procedures and the role of the director, producer and technician in the recording studio. (CSU)

### **MUS 60L Recording Techniques Lab**

*1 unit/2 hours laboratory, 1 hour by arrangement. Grade only. Prerequisite: Concurrent enrollment in or completion of MUS 60A or 60B. Recommended: A performing ensemble.*

Laboratory experience in use of modern recording equipment. Practical applications including the recording of rehearsals and performances and an independent recording project. (CSU)

*May be taken for a total of 4 units.*

### **MUS 317A Fundamentals of Singing**

*1 unit/2 hours lecture. CR/NC option. Recommended: Ability to read music advised, but not required.*

A course to accommodate the vocal needs of the non-music major. Strong emphasis on gaining confidence through experience and group support, while learning basic vocal techniques (i.e. breathing, tone, diction, interpretation, stage presence). Introduces basic theory concepts and criteria for evaluating vocal performance.

*May be taken for a total of 4 units in any combination.*

### **MUS 370 Tap Master Rhythmic Sight Reading**

*(Formerly MUS 170) 0.5-1 unit/up to 3 hours laboratory. CR/NC only. Corequisite: Concurrent enrollment in at least one other music course.*

Tap is a programmed learning sequence for the development of rhythmic sight reading. Rhythmic patterns of increasing complexity are utilized in actual musical context. Each student works at his or her own pace through the sequence.

*May be taken for a total of 4 units within 4 semesters.*

## **Natural Resources**

### **NRM 10 Conservation of Forest & Wildland Resources**

*(Formerly FOR 10) 3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*

An introductory course in the management principles and techniques of forests and other wildland resources as related to the needs of society for wood, water, forage, recreation and wilderness. Emphasis on general principles and contemporary issues affecting the management of the nation's renewable natural resources. (CSU/UC)

*AA/AS area C; CSU area B2*

### **NRM 50 Wildland Resource Management**

*(Formerly FOR 50) 3 units/3 hours lecture, 0.5 hour by arrangement. Grade only. Recommended: Eligibility for Engl 100A or equivalent.*

An introduction to the integrated management of trees, soils, water and wildlife resources for the production of wood and fiber products. The emphasis will be on the sustainability of wildland resources. (CSU)

### **NRM 51 Wildland Trees and Shrubs**

*(Formerly FOR 51) 3 units/3 hours lecture, 2 hours laboratory. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*

A study of the taxonomy, physiology and identification of the natural vegetation of the United States with particular emphasis on western species. (CSU)

*AA/AS area C; CSU areas B2, B3*

### **NRM 52 Park and Woodland Surveying**

*(Formerly FOR 52) 3 units/2 hours lecture, 3 hours laboratory. Grade only. Recommended: Eligibility for Engl 100A or equivalent & Ag 78.*

Measurement of distance, direction and elevation using basic surveying equipment, including the

abney, clinometer, compass, engineer's tape and level rod. The interpretation and use of topographic maps for wildland navigation. (CSU)

### **NRM 53 Forest Engineering and Mapping**

*(Formerly FOR 53) 3 units/2 hours lecture, 3 hours laboratory. Grade only. Prerequisite: NRM 52 (formerly FOR 52). Recommended: Eligibility for Engl 100A or equivalent and Ag 78.*

The construction of maps from field survey notes. The use of the field transit in surveying and locating forest roads. (CSU)

### **NRM 60 Introduction to Outdoor Recreation**

*(Formerly FOR 60) 3 units/3 hours lecture. Grade only.*

*Recommended: Eligibility for Engl 100A or equivalent.* A study of the historical development, policies, and federal, state and local agencies involved in outdoor recreation in the United States. An analysis of the social and economic factors affecting participation in outdoor recreation activities. (CSU)

*CAN REC 6*

### **NRM 61 Outdoor Recreation Management**

*(Formerly FOR 61) 3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent.*

Management and planning of private and public outdoor recreational area. A general overview of ecological use of wildlands and planning of recreational areas. (CSU)

### **NRM 62 Camping**

*(Formerly FOR 62) 3 units/3 hours lecture, 2 hours by arrangement. CR/NC option. Prerequisite: Physical ability to walk five miles with a 25 pound pack. Recommended: Eligibility for Engl 100A or equivalent.*

Requires physical ability to walk five miles with a 25 pound pack. Skills and procedures for low impact camping in public recreation areas with family or other groups; from recreational vehicle to backpacking. (CSU)

### **NRM 63 Park Interpretation**

*(Formerly FOR 63) 3 units/2 hours lecture, 3 hours laboratory. Grade only. Recommended: Eligibility for Engl 100A or equivalent.*

Principles and applied techniques used to explain natural and cultural resources to the park and museum visitor. (CSU)

### **NRM 64 Park Practices**

*(Formerly FOR 64) 4 units/2 hours lecture, 6 hours laboratory. Grade only. Recommended: Eligibility for Engl 100A or equivalent.*

Applied park practices relating to the operations of campgroups and other types of recreational facilities. Internship within a park organization. (CSU)

### **NRM 65 Recreation Facility Maintenance**

*(Formerly FOR 65) 3 units/2 hours lecture, 3 hours laboratory. Grade only. Recommended: Eligibility for Engl 100A or equivalent.*

The principles, practices of park maintenance and management skills for recreational facilities. (CSU)  
*May be taken for a total of 3 units.*

### **NRM 66 Wilderness Skills**

*(Formerly FOR 66) 3 units/3 hours lecture, 2 hours laboratory. Grade only. Recommended: Eligibility for Engl 100A or equivalent.*

Advanced principles and techniques of wilderness camping survival and leadership. Emphasis on skills required for safe supervision of groups in wilderness living. (CSU)

### **NRM 70 Forest Practices**

*(Formerly FOR 70) 4 units/2 hours lecture, 6 hours laboratory. Grade only. Recommended: Eligibility for Engl 100A or equivalent.*

Applied forestry as related to forest stand improvement, harvest methods, fire control, manufacturing and management of forest wood lots. (CSU)

### **NRM 71 Forest Harvesting**

*(Formerly FOR 71) 3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent.*

Forest harvesting operations. Equipment requirements, rules, regulations and practices currently in use in the Pacific Northwest. Environmental and economic factors affecting harvesting operations. (CSU)

### **NRM 72 Forest Fire Control & Its Use**

*(Formerly FOR 72) 3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*

Not open to students who have completed FIRE 66, Wildland Fire Control. How fire can be used in forestry. (CSU)

### **NRM 73 Natural Resource Measurements**

*(Formerly FOR 73) 3 units/2 hours lecture, 3 hours laboratory. Grade only. Recommended: Eligibility for Engl 100A or equivalent.*

An introduction to the mathematics, sampling methods, and measurement techniques involved in inventorying the renewable natural resources. Emphasis will be on the forest resources. (CSU)

### **NRM 74 Lumber Grading & Wood Technology**

*(Formerly FOR 74) 3 units/2 hours lecture, 3 hours laboratory. Grade only. Recommended: Eligibility for Engl 100A or equivalent.*

Basic structures of wood. Identification, utilization of lumber and its grade requirement. (CSU)

### **NRM 75 Supervision in Forestry**

*(Formerly FOR 75) 2 units/2 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent.*

Responsibility of the supervisor in labor, legal and personnel problems as related to forest industries. (CSU)

### **NRM 76 Use of Aerial Photos in Forestry**

*(Formerly FOR 76) 3 units/2 hours lecture, 3 hours laboratory. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*

Use of aerial photographs in forestry, including photo scales, orientation of photographs, forest type maps and measurement of forest volumes. (CSU)

### **NRM 77 Forest Products Manufacturing**

(Formerly FOR 77) 3 units/2 hours lecture, 3 hours laboratory. Grade only. Recommended: Eligibility for Engl 100A or equivalent.

Construction and operation of equipment in manufacturing processes in production of lumber, plywood, particle board, paper and wood-using industries. (CSU)

### **NRM 78A Timber Cruising**

(Formerly FOR 78A) 3 units/2 hours lecture, 3 hours laboratory. Grade only. Prerequisite: NRM 52 (formerly FOR 52). Recommended: Eligibility for English 100A or equivalent.

The sampling, measurement and grade determination of standing timber. (CSU)

### **NRM 78B Log Scaling**

(Formerly FOR 78B) 3 units/2 hours lecture, 3 hours laboratory. Grade only. Recommended: Eligibility for Engl 100A or equivalent.

The measurement, volume and defect estimation, and grade determination of sawlogs of commercial trees. (CSU)

### **NRM 79 Forestry Employment**

(Formerly FOR 79) 1 unit/1 hour lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent.

Exploration of the job market in the Forestry, and Park and Recreation fields. The development and use of job application forms, effective resumes, and interviewing techniques. (CSU)

### **NRM 81 Compartment Inventory Examination & Analysis**

(Formerly FOR 81) 1 unit/6 hours lecture, 10 hours laboratory, 16 hours by arrangement for 2 weeks. Grade only. Recommended: Eligibility for Engl 100A or equivalent.

The procedures, methods and equipment used for conducting timber stand examinations and evaluating stand conditions on U.S. Forest Service lands in California. (CSU)

### **NRM 82 Forest Disease & Damage**

(Formerly FOR 82) 1 unit/2 hours lecture, 3 hours laboratory for 6 weeks. Grade only. Recommended: Eligibility for Engl 100A or equivalent.

Identification, causes and cures of forest disease and damage. (CSU)

### **NRM 83 Western Forest Insects-Identification & Damage Assessment**

(Formerly FOR 83) 1 unit/2 hours lecture, 3 hours laboratory for 6 weeks. Grade only. Recommended: Eligibility for Engl 100A or equivalent.

Identification, damage appraisal, and control of Western Forest insect pests. (CSU)

### **NRM 84 Introduction to Fish and Wildlife Conservation**

3 units/2 hours lecture, 3 hours laboratory. CR/NC option. Recommended: Eligibility for English 100A or equiv. Limits on enrollment: 30 maximum

Basic introduction to the study of fish and wildlife conservation management principles and techniques. Involves: identification, natural history, life cycles, and population ecology of selected species. Habitat manipulation, improvement and preservation, and rules and regulations affecting wildlife populations and endangered species. (CSU)

### **NRM 85 Forest Hydrology and Watershed Management**

3 units/2 hours lecture, 3 hours laboratory. CR/NC option. Recommended: Eligibility for English 100A or equiv.

This course serves as an introduction to forest and wildland hydrology, and the management of resources on a watershed scale. The material covered will include the fundamental concepts of the hydrologic cycle: precipitation, interception, evaporation, evapotranspiration and runoff, infiltration, and groundwater. The fundamentals of protection, management, and monitoring watersheds in California will be emphasized. (CSU)

### **NRM 90A Introduction to Wildland Management**

(Formerly FOR 90A) 3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

The student will acquire an understanding of current management principles and contemporary issues affecting the use of the nation's wildland resources. The ecological requirements and management practices of forest, soil, wildlife, and water resources will be covered. Not intended for Park and Recreation or Forest Technology majors. (CSU)

### **NRM 90B Applied Wildland Management Practices**

(Formerly FOR 90B) 3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Enables the student to develop a background in forestry and an awareness of current forestry issues. To include: forest measurements, map reading, forest protection, forest inventor, harvesting, forest law and ecological concerns of these subjects. Not intended for Forestry or Forest Technology majors. (CSU)

### **NRM 98 Special Studies in Forest Technology**

(Formerly FOR 98) 1-3 units/up to 9 hours by arrangement. Grade only. Prerequisite: Application to department and approval of the Dean of Instruction. Recommended: Eligibility for Engl 100A or equivalent.

Seminars, individual conferences and library or field research projects by arrangement. To provide independent study and enriched academic experience. (CSU)

Independent study including 49 and 98 courses - 6 unit total.

### **NRM 99 Occupational Work Experience Education**

0.5-8 units/up to 36 hours by arrangement. Grade only.

Occupational Work Experience is supervised employment extending classroom learning at an on-the-job learning station relating to the student's educational or occupational goal. Students gain this experience by enrollment in the parallel or alternate plan. (CSU)

May be taken for a total of 16 units.

### **NRM 99I Occupational Work Experience-Intern Program**

1-8 units/up to 40 hours by arrangement. Grade only.

Occupational Work Experience Internship is supervised employment extending classroom learning at an on-the-job learning station relating to

the student's educational or occupational goal. May be repeated for a total of sixteen (16) units, four (04) units maximum per semester (Repeat Code 25 for all Parallel Plan). Must be enrolled in 7 units including Work Experience units (for summer school - Work Experience and one other course). Alternate Plan - designed to offer students opportunities to attend college full-time one semester and work full-time the following semester. Job experience must relate directly to the student's educational goals. Up to eight (08) units may be earned in one semester. Students may not be enrolled in more than one other course or transfer from Alternate to Parallel or vice-versa without completing 7 units between plans. (CSU)

May be taken for a total of 16 units.

### **NRM 202 Tree Planting**

(Formerly FOR 202) 0.5 unit/5 hours lecture, 35 hours laboratory for 1 week. Grade only. Recommended: Eligibility for Engl 100A or equivalent.

Techniques of planting forest trees.

May be taken for a total of 2 units.

### **NRM 204 Chainsaw Safe Operation & Care**

(Formerly FOR 204) 0.5 unit/7 hours lecture, 3 hours laboratory for 1 week. Grade only. Recommended: Eligibility for Engl 100A or equivalent.

The proper operation, maintenance and care of chainsaws.

### **NRM 280 Selected Topics in Natural Resource Management**

(Formerly FOR 280) 0.5-2 units/up to 36 hours lecture for 1 week. CR/NC option.

Designed to provide professionals and the general public with the skills and knowledge needed to deal with contemporary topics and issues in resource management.

May be repeated with different topics.

## **Nursing**

### **Nursing - Aide**

#### **NRA 51.1 Nursing Assistant/Home Health Aide**

(Formerly NRA 51) 9.5 units/6.4 hours lecture, 10.6 hours laboratory. Grade only.

Course is designed to teach Nurse Assistant/Home Health Aide students basic nursing skills, psychological understanding and communication techniques necessary to help meet the needs of the patient. All aspects of care are designed to allow the graduate to adapt these skills in a health care facility and in home health care. Students learn theory and basic patient care skills necessary for certification as a nurse Assistant and Home Health Aide. (CSU)

## **NRA 52 Home Health Aide**

1.5 units/6 hours lecture, 5 hours laboratory for 4 weeks.  
Grade only. Prerequisite: Current California certification as a Nurse Assistant.

Theory and basic patient care skills necessary for certification as a Home Health Aide. Techniques of communication, understanding behavior and identification of ethical issues in patient care. Examination of the role of the Home Health Aide in home care settings. (CSU)

## **Nursing - RN**

### **NR 74A VN to ADN Bridge**

4.5 units/2.5 hours lecture, 6 hours by arrangement. Grade only. Prerequisite: Completion of *PHYSIO 1* and *MICRO 60* or *MICRO 5* or *HLC 55* and *ANAT 1* and *FDNT 62* and *PSYCH 1A* or *PSYCH 53* (formerly *PSYCH 33*) or *PSYCH 4* and *CHEM 60*. Recommended: *English 100B* or *1A* required for certificate. Recommend that it be taken prior to entering the program. Course is designed to increase the knowledge base of the Licensed Vocational Nurse so that his/her knowledge base is consistent with that of the generic nursing student entering Level III of the SRJC Associate Degree Nursing Program and meet the psychiatric nursing requirement as established by the Board of Registered Nursing. The psychiatric nursing component includes theory and clinical experience in the psychiatric setting. Additional professional threads are introduced. (CSU)

### **NR 74B Intermediate Medical-Surgical Nursing**

8.5 units/5.7 hours lecture, 19.2 hours by arrangement for 12 weeks. Grade only. Prerequisite: *NR 74A* with a grade of *C* or better.

Designed to provide an opportunity for LVNs to complete a selected portion of a second-year nursing course. Focus of this course is intermediate medical-surgical nursing. Concepts from the biopsychosocial sciences introduced in previous courses are explored in greater depth. Includes theory, clinical assignment, and skills lab practice (4 units lecture and 4.5 units lab). (CSU)

### **NR 74C Advanced Medical-Surgical Nursing**

8.5 units/5.7 hours lecture, 19.2 hours by arrangement for 12 weeks. Grade only. Prerequisite: *NR 74B* with a grade of *C* or better.

Designed to provide an opportunity for LVNs with a current California Vocational Nursing license to complete a selected portion of a second year nursing course. Focus of this course is advanced medical-surgical nursing and leadership. Concepts basic to nursing introduced in previous courses are applied when caring for a greater number of clients in the clinical setting. More advanced concepts are explored and applied in the clinical setting. A clinical preceptorship is also included. Gerontological concepts are integrated throughout the course. (4 units lecture and 4.5 units lab) (CSU)

### **NR 74D Introduction to Nursing**

10 units/5 hours lecture, 15 hours by arrangement. CR/NC

only.

Designed to provide the California Licensed Vocational Nurse enrolled in the VN to RN Career Ladder who has met graduation and BRN requirements, including nursing courses, the opportunity to challenge 10 units (5 theory, 5 clinical) of nursing based upon evaluation of transcripts in a vocational nursing program. (CSU)

### **NR 74C.1 Advanced Medical-Surgical Nursing, 30-Unit Option**

7.5 units/5.7 hours lecture, 14.9 hours by arrangement for 12 weeks. Grade only. Prerequisite: *NR 74B* with a grade of *C* or better.

Designed to provide an opportunity for LVNs with a current California Vocational Nursing license that select the 30-unit option to complete a selected portion of a second-year nursing course. Focus of this course is advanced medical-surgical nursing and leadership. Concepts basic to nursing introduced in previous courses are applied when caring for a greater number of clients in the clinical setting. A clinical preceptorship is also included.

Gerontological concepts are integrated throughout the course. (4 units lecture and 3.5 units lab). (CSU)

### **NR 75A Fundamentals of Professional Nursing**

11.5 units/6.5 hours lecture, 16.5 hours laboratory. Grade only. Prerequisite: Admission to the ADN program; completion of *WEXP 99* or *CI 52* (50 hrs), *HS chemistry* or *CHEM 60*; *ANAT 1*, *PHYSIO 1*, and *HLC 55*, *MICRO 5* or *60*; completion of, or concurrent enrollment in, *FDNT 62*; completion of physical exam form; required health documentation listed in application packet; current CPR card; malpractice insurance. Recommended: Completion of *ENGL 100B* or *1A* is required for certificate; recommend taking prior to beginning program.

Concepts fundamental to professional nursing; nursing process, professionalism, basic physiological, psychosocial, and developmental needs and basic nursing skills are included in this course. Concepts from the basic sciences, anatomy, physiology and microbiology are applied throughout the course. Application of theoretical knowledge is guided by Orem's Self-Care Deficit Model. A number of teaching/learning strategies are incorporated in a variety of settings: classroom, skills laboratory and client-care settings providing students an opportunity to use the nursing process. (CSU)

### **NR 75B Nursing Care of the Adult Maternal/ Neonatal Client**

12 units/6 hours lecture, 18 hours by arrangement. Grade only. Prerequisite: Enrollment in the ADN program; completion of *NR 75A*, *PSYCH 1A* or *53* or *4*, and *FD NT 62*, all with a grade of *C* or better.

Concepts relevant to the nursing care of the adult/geriatric, maternal/neonatal, and psychiatric client are explored. Emphasis is on application of basic concepts related to the nursing care of clients with acute physical and mental illness, as well as basic concepts relevant to the care of the maternal/neonatal client within Orem's self-care framework. Knowledge and skills acquired in lecture-discussion and in a simulated clinical skills laboratory are applied in adult/geriatric, psychiatric and maternal/

neonatal clinical settings. (CSU)

### **NR 75C Nursing Care of the Acutely Ill Patient**

12 units/6 hours lecture, 18 hours by arrangement. Grade only. Prerequisite: Enrollment in Associate Degree Nursing program; completion of *NR 75B* or *NR74A* with a grade of *C* or better.

This course continues to focus on the development of concepts applicable to the care of the more complex adult medical-surgical client. In addition, a new focus on the pediatric client is included. Application of Orem's Self-Care Deficit Model is incorporated throughout this course. Emphasis is placed on the student's ability to use critical thinking skills, identify relationships among concepts, and incorporate both into the nursing process in multiple clinical settings. Professional growth is encouraged by incorporating selected concepts in theoretical scenarios and in the clinical setting for more complex skills. (CSU)

### **NR 75D Advanced Nursing Care of the Acutely Ill Patient**

12.5 units/6.5 hours lecture, 18 hours by arrangement. Grade only. Prerequisite: Enrollment in the Associate Degree Nursing Program; successful completion of *NR 75C* with a grade of *C* or better.

Advanced concepts related to health deviation in the acutely ill adult medical-surgical/gerontological client are presented while focusing on the individual's ability to meet universal self-care needs/deficits. Utilizing the nursing process, these concepts are integrated to meet the complex self-care needs of both medical-surgical and gerontological clients. Concepts related to professionalism, a preceptorship experience, and advanced nursing skill practice in a variety of clinical settings give the student an opportunity to apply multiple concepts and skills and make the transition from student to professional nurse. (CSU)

### **NR 78B Skills Lab for Nursing Students**

(Formerly *NR 78.B*) 2 units/6 hours by arrangement. Grade only. Prerequisite: Admission to the Associate Degree program; completion of *NR 78A* and *NR 75A* with grade of *C* or better; concurrent enrollment in *NR 75B*. Corequisite: *NR 75B* Demonstration and supervised practice of basic skills based on scientific principles and concepts from *Nursing 75B* including the bio-psycho-social sciences. Planning and implementing basic patient care in the simulated clinical setting. Relationships between these concepts and nursing skills relevant to steps in the nursing process: assessment, nursing diagnosis, planning, implementing, evaluation and documentation are practiced. Return demonstration by students prior to assignment of skill in the clinical setting is included. Nursing skills are correlated with concepts from Orem's self-care framework. Laboratory is used not only for teaching new skills but also for reinforcement of previously learned skills. (CSU)

### NR 98 Special Studies in Nursing

1-3 units/up to 3 hours by arrangement. Grade only.

Prerequisite: Application to department.

Seminars or individual conferences by arrangement to provide for independent study and enriched academic experience. (CSU)

Independent study including 49 and 98 courses - 6 unit total.

### NR 205 Psychological & Interpersonal Aspects of Nursing Care

3 units/3 hours lecture. Grade only.

Designed to assist Health Care Personnel to become more effective in implementing patient care through understanding psychological needs and behavioral reaction.

### NR 243B Basic Coronary Care Unit

1.5 units/40 hours lecture for 8 weeks. Grade only.

Prerequisite: NR 243 (formerly NR 243A) or equivalent; qualify for MATH 150A. Recommended: Working in an acute care hospital. Eligibility for Engl 100A OR equivalent.

Instructs students to interpret 12-Lead EKG.

Pathophysiology of hemodynamic monitoring of patients discussed along with advanced arrhythmia recognition including Aberrancy, Pacemakers, and Bundle Branch Blocks.

### NR 245 Leadership Skills

3 units/3 hours lecture. CR/NC option.

Leadership skills and knowledge required for effective performance in supervisory roles in health care settings. Analysis of leadership styles. Application of concepts in human relations and communications to employee morale, motivations and discipline. Skills in organizing, planning, budget control and time management. Analysis of current leadership theories in relation to health care.

### NR 257 Pharmacology in Nursing

3 units/3 hours lecture. Grade only. Prerequisite: NR 75C, NRV 53 or equivalent, eligibility for Engl 100A or equivalent. Recommended: Chem 60, Bio 10 and Physio 1.

Mechanism of action, clinical uses, side effects and adverse reactions in drug therapy. Applications of nursing implications in monitoring drug therapy as well as review of physiologic systems affected by drug therapy. Review of major drug therapy in areas of cardiovascular, central nervous system, respiratory system, hormonal system and infection control.

May be taken for a total of 6 units.

### NR 257.1 Pharmacology Update

1-1.5 units/up to 1 hour lecture. Grade only. Prerequisite: NR 75C, NRV 53 or equivalent, eligibility for Engl 100A or equivalent.

Review and update of mechanism of action, clinical uses, side effects and adverse reactions of drug therapy of the cardiovascular system. Applications of nursing implications in monitoring drug therapy as well as review of physiologic systems affected.

May be taken for a total of 6 units in any combination.

### NR 257.2 Pharmacology Update

1 unit/1 hour lecture. Grade only. Prerequisite: NR 75C, NRV 53 or equivalent. Recommended: Eligibility for Engl 100A or equivalent.

Review and update of mechanism of action, clinical

uses, side effects and adverse reactions of drug therapy used in central nervous system disorders, respiratory diseases, and antibiotic therapy. Applications of nursing implications in monitoring drug therapy as well as review of physiologic systems affected.

May be taken for a total of 6 units in any combination.

### NR 257.3 Pharmacology Update

1 unit/2 hours lecture for 8 weeks. Grade only. Prerequisite: NR 75C, NRV 53 or equivalent. Recommended: Eligibility for Engl 100A or equivalent.

Review and update of mechanism of action, clinical uses, side effects and adverse reactions of drug therapy used in hormonal deficiency, chemotherapy, and intravenous nutritional therapy. Applications of nursing implications in monitoring drug therapy as well as review for physiologic systems effected.

May be taken for a total of 6 units in any combination.

### NR 285 Assertive Communication for Nurses

1 unit/3 hours lecture for 6 weeks. Grade only.

Recommended: Eligibility for Engl 100A or equivalent, Psych 1A, Psych 53 (formerly Psych 33).

Identification and analysis of personal communication styles. Application of concepts in values, self-image, and stress to the process of communication. Role playing and problem solving; sending and receiving positive and negative feedback.

### NR 287 Selected Topics in Nursing

0.5-2 units/up to 2 hours lecture. CR/NC option. Prerequisite: Completion of NR 75B or equivalent. Recommended: Eligibility for Engl 100A or equivalent.

Content focusing on current issues, theories and procedures in nursing and nursing care. Application of concepts and principles from life science to the topic under study.

May be repeated with different topics.

### NR 375A.1 Beginning Clinical Practice

4 units/12 hours by arrangement. CR/NC only. Prerequisite: Completion of NR 75A with a grade of "C" or better; readmission to the ADN Program.

Course provides an opportunity to remediate NR 75A basic clinical nursing skills.

### NR 375B.1 Intermediate Clinical Practice

3 units/9 hours by arrangement. CR/NC only. Prerequisite: Completion of NR 75B with a grade of "C" or better; readmission to the ADN Program.

Course provides an opportunity to remediate NR 75B medical-surgical clinical nursing skills.

### NR 375C.1 Advanced Clinical Practice

3.5 units/18 hours laboratory for 10 weeks. CR/NC only. Prerequisite: Completion of NR 75C with a grade of "C" or better; readmission to the ADN Program.

Course provides an opportunity to remediate NR 75C medical-surgical clinical nursing skills.

### NR 375A.2 Beginning Nursing Theory

6.5 units/6.5 hours lecture. CR/NC only. Prerequisite: Completion of NR 75A with a grade of "C" or better; readmission to the ADN Program.

A course designed to provide an opportunity to remediate beginning nursing theory.

### NR 375B.2 Intermediate Nursing Theory

4 units/4 hours lecture. CR/NC only. Prerequisite: Completion of NR 75A and NR 75B with a grade of "C" or better; readmission to ADN Program.

A course designed to provide an opportunity to remediate intermediate medical-surgical nursing theory.

### NR 375C.2 Advanced Nursing Theory

4.5 units/6 hours lecture for 12 weeks. CR/NC only. Prerequisite: Completion of NR 75B with a grade of "C" or better; readmission to ADN Program.

A course designed to provide an opportunity to remediate advanced medical-surgical nursing theory.

### NR 378A Beginning Nursing Skills Laboratory

1.5 units/4.5 hours by arrangement. CR/NC only.

Prerequisite: Completion of NR 75A with a grade of "C" or better; readmission to the ADN Program.

Course provides an opportunity to remediate NR78A clinical nursing skills in a simulated clinical setting.

### NR 378B Intermediate Nursing Skills Laboratory

1 unit/3 hours by arrangement. CR/NC only. Prerequisite:

Completion of NR 75B with a grade of "C" or better; readmission to ADN Program.

A course designed to provide an opportunity to remediate intermediate nursing skills in a simulated clinical setting.

### NR 378C Advanced Nursing Skills Laboratory

0.5 unit/1.5 hours laboratory. CR/NC only. Prerequisite: Completion of NR 75C with a grade of "C" or better; readmission to ADN Program.

A course designed to provide an opportunity to remediate advanced nursing skills in a simulated clinical setting.

## Nursing - Vocational

### NRV 51 Medical-Surgical Nursing

10 units/10 hours lecture. Grade only. Prerequisite: Completion of FDNT 62, and completion of CSKL 374 (or CSKL 373B), and completion of HLC 60, and completion of ANAT 58, and completion of PHYSIO 58. Recommended: NRA 51.1 (formerly NRA 51) or equivalent; English 104; CSKL 373A if Comp.Score <30.

Normal human body structure and function. Fundamentals of nursing, nursing process, basic pharmacology, and the more common diseases. Emphasis is on the theoretical aspects of planning and implementing total care of geriatric, chronically ill, and acute/sub-acute patients. Basic mental health concepts and communication skills for administering total patient care are included. Total patient care is taught within the framework of Orem's Self Care Theory. (CSU)

### **NRV 51L Medical-Surgical Nursing Clinical Experience**

6 units/18 hours by arrangement. CR/NC only. Prerequisite: Admission to the program. Corequisite: NRV 51 (Medical/Surgical) and NRV 58A (Skills Laboratory).

Application of biological and physiological concepts in planning and implementing total care of the geriatric, chronically ill, and sub-acute patients in the clinical setting. Emphasis is on caring for patients with common disease processes; and, performance of basic nursing skills including medication administration. Mental health concepts and spiritual and social aspects as they apply to assigned patients are explored. (CSU)

### **NRV 52A Medical-Surgical Nursing**

8 units/8 hours lecture. Grade only. Prerequisite: Completion of NRV 51.

Focus is on the medical-surgical patient with more complex problems. Continued development of biological, physiological, spiritual, and mental health concepts as they apply to the nursing care of the acutely ill adult patient. Explores pathological processes of selected disease states with an emphasis on care of the pre/postoperative patient. (CSU)

### **NRV 52AL Medical/Surgical Nursing Clinical**

4 units/12 hours by arrangement. CR/NC only. Prerequisite: NRV 51L or equivalent. Corequisite: NRV 52A and NRV 58B.

Planning and implementation of total care of patients with acute medical and surgical problems; intravenous therapy as it relates to the scope of practice of vocational nursing. Continued development of biological, physiological, spiritual and mental health concepts as they apply to the nursing care of acutely ill patients (with an emphasis on pre/postoperative care). (CSU)

### **NRV 52B Maternal-Child Health Nursing**

2 units/2 hours lecture. Grade only. Prerequisite: Completion of NRV 51.

Basic concepts of maternal and child health nursing with an emphasis on wellness are presented. Theory to build a foundation for the planning and implementing of patient care with a focus on normal growth and development of infants to adults. (CSU)

### **NRV 52BL Maternal-Child Health Nursing Clinical**

2 units/6 hours by arrangement. CR/NC only. Prerequisite: Completion of NRV 51L. Corequisite: Concurrent enrollment in NRV 52B, and concurrent enrollment in NRV 58B. Recommended: Psych 4.

Implementation of basic concepts of maternal and child health care nursing. Continued development of biological, physiological, spiritual, social, and mental health concepts as they apply to the nursing care of both normal and acutely ill obstetric and pediatric patients (with an emphasis on normal growth and development process). (CSU)

### **NRV 53 Advanced Medical-Surgical Nursing**

10 units/10 hours lecture. Grade only. Prerequisite: Completion of NRV 52A.

Application of principles of anatomy and physiology in medical-surgical assignment with increased complexity. Addition of professional and vocational

relationships including an introduction to leadership skills & community health agencies & LVN scope of practice in its relationship to leadership and supervisory skills. (CSU)

### **NRV 53L Medical-Surgical Nursing**

6 units/18 hours by arrangement. CR/NC only. Prerequisite: Completion of NRV 52AL. Corequisite: Concurrent enrollment in NRV 53, and concurrent enrollment in NRV 58C.

Total patient care of complex medical-surgical patients, team-leading in the skilled nursing facility, and expanded roles in home care/clinics and residential care settings. A focus on care of the gerontological client is emphasized in each setting. (CSU)

### **NRV 58A Skills Laboratory for Vocational Nursing Students**

1 unit/3 hours by arrangement. CR/NC only. Corequisite: Concurrent enrollment in NRV 51L.

Demonstration and supervised practice of basic nursing skills based on scientific principles and correlated with concepts from NRV 51. Planning and implementing basic patient care are practiced in a simulated clinical setting. Relationships between these concepts and nursing skills relevant to steps in the nursing process; assessment, planning, implementing, evaluation and documentation are practiced. Return demonstrations by students prior to assignment of skills in the clinical setting including the reinforcement of previously learned skills. (CSU)

### **NRV 58B Skills Laboratory for Vocational Nursing Students**

1 unit/3 hours by arrangement. CR/NC only. Prerequisite: NRV 58A or equivalent. Corequisite: NRV 52AL and/or NRV 52BL.

Demonstration and supervised practice of intermediate skills based on scientific principles and concepts from NRV 52A. Planning and implementing intermediate patient care are done in the simulated clinical setting relevant to steps in the nursing process: assessment, planning, implementing, evaluation and documentation. Return demonstration by students prior to assignment of skills in the clinical setting including the reinforcement of previously learned skills. (CSU)  
May be taken for a total of 3 units.

### **NRV 58C Skills Laboratory for Vocational Nursing Students**

1 unit/3 hours by arrangement. CR/NC only. Prerequisite: NRV 58B or equivalent. Corequisite: NRV 53L.

Demonstration and supervised practice of advanced vocational nursing skills on scientific principles and concepts from NRV 53. Planning and implementing advanced patient care in the simulated clinical setting relevant to steps in the nursing process: assessment, planning, implementing, evaluation and documentation. Return demonstration by students prior to assignment of skill in the clinical setting including the reinforcement of previously learned skills. (CSU)

May be taken for a total of 3 units.

### **NRV 100 Basic Intravenous Therapy**

1.5 units/6 hours lecture, 2 hours laboratory for 4 weeks. CR/NC option. Prerequisite: LVN licensure or completion of an accredited VN program or NR 75B or equivalent.

This is a basic course in IV therapy. Course covers legal requirements with emphasis on differences in scope of practice for LVNs and RNs. Topics include: IV solutions; site, device and infusion system selection, preparation and care; calculation and regulation of infusion rates. Laboratory component includes demonstration and return demonstration of intravenous cannulation, infusion and maintenance. Successful completion requires individually supervised successful venipuncture of a live subject. Meets Board of Vocational Nursing regulations governing intravenous therapy. Does not meet LVN or RN continuing education requirements.

## **Philosophy**

### **PHIL 3 Critical Thinking**

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Practical reasoning, argumentation and the analysis of language as instruments of sound thinking in everyday life. (CSU/UC)

AA/AS area B; CSU area A3

### **PHIL 4 Introduction to Symbolic Logic**

3 units/3 hours lecture. CR/NC option. Prerequisite: Completion of or concurrent enrollment in either English 100A or Math 150A or the equivalent.

An introduction to symbolic systems as means for representing deductive logic and reasoning. The course will examine the nature of logic, as well as the principles and techniques relevant to sentential and predicate logic. (CSU/UC)

AA/AS area B; CAN PHIL 6

### **PHIL 5 Critical Thinking/Writing**

3 units/3 hours lecture. CR/NC option. Prerequisite: Completion of ENGL 1A; OR completion of ENGL 1A.1.

The application of the principles of critical thinking to the writing of argumentative essays. Critical reasoning skills are presented and practiced in the context of the construction and the critique of numerous written, extended arguments. (CSU/UC)

AA/AS area B; CSU area A3; IGETC area 1B

### **PHIL 6 Introduction to Philosophy**

3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100B or equivalent.

An inquiry into truth and value through studies of the philosophers. Stresses philosophical problems or philosophical themes and issues or methods of philosophical inquiry. Attempts to guide the student's understanding of philosophy's role in personal and social life. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B; CAN PHIL 2

### PHIL 7 Contemporary Moral Issues

3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100B or equivalent. Examination of contemporary moral issues such as capital punishment, euthanasia and abortion and of ethical principles and theories involved in thinking about such issues. (CSU/UC)  
AA/AS area E; CSU area C2; IGETC area 3B; CAN PHIL 4

### PHIL 8 Comparative Religion

3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100B or equivalent. Study and comparison of the major Eastern religions (Hinduism, Buddhism, Taoism and Confucianism) and of the major Western religions (Judaism, Christianity and Islam). (CSU/UC)  
AA/AS area E; CSU area C2; IGETC area 3B

### PHIL 9 Political Philosophy

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 1A. An examination of philosophical concepts such as liberty, equality, rights, justice, and democracy. Typical approaches will use these and other concepts to address the nature of government and citizenship, attempting to understand the U.S. Constitution, civil rights, and contemporary issues such as affirmative action and the welfare state. These concepts will be explored through the thought and experience of diverse groups within the United States. (CSU/UC)  
AA/AS areas E, G; CSU area C2; IGETC area 3B

### PHIL 12 Environmental Philosophy

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv. An examination of various philosophical views about what makes the natural environment worth valuing. The course will consider whether the natural environment is valuable only in so far as it is useful to humans or whether non-human animals, plants or ecosystems are also valuable in and of themselves. These issues will be approached not only from the perspective of ethics but also from the perspective of various secular and religious philosophies which are grounded in metaphysics or aesthetics. (CSU/UC)  
AA/AS area E; CSU area C2; IGETC area 3B

### PHIL 20 History of Western Philosophy

(Formerly PHIL 20.1) 3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100B or equivalent. History of Western philosophy from classical Greek philosophy to the Renaissance, concentrating on Socrates, Plato and Aristotle. (CSU/UC)  
AA/AS area E; CSU area C2; IGETC area 3B; CAN PHIL 8; PHIL 20 + PHIL 21 = CAN PHIL SEQ A

### PHIL 21 History of Western Philosophy

(Formerly PHIL 20.2) 3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100B or equivalent. History of Western philosophy from the Renaissance to the twentieth century. (CSU/UC)  
AA/AS area E; CSU area C2; IGETC area 3B; CAN PHIL 10; PHIL 20 + PHIL 21 = CAN PHIL SEQ A

### PHIL 48 Selected Topics

1-3 units/up to 3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent. Recurrent philosophical themes and problems as

they are met in selected subject areas. Course emphasis varies at the discretion of instructor. See Schedule of Classes. (CSU/UC)  
May be repeated with different topics for a total of 6 units.

### PHIL 49 Special Studies

1-3 units/up to 9 hours by arrangement. Grade only. Prerequisite: Application to department. Seminars and individual conferences by arrangement to provide for independent study and enriched academic experience. (CSU/UC)  
Independent study including 49 and 98 courses - 6 units total.

## Physical Education

### Aquatics

#### PE 1.1 Beginning Aquatic Fitness

1-2 units/up to 4 hours laboratory. CR/NC option. Recommended: PE 2.3 (formerly PE 101.2) or equivalent. Progressive program in swimming presented as a carry over activity in later adult life (CSU/UC)  
All P.E. activities - 4 times for credit in any combination of levels.

#### PE 1.3 Advanced Aquatic Fitness

1-2 units/up to 4 hours laboratory. CR/NC option. Recommended: PE 1.1 or equivalent. Aggressive program of physical fitness through swimming and dryland activity. (CSU/UC)  
All P.E. activities - 4 times for credit in any combination of levels.

#### PE 2.1 Non-Swimmer-Level II

(Formerly PE 101.4) 1 unit/2 hours laboratory. CR/NC option. Physical and mental adjustment to water. (CSU/UC)  
All P.E. activities - 4 times for credit in any combination of levels.

#### PE 2.2 Beginning Swimmer-Level III

(Formerly PE 101.1) 1-2 units/up to 4 hours laboratory. CR/NC option. Basic water safety skills and knowledge leading to safe practices while in, on or about the water. (CSU/UC)  
All P.E. activities - 4 times for credit in any combination of levels.

#### PE 2.3 Intermediate Swimmer - Level IV and V

(Formerly PE 101.2) 1-2 units/up to 4 hours laboratory. CR/NC option. Recommended: PE 2.2 (formerly PE 101.1) or equivalent. Opportunity to learn the elements of good swimming skills. (CSU/UC)  
All P.E. activities - 4 times for credit in any combination of levels.

#### PE 2.4 Advanced Swimmer Level VI

(Formerly PE 101.5) 1-2 units/up to 4 hours laboratory. CR/NC option. Recommended: PE 2.3 (formerly PE 101.2) or equivalent. Advanced techniques in swimming, leading to increased stroke proficiency and endurance. (CSU/UC)  
All P.E. activities - 4 times for credit in any combination of levels.

#### PE 2.5 Synchronized Swimming

(Formerly PE 48.28) 1.5 units/3 hours laboratory. CR/NC option. Recommended: PE 2.3 (formerly PE 101.2) or equivalent. An introduction into the basic concepts of synchronized swimming. (CSU/UC)  
All P.E. activities - 4 times for credit in any combination of levels.

#### PE 3.1 Beginning Water Polo

(Formerly PE 106.1) 1-2 units/up to 4 hours laboratory. CR/NC option. Recommended: PE 2.3 (formerly PE 101.2) or equivalent. Introductory and survey course in the sport of water polo. (CSU/UC)  
All P.E. activities - 4 times for credit in any combination of levels.

#### PE 3.2 Intermediate Water Polo

(Formerly PE 106.2) 1-2 units/up to 4 hours laboratory. CR/NC option. Recommended: PE 3.1 (formerly PE 106.1) or equivalent. Intermediate to advanced skills in various offensive and defensive techniques of water polo. (CSU/UC)  
All P.E. activities - 4 times for credit in any combination of levels.

#### PE 4 Aquatic Calisthenics

(Formerly PE 100.4) 1-2 units/up to 4 hours laboratory. CR/NC option. Water exercise taking advantage of water pressure, water resistance and buoyancy. (CSU/UC)  
All P.E. activities - 4 times for credit in any combination of levels.

#### PE 5 Beginning Springboard Diving

(Formerly PE 107.1) 1-2 units/up to 4 hours laboratory. CR/NC option. Recommended: PE 2.3 (formerly PE 101.2) or equivalent. Basic springboard diving skills using one and three meter diving boards. (CSU/UC)  
All P.E. activities - 4 times for credit in any combination of levels.

#### PE 6 Lifeguard Training

2.5-3 units/up to 2 hours lecture, 2 hours laboratory. CR/NC option. Recommended: PE 2.4 (formerly PE 101.5) or equivalent. To provide students with the skills and knowledge needed to prevent and respond to aquatic emergencies to help sustain life, reduce pain, and minimize the consequences of injury or sudden illness until more advanced medical help can arrive. This course adheres to American Red Cross standards and meets the first aid, CPR and aquatic training requirements as specified by code to be a lifeguard in the State of California. (CSU/UC)  
All P.E. activities - 4 times for credit in any combination of levels.

## PE 7 Water Safety Instructor

(Formerly PE 105) 2.5-3 units/up to 2 hours lecture, 2 hours laboratory. CR/NC option. Recommended: PE 6. Advanced techniques and methods of teaching swimming and water safety skills leading to American Red Cross WSI certificate. Students must be 17 years old by the end of the course. Instructor Candidate Training, a Red Cross prerequisite for this course, will be taught as part of the course. (CSU/UC) All P.E. activities - 4 times for credit in any combination of levels.

## PE 61 Deep Water Running

1-2 units/up to 4 hours laboratory. CR/NC option. Recommended: PE 2.2 (formerly PE 101.1). Deep water running and exercises for improving fitness, cross training, water safety, and rehabilitation. Workout composition, proper body mechanics, aquatics rehabilitation skills, and water safety skills will be presented. (CSU/UC) All P.E. activities - 4 times for credit in any combination of levels.

## Individual Fitness

### PE 8.1 Beginning Step Aerobics

1-2 units/up to 4 hours laboratory. CR/NC option. This class involves Bench Stepping, an aerobic activity designed to increase cardiovascular/respiratory fitness, improve muscular strength and endurance, and enhance body awareness. Basic step patterns and movement combinations choreographed to music will be presented. (CSU/UC) All P.E. activities - 4 times for credit in any combination of levels.

### PE 8.2 Intermediate Step Aerobics

1-2 units/up to 4 hours laboratory. CR/NC option. Intermediate aerobic bench stepping is designed to increase cardiovascular/respiratory fitness, improve muscle strength and endurance and enhance body awareness. Intermediate and advanced level step combinations and various movement patterns choreographed to music will be presented. (CSU/UC) All P.E. activities - 4 times for credit in any combination of levels.

### PE 9.1 Beginning Body Conditioning

(Formerly PE 160.1) 1-2 units/up to 4 hours laboratory, 40 hours by arrangement. CR/NC option. Designed to achieve a basic level of physical fitness through exercise, stretching activities and aerobic activities. Emphasis on cardiovascular pulmonary fitness, aerobic conditioning and lower flexibility. (CSU/UC) All P.E. activities - 4 times for credit in any combination of levels.

### PE 9.2 Intermediate Body Conditioning

(Formerly PE 160.2) 1-2 units/up to 4 hours laboratory. CR/NC option. Designed to achieve an intermediate level of total body fitness. Emphasis on cardiovascular-pulmonary fitness, aerobic conditioning and total body strength and flexibility. (CSU/UC) All P.E. activities - 4 times for credit in any combination of levels.

### PE 9.3 Advanced Body Conditioning

(Formerly PE 160.3) 1-2 units/up to 4 hours laboratory. CR/NC option. Designed to achieve an advanced level of physical fitness through a detailed program of exercise. Emphasis on cardiovascular-pulmonary fitness, aerobic conditioning and total body musculative conditioning. (CSU/UC) All P.E. activities - 4 times for credit in any combination of levels.

### PE 10 Beginning Body Mechanics

(Formerly PE 161.1) 1-2 units/up to 4 hours laboratory. CR/NC option. Provides student with "way of life through movement". (CSU/UC) All P.E. activities - 4 times for credit in any combination of levels.

### PE 11 Beginning Physical Fitness

(Formerly PE 181.1) 1-2 units/up to 4 hours laboratory. CR/NC option. Aerobic and anaerobic training combined with flexibility activities, designed to enhance sport performance, cardiovascular endurance and muscular strength. (CSU/UC) All P.E. activities - 4 times for credit in any combination of levels.

### PE 12 Ski Conditioning

(Formerly PE 186.1) 1 unit/2 hours laboratory. CR/NC option. Physical ski conditioning for strength, endurance, flexibility and coordination. Care and selection of equipment. Basic skills and safety. (CSU/UC) All P.E. activities - 4 times for credit in any combination of levels.

### PE 13 Beginning Weight Lifting

(Formerly PE 193.1) 1-2 units/up to 4 hours laboratory. CR/NC option. Development of body with use of weights. (CSU/UC) All P.E. activities - 4 times for credit in any combination of levels.

### PE 13.2 Intermediate Power Lifting

1-2 units/up to 4 hours laboratory. CR/NC option. Recommended: PE 13 (formerly PE 193.1) or equivalent. This is an Intermediate Power Lifting course with an emphasis on technique, safety, correction and improvement. (CSU/UC) All P.E. activities - 4 times for credit in any combination of levels.

### PE 13.3 Advanced Power Lifting

1-2 units/up to 4 hours laboratory. CR/NC option. Recommended: PE 13.2 or Equivalent. Advanced Power Lifting course with an emphasis on proper technique, safety concerns, improvement of strength, muscle size and testing. (CSU/UC) All P.E. activities - 4 times for credit in any combination of levels.

### PE 14.1 Beginning Weight Training

(Formerly PE 195.1) 1-2 units/up to 4 hours laboratory. CR/NC option. Resistance exercises through the use of: nautilus weight machines, plate loaded nautilus weight machines, basic free weight use of bars, barbells and

dumbbells, to develop muscular fitness. (CSU/UC) All P.E. activities - 4 times for credit in any combination of levels.

### PE 14.2 Intermediate Weight Training

(Formerly PE 195.2) 1-2 units/up to 4 hours laboratory. CR/NC option. Recommended: PE 14.1 (formerly PE 195.1) or equivalent. In-depth exposure to nautilus machines, dumbbells, barbells related to repetition and resistance. (CSU/UC) All P.E. activities - 4 times for credit in any combination of levels.

### PE 15.1 Beginning Aerobic Dance

(Formerly PE 150.1) 1-2 units/up to 4 hours laboratory. CR/NC option. Recommended: PE 22 (formerly PE 145) or equivalent. The main focus of this class is physical activity designed to increase cardiovascular/respiratory fitness and enhance body awareness. Movement patterns to music will be presented emphasizing aerobic conditioning and muscle toning. The instructor will select from a variety of aerobic activities including dance movements, free exercise movements, jogging, and exercising with steps, bands, and free weights, etc. (CSU/UC) All P.E. activities - 4 times for credit in any combination of levels.

### PE 15.2 Intermediate Aerobic Dance

(Formerly PE 150.2) 1-2 units/up to 2 hours laboratory. CR/NC option. Recommended: PE 15.1 (formerly PE 150.1) or equivalent. Designed for students to continue to develop cardiovascular/respiratory fitness, through more complex and greater intensity movement patterns set to music. The class will also include muscle toning and stretching. The instructor will select from a variety of aerobic activities including dance movements, free exercise movements, jogging, and exercising with steps, bands, and free weights, etc. (CSU/UC) All P.E. activities - 4 times for credit in any combination of levels.

### PE 92 Matwork Based On The Principles Of J.H. Pilates

2 units/2 hours laboratory. CR/NC option. This class is designed for individuals of all fitness levels, dancers and athletes who want to increase overall movement efficiency, correct muscle imbalances, increase strength especially of the deep muscles of the body's core and develop the mind/body connection during movement. Students will be introduced to principles of proper alignment, core and extremity strength, flexibility, balance and coordination through a series of mat exercises that have evolved from the original techniques developed by fitness pioneer, Joseph H. Pilates. This approach is gentle on the body, using gravity and body weights as resistance, yet is challenging to even the most advanced dancers and accomplished athletes. Deep breathing is used to facilitate smooth and efficient movement as well as to promote sufficient oxygen circulation and enhance kinesthetic awareness. (CSU/UC) All P.E. activities - 4 times for credit in any combination of levels.



## Combatives

### PE 12.1 Beginning Sabre

1 unit/2 hours laboratory. CR/NC option.

Student will learn techniques in beginning sabre fencing within the context of the tradition of arms including honor, sportsmanship and proper deportment. Precise movements, rules and judging bouts in a manner unique to sabre will be presented in a format in which the student learns the actions in the context of combat. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 12.2 Intermediate Sabre

1 unit/2 hours laboratory. CR/NC option. Recommended: PE 12.1.

Students will learn intermediate skills and techniques of sabre fencing. Students will learn precise movements, rules and judging bouts using competitive electric scoring. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 12.3 Advanced Sabre

1 unit/2 hours laboratory. CR/NC option. Recommended: PE 12.2.

Students will learn advanced skills and techniques of sabre fencing. Students will learn advanced strategies for competition, individual lesson skills, both giving and taking, and advanced refereeing skills in bouts using competitive electronic scoring. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 16.1 Beginning Fencing

(Formerly PE 132.1) 1-2 units/up to 4 hours laboratory. CR/NC option.

Fundamentals of French foil weapon with emphasis in basic footwork, attacks, parries, bladework, and bout experience. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 16.2 Intermediate Fencing

(Formerly PE 132.2) 1-2 units/up to 4 hours laboratory, 4 hours by arrangement. CR/NC option. Recommended: PE 16.1 (formerly PE 132.1) or equivalent.

Continuation of fundamentals with advanced use of foil from on guard position through attacks, parries, ripostes to combination of skills and match experiences. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 16.3 Advanced Foil

1 unit/2 hours laboratory. CR/NC option. Recommended: PE 16.2.

Students will learn advanced skills and techniques of foil fencing. Students will learn advanced strategies for competition, individual lesson skills, both giving and taking, and advanced refereeing skills in bouts using competitive electric scoring. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 17.1 Beginning Judo

1 unit/2 hours laboratory. CR/NC option.

A beginning self-defense course in Judo with emphasis on fundamentals of throwing and mat techniques. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 17.2 Intermediate Judo

1 unit/2 hours laboratory. CR/NC option. Recommended: PE 17.1 or equivalent.

A progressive course designed for the continuing Judo student. Focus on advanced techniques and history of Judo in America. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 17.3 Advanced Judo

1 unit/2 hours laboratory. CR/NC option. Recommended: PE 17.2 or equivalent.

A progressive course designed for the advanced Judo student. Competitive and self defense aspects of Judo, and increased fitness levels will be offered. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 18.1 Beginning Karate

(Formerly PE 135.1) 1-1.5 units/up to 3 hours laboratory. CR/NC option.

A beginning level self defense course that develops the body, mind and spirit through training that uses the arms and legs as weapons. Training includes Karate basics, kata and sparring as well as various conditioning exercises that develop speed, power, reaction and flexibility. Each course will emphasize a selected style including Japanese Shotokan, Okinawan Shito and Korean Taekwondo. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 18.2 Intermediate Karate

(Formerly PE 135.2) 1-1.5 units/up to 3 hours laboratory. CR/NC option. Recommended: PE 18.1 (formerly PE 135.1) or equivalent.

A intermediate level self defense course that develops the body, mind and spirit through training that uses the arms and legs as weapons. Training includes Karate basics, kata and sparring as well as various conditioning exercises that develop speed, power, reaction and flexibility. Each course will emphasize a selected style including Japanese Shotokan, Okinawan Shito and Korean Taekwondo. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 19.1 Beginning Wrestling

(Formerly PE 141.1) 1-2 units/up to 4 hours laboratory. CR/NC option.

A progressive program in wrestling designed to teach the basic skills of scholastic and freestyle wrestling. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 19.3 Advanced Wrestling

(Formerly PE 141.3) 1-2 units/up to 4 hours laboratory. CR/NC option. Recommended: PE 19.1 (formerly PE 141.1) or equivalent experience.

Progressive program in wrestling designed to teach

advanced skills of scholastic, freestyle and Greco-Roman wrestling. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 21.1 Beginning Dueling Sword (Epee)

1 unit/2 hours laboratory. CR/NC option.

Students will learn techniques in beginning dueling sword (epee) fencing within the context of the tradition of arms including honor, sportsmanship and proper deportment. Precise movements, rules and judging bouts in a manner unique to sabre will be presented in a format in which the student learns the action in the context of combat. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 21.3 Advanced Dueling Sword (Epee)

1 unit/2 hours laboratory. CR/NC option. Recommended: PE 21.2.

Students will learn intermediate skills and techniques of dueling sword (epee) fencing. Students will learn precise movements, rules and judging bouts using competitive electric scoring. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 78 Beginning Boxing

1-2 units/up to 4 hours laboratory. CR/NC option.

Beginning Boxing is a course designed to challenge/build cardiovascular efficiency, muscular strength, endurance, coordination, agility, balance, fitness, and flexibility. Students will be introduced to basic boxing fundamentals. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 81 Personal Safety & Self Defense

(Formerly PE 135.5) 1 unit/2 hours laboratory. CR/NC option.

Instruction in personal safety and assault prevention with an emphasis on physical and psychological aspects of personal defense. Physical defensive tactics and techniques are included. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

## Theory

### PE 20 Foundations of Physical Education & Sport

3 units/3 hours lecture. Grade only. Recommended:

Eligibility for English 100A or equiv.

Overview of the Physical Education and sport profession and allied fields of study. The prospective major will have an understanding of professional preparation requirements and education. (CSU/UC)

### PE 21A Sports Officiating

2-3 units/up to 2 hours lecture, 2 hours laboratory. Grade only.

Rules and interpretations; necessary mechanics to effectively officiate either an individual or team sport. Practical experience required in intramurals, interscholastic and intercollegiate athletics. (CSU/UC)

### PE 21B Sports Officiating

2-3 units/up to 2 hours lecture, 2 hours laboratory. Grade only.

Rules, rule interpretation; necessary mechanics to effectively officiate either an individual or team sport. Practical experience required in intramurals and intercollegiate athletics. (CSU/UC)

### PE 48 Selected Topics in Physical Education

1-3 units/up to 2 hours lecture, 2 hours laboratory. CR/NC option.

Intensive study or practice of a topic in Physical Education of current interest selected by the Physical Education Department and presented by an instructor specializing in that area. (CSU/UC)  
May be repeated with different topics.

### PE 49 Special Studies in Physical Education

1-3 units/up to 3 hours lecture, 6 hours by arrangement. Grade only. Prerequisite: Application to Department.

Recommended: Eligibility for English 100A or equivalent. Seminars or individual conferences by arrangement to provide for independent study and enriched academic experience. (CSU/UC)  
Independent study including 49 and 98 courses - 6 unit total.

### PE 70.1 Techniques & Theory of Basketball

(Formerly PE 51.1) 1-2 units/up to 2 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Introduction to the fundamental techniques and theories of basketball. Individual offensive and defensive strategies as well as team offensive and defensive strategies. (CSU/UC)

### PE 70.2 Basketball Lab

(Formerly PE 116.4) 1 unit/2 hours laboratory. CR/NC option. Prerequisite: PE 51A (formerly PE 51 and PE 51M) or PE 75A (formerly PE 75). Corequisite: PE 51A (formerly PE 51 and PE 51M) or PE 75A (formerly PE 75).

A field situation for the development of individual skills, team tactics, situational plays and modern offensive and defensive techniques. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 71.1 Theory & Analysis of Soccer

1-2 units/up to 2 hours lecture, 1 hour laboratory. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Explanation, organization and development of various systems of play in soccer. Analyzing coaching problems in offense and along with a review of technique films. Discussion and practical application of various approaches to technical and tactical training for modern soccer. (CSU/UC)

May be taken for a total of 4 units.

### PE 71.2 Soccer Lab

(Formerly PE 123.4) 1 unit/2 hours laboratory. CR/NC option. Prerequisite: PE 45.3 (formerly PE 123.3) or equivalent. Corequisite: Concurrent enrollment in varsity soccer.

A field situation for the development of individual skills, team tactics, dead-ball situations. Systems of play and modern offensive and defensive techniques. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 72 Introduction to Techniques of Athletic Training

3 units/3 hours lecture, 1 hour laboratory. Grade only. Recommended: Eligibility for English 100A or equivalent.

Procedures, methodologies, and techniques in the care and prevention of athletic injuries with hands on application of prophylactic taping, rehabilitation, conditioning, prevention of injury and therapeutic equipment. (CSU/UC)

### PE 73A Offensive Football Laboratory

(Formerly PE 121.1) 1-3 units/up to 1 hour lecture, 4 hours laboratory. CR/NC option. Recommended: Currently enrolled in intercollegiate football. Limits on enrollment: Zero enrollment.

Explanation, organization and development of various basic offensive football philosophies. Analyzing scouting reports, film reviews. Discussion and practical application of various physical training concepts. (CSU/UC)

May be taken for a total of 4 units.

### PE 73B Defensive Football Laboratory

(Formerly PE 121.2) 1-3 units/up to 1 hour lecture, 4 hours laboratory. CR/NC option. Recommended: Currently enrolled in intercollegiate football.

Explanation, organization and development of various basic defensive football theories. Analyzing scouting reports, film reviews. Discussion and practical application of various physical training concepts. (CSU/UC)

May be taken for a total of 4 units.

### PE 74A Competition, Motivation & the Athlete

(Formerly PE 24A) 3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Introduction to the psychological, motivational, competitive and physical dimensions of sport. Survey for the athlete and coach to facilitate maximum performance. No UC Credit if taken after Spring 1990. (CSU)

### PE 74B Competition, Motivation & the Athlete

(Formerly PE 24B) 3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Psychological dimensions of sport and athletic performance. Survey of sport, self and society. No UC credit if taken after Spring 1990. (CSU)

### PE 76 An Intro of Leader Prin, Team Build Dynamics and Coaching

(Formerly PE 48.20) 3 units/3 hours lecture. CR/NC option.

An introduction to successful leadership principles, skills and philosophies, coaching effectiveness and team-building dynamics. (CSU/UC)

### PE 77 Psychological Aspects of Sport

3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100A.

Foundation of psychological aspects of the subdiscipline of sports psychology. Theoretical and applied teaching skills will be covered in an interactive format. (CSU)

### PE 79 Softball Laboratory

1-3 units/up to 1 hour lecture, 4 hours laboratory. CR/NC option. Recommended: Currently enrolled in PE 46 (formerly PE 124.1) or PE 89. Limits on enrollment: Zero enrollment

This course is designed for intercollegiate athletes for the development of individual skills and team concepts through film analysis, classroom lecture and practical application. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 82 Teaching Aides

1-2 units/up to 4 hours laboratory. CR/NC option. Recommended: Engl 100A or Equivalent.

Teaching techniques for physical education tutors. Student will assist faculty in a classroom environment for a semester. (CSU/UC)

May be taken for a total of 4 units.

### PE 84.1 Principles and Applications of Wilderness Injuries

(Formerly PE 48.04) 2 units/16 hours lecture, 30 hours laboratory for 1 week. CR/NC option.

The course will provide the student with a unique opportunity and exposure to study and identify wilderness injuries common to back country travel. Emphasis will be placed on management of acute injuries sustained in a wilderness environment. (CSU/UC)

### PE 85.1 Application of Sports Medicine (Athletic Training) Principle

(Formerly PE 48.01) 2 units/1 hour lecture, 2 hours laboratory. CR/NC option. Recommended: Eligibility for English 100A or equiv.

This course will provide the student with a lab setting & the opportunity to apply the principles of Athletic Training. It will include pre- & post- practice techniques, injury management methodologies and pre- & post- competition procedures. This course partially fulfills the requisites and requirements of the National Athletic Trainers Association Certification. (CSU/UC)

May be taken for a total of 8 units.

### PE 94 Fitness/Health Assessment

1 unit/2 hours laboratory. CR/NC option.

An individual functional fitness assessment for health and fitness components. Students receive test interpretation and personal exercise program guidelines. (CSU/UC)

May be taken for a total of 4 units.

### PE 95 Fitness for Living

2 units/1 hour lecture, 3 hours laboratory. Grade only. Recommended: Eligibility for English 100B or equivalent.

Knowledge of physical fitness, benefits, training principles, appropriate exercise and health practices with application to lifelong health and exercise habits. Includes lecture, laboratory, exercise, and physical fitness tests. (CSU/UC)

### PE 96 Volleyball Laboratory

1-3 units/up to 1 hour lecture, 4 hours laboratory. CR/NC option. Recommended: Currently enrolled in Advanced Volleyball or Intercollegiate Volleyball. Limits on enrollment: Zero enrollment

This course is designed for intercollegiate athletes for the development of individual skills and team concepts through film analysis, classroom lecture and practical application. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

## PE 97 Baseball Laboratory

1-3 units/up to 1 hour lecture, 4 hours laboratory. CR/NC option. Recommended: Currently enrolled in Advanced Baseball or Intercollegiate Baseball. Limits on enrollment: Zero enrollment

This course is designed for intercollegiate athletes for the development of individual skills and team concepts through film analysis, classroom lecture and practical application. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

## Dance

### PE 22 Introduction to Dance Movement

(Formerly PE 145) 1-2 units/up to 4 hours laboratory. CR/NC option.

Introductory class of basic dance movements designed for the student with no prior knowledge of dance. Recommended as a prerequisite for all dance and gymnastics classes. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 23 Rhythmic Analysis

1 unit/2 hours laboratory. CR/NC option. Recommended: Completion of PE 22.

Study of the form and dynamics of rhythm and tempo. Exploration of rhythmic devices for application to choreography. Basic skills of dance accompaniment. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 25.1 Dance Composition I

(Formerly PE 25) 1-2 units/up to 1 hour lecture, 2 hours laboratory. CR/NC option. Recommended: Completion of PE 22 (formerly PE 145), PE 27.1 (formerly PE 146.1), and PE 28.1 (formerly PE 147.1), or equivalent.

Introduction to the study and application of basic techniques of solo and group dance compositions. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 25.2 Dance Composition II

2 units/1 hour lecture, 2 hours laboratory. CR/NC option. Recommended: Completion of PE 28.2.

Study and application of more advanced techniques of choreography with emphasis on more complex choreographic problems including dance compositions for trios, quartets and larger groups. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 26.1 Introduction to Folk Dance

(Formerly PE 145.1) 1 unit/2 hours laboratory. CR/NC option. Recommended: Completion of PE 22.

The study of basic rhythms, movements, and step patterns while learning a beginning folk dance repertoire. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 27.1 Beginning Ballet

(Formerly PE 146.1) 1-2 units/up to 4 hours laboratory. CR/NC option. Recommended: PE 22 (formerly PE 145) or equivalent.

Basic techniques and principles of ballet. (CSU/UC)  
All P.E. activities - 4 times for credit in any combination of levels.

### PE 27.2 Intermediate Ballet

(Formerly PE 146.2) 1-2 units/up to 4 hours laboratory. CR/NC option. Recommended: PE 27.1 (formerly PE 146.1) or equivalent.

Continuation of fundamentals of technique and principles of ballet. Emphasis on body knowledge, analysis of movement and physical development as elements of the art form. May include a possible performance in a dance concert. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 28.1 Beginning Modern Dance

(Formerly PE 147.1) 1-2 units/up to 4 hours laboratory. CR/NC option. Recommended: Completion of PE 22.

Modern dance is a class in expressive dance covering basic dance technique, movement sequences, improvisation and composition. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 28.2 Intermediate Modern Dance

(Formerly PE 147.2) 1-2 units/up to 4 hours laboratory. CR/NC option. Recommended: Completion of PE 28.1.

A class for dance students who wish to continue their dance experience through more technically challenging exercises, increasing complexity of movement sequences, further exploration of improvisation and composition, and by focusing on performance skills. May include a possible performance in a dance concert. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 29.1 Beginning Tap Dance

(Formerly PE 148.1) 1 unit/2 hours laboratory. CR/NC option. Recommended: Completion of PE 22.

Beginning course in tap dance: basic terminology, skills, fundamentals and tap dance combinations. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 29.2 Intermediate Tap Dance

(Formerly PE 148.2) 1 unit/2 hours laboratory. CR/NC option. Recommended: Completion of PE 29.1.

Intermediate course in tap dance for students wishing to work towards greater proficiency in performing basic steps and combinations. Beginning exercises in tap dance composition. May include a possible performance in a dance concert. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 30.1A Beginning Jazz Dance I

(Formerly PE 30.1) 1-1.5 units/up to 3 hours laboratory. CR/NC option. Recommended: PE 22 (formerly PE 145) or equivalent.

Introduction to the study of jazz dance techniques including warm-up exercises, isolations, floor stretches and strengthening. This would also include

dance technique, locomotor jazz steps across the floor and short jazz dance combinations. (CSU/UC)  
All P.E. activities - 4 times for credit in any combination of levels.

### PE 30.1B Beginning Dance Jazz II

1-1.5 units/up to 3 hours laboratory. CR/NC option. Recommended: PE 22 (formerly PE 145) and PE 30.1A (formerly PE 30.1, PE 149.1).

For the beginning jazz dancer continuing their introduction to the study of jazz dance techniques. These include warm-up exercises, isolations, floor stretches and strengthening. This would also include dance technique, locomotor jazz steps across the floor and short jazz dance combinations. (CSU/UC)  
All P.E. activities - 4 times for credit in any combination of levels.

### PE 30.2 Intermediate Jazz Dance

(Formerly PE 149.2) 1-2 units/up to 4 hours laboratory. CR/NC option. Recommended: Completion of PE 30.1A, and completion of PE 27.1.

For students who wish to continue their jazz experience and broaden their scope in technique including warm-up exercises, isolations, intermediate footwork and jazz movements, intermediate jazz techniques, more intricate jazz dance combinations and compositions. May include a possible performance in a dance concert. (CSU/UC)  
All P.E. activities - 4 times for credit in any combination of levels.

### PE 30.3 Advanced Jazz Dance

1-2 units/up to 4 hours laboratory. CR/NC option. Recommended: PE 27.2 (formerly PE 146.2) and PE 30.2 (formerly PE 149.2).

This course is for serious and skilled jazz dance students who wish to intensify and continue their dance experience. Emphasis will be placed on broadening the dancers' scope with regard to advanced concepts of alignment and placement, increased sight-reading of movement, and longer, more complicated dance combinations presented at a faster pace. Class will include warm-up exercises, isolations, advanced footwork and multiple turns, extensive development of neuromuscular coordination and performance of advanced dance combinations. Selected students may have the opportunity to perform in the dance concert. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 31.2 Intermediate Dance Production

(Formerly PE 151.2) 1-2 units/up to 4 hours laboratory. CR/NC option. Recommended: Completion of all of the following courses: PE 25.1 (formerly PE 25, PE 144), PE 27.1 (formerly PE 146.1), PE 28.1 (formerly PE 147.1), and PE 30.1A (formerly PE 30.1, PE 149.1).

A class for dance students to develop performance skills and participate in a dance concert. (CSU/UC)  
All P.E. activities - 4 times for credit in any combination of levels.

### PE 31.3 Advanced Dance Production

(Formerly PE 151.3) 1-2 units/up to 4 hours laboratory. CR/NC option. Recommended: Completion of PE 25.1, and completion of PE 31.2.

A dance class for students to develop their own choreography and perform their compositions in the concert or studio concert. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 31.4 Advanced Dance Ensemble

1-2 units/up to 4 hours laboratory. CR/NC option.

Prerequisite: Completion of PE 27.2 (formerly PE 146.2) or PE 28.2 (formerly PE 147.2) or PE 30.2 (formerly PE 149.2) with grade of "C" or better. Recommended: Completion of or concurrent enrollment in PE 25.1 (formerly PE 25, PE 144) or equivalent.

The Advanced Dance Ensemble is designed to provide the student with practical performing and possibly teaching experience. The students will develop their own choreography and perform both student and instructor compositions in a variety of venues within the college and community setting. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 32.1 Beginning Ballroom Dance

1 unit/2 hours laboratory. CR/NC option. Recommended: PE 22 (formerly PE 145) or equivalent.

This course establishes a solid foundation in social dance technique with an introduction to the basic skills of the following ballroom dances: foxtrot, waltz, swing, and cha cha. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 32.2 Intermediate Ballroom Dance

1 unit/2 hours laboratory. CR/NC option. Recommended: PE 32.1.

A continuation of the fundamentals of social ballroom dance. Presentation of skills, technique and step patterns of greater complexity in foxtrot, waltz, cha cha and swing. Introduction of the basis skills and patterns of rumba, samba, tango, and Viennese waltz. May include performance in a dance concert. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 40 Survey of Dance History

3 units/3 hours lecture. Grade only. Recommended: Eligibility for English 100A or equiv.

Introduction to the world of dance. Survey of its history, its cultural and religious significance and its comparison to other (in terms of related) forms of expression in primitive society, ancient cultures, medieval and Renaissance Europe. Development of ballet, modern dance and contemporary forms, and the relationship of their elements of style and composition to those of concurrent art forms of music, art, literature. (CSU/UC)

AA/AS area E; CSU area C1; IGETC area 3A

### PE 58 Intermediate Lyrical Jazz

1-2 units/up to 2 hours laboratory. CR/NC option.

Recommended: PE 27.1 (formerly PE 146.1), PE 28.1 (formerly PE 147.1) and PE 30.1A (formerly PE 30.1, PE 149.1).

The lyrical style of jazz draws from ballet and

modern techniques while maintaining the attitude and style of jazz dance. This class will follow a jazz dance format including center warm-ups, across the floor sequences and combinations, with the choreographic focus on interpretation of the mood of the music or the lyrics of songs. May include a possible performance in a dance concert. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 59.1 Beginning Hip Hop/Funk

1-2 units/up to 4 hours laboratory. CR/NC option.

Recommended: PE 22 (formerly PE 145) or equivalent.

This course will introduce students to the fundamentals of the hip hop/funk dance style. The students will learn the fundamentals of today's dances that are commonly used in music videos. Classes will include warm-up exercises, isolations, floor stretches and strengthening specific to the hop hop/funk style of dance. This will also include locomotor movements practiced across the floor and short dance combinations. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 59.2 Intermediate Hip Hop/Funk

(Formerly PE 48.7) 1-2 units/up to 4 hours laboratory. CR/NC option. Recommended: PE 59.1.

This course will allow students to continue their exposure and participation with hip hop/funk experiences on an intermediate level, incorporating intermediate styles and choreography which are most commonly used in music videos. The students will broaden their scope of intermediate techniques. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 60 Dance Improvisation

1-2 units/up to 4 hours lecture, 2 hours laboratory. CR/NC option. Recommended: PE 28.1 (formerly PE 147.1).

Dance Improvisation is a dance class for dancers at all levels of technique that focuses on exploration of the aesthetic dance elements of space, time and energy through guided individual movement experiences and structured duet and group improvisations. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 83 International Folk Dance

(Formerly PE 26.2) 1 unit/2 hours laboratory. CR/NC option. Recommended: Completion of PE 26.1.

The study of folk dances representing ethnic cultures from around the world; ability to assess differences between the dances. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 86 Balkan Folk Dance

(Formerly PE 26.3) 1 unit/2 hours laboratory. CR/NC option. Recommended: Completion of PE 26.1.

The study of folk dances with complex rhythms from the Balkans with emphasis on differentiating regional folk dance styles. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 87 Greek Folk Dance

(Formerly PE 26.4) 1 unit/2 hours laboratory. CR/NC option. Recommended: Completion of PE 26.1.

Designed for students to learn a repertoire of folk dances from Greece. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 88 Israeli and Middle Eastern Dance

(Formerly PE 26.5) 1 unit/2 hours laboratory. CR/NC option. Recommended: Completion of PE 26.1.

A class designed to teach folk dance elements unique to the different ethnic groups in Israel and the Middle East. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

## Sport

### PE 24.1 Pickleball

1 unit/2 hours laboratory. CR/NC option.

The course will emphasize the skills, techniques, game strategies and rules that make up the game of Pickleball. Students will receive test interpretation and competition in singles and doubles play. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 33.1 Beginning Archery

(Formerly PE 155.1) 1 unit/2 hours laboratory. CR/NC option.

Elective physical education course providing student with an introduction to archery fundamentals; designed to meet skill, comprehension and attitude objectives. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 33.2 Intermediate Archery

(Formerly PE 155.2) 1 unit/2 hours laboratory. CR/NC option. Recommended: PE 33.1 (formerly PE 155.1) or equivalent.

Designed to fulfill the desires of those students who wish to pursue the art and skills of archery beyond those offered in a beginning class. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 34.1 Beginning Badminton

(Formerly PE 159.1) 1-2 units/up to 4 hours laboratory. CR/NC option.

Introduction to the sport activity of badminton with emphasis on fundamental skills and strategies as well as court etiquette. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 34.2 Intermediate Badminton

(Formerly PE 159.2) 1-2 units/up to 4 hours laboratory. CR/NC option. Recommended: PE 34.1 (formerly PE 159.1) or equivalent.

Designed to offer students the opportunity to further their mastery of badminton with emphasis on refinement of skills and strategy through both singles and doubles play. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 34.3 Advanced Badminton

(Formerly PE 159.3) 1-2 units/up to 4 hours laboratory. CR/NC option. Recommended: PE 34.2 (formerly PE 159.2) or equivalent.

Advanced exposure to the sport activity of badminton with emphasis on refinement and strategic use of skills through competitive play. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 35.1 Beginning Golf

(Formerly PE 169.1) 1 unit/2 hours laboratory. CR/NC option.

Introduction to the game of golf, its fundamental skills, strategies, rules and etiquette. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 35.2 Intermediate Golf

(Formerly PE 169.2) 1 unit/2 hours laboratory. CR/NC option. Recommended: PE 35.1 (formerly PE 169.1) or equivalent.

Designed for the intermediate student to develop their skills by use of concentrated drills with (mid and long) irons and woods; challenge shots. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 35.3 Advanced Golf

(Formerly PE 169.3) 1 unit/3 hours laboratory for 10 weeks. CR/NC option. Recommended: Preparation PE 35.2 (formerly PE 169.2) or equivalent.

Advanced skills of golf assimilating practical situations of practice that would occur on a golf course. Short game: 80-60-40 yd wedge shots, putting/chipping/pitch sand bunker shots (green side up and down). Driving range work, all clubs, mental aspects of course management, and goal cards. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 36.1 Beginning Gymnastics

(Formerly PE 171.1) 1-2 units/up to 4 hours laboratory. CR/NC option. Recommended: PE 22 (formerly PE 145) or equivalent.

Introduction to fundamental gymnastics skills on floor exercise, uneven & parallel bars, balance beam, horizontal bar, vaulting & rings. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 36.2 Intermediate Gymnastics

(Formerly PE 171.2) 1-2 units/up to 4 hours laboratory. CR/NC option. Recommended: PE 36.1 (formerly PE 171.1) or equivalent.

For students who wish to continue their gymnastics experience and expand their knowledge and ability through learning more difficult skills. The students will incorporate these skills into routines. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 36.3 Advanced Gymnastics

(Formerly PE 171.3) 1-2 units/up to 4 hours laboratory. CR/NC option. Recommended: PE 36.2 (formerly PE 171.2) or equivalent.

Designed to develop gymnastics skills in floor exercise and apparatus and choreographing these

skills into optional gymnastics routines. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 37.1 Beginning Tennis

(Formerly PE 185.1) 1-2 units/up to 4 hours laboratory. CR/NC option.

An elective physical education course designed to provide the student with an introduction of fundamental skills involved in the game of tennis. Also to teach the rules and basic strategies related to game play. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 37.2 Intermediate Tennis

(Formerly PE 185.2) 1-2 units/up to 4 hours laboratory. CR/NC option. Recommended: PE 37.1 (formerly PE 185.1) or equivalent.

Advanced skills and team play. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 37.3 Advanced Tennis

(Formerly PE 185.3) 1-2 units/up to 4 hours laboratory. CR/NC option. Recommended: PE 37.2 (formerly PE 185.2) or equivalent.

Advanced technique of fundamentals, tactics and strategies associated with competitive tennis. Special emphasis placed on drills and competitive play situations. Tournament play optional. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 38.1 Beginning Track & Field

(Formerly PE 187.1) 1 unit/2 hours laboratory. CR/NC option.

Fundamentals of running, hurdling, jumping and throwing. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 38.2 Intermediate Track & Field

(Formerly PE 187.2) 1 unit/2 hours laboratory. CR/NC option. Recommended: PE 38.1 (formerly PE 187.1) or equivalent.

In-depth study of running, jumping, throwing and hurdling emphasizing the latest techniques and training methods. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 38.3 Advanced Track & Field

(Formerly PE 187.3) 1-2 units/up to 4 hours laboratory. CR/NC option. Recommended: PE 38.2 (formerly PE 187.2) or equivalent.

Progressive program designed to teach advanced techniques in running, jumping, throwing and hurdling. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 39.1 Beginning Volleyball

(Formerly PE 48.1) 1-2 units/up to 4 hours laboratory. CR/NC option.

Presentation of basic volleyball fundamentals, participation in match play and rules for the game. Basic individual skills, team techniques, and game strategies will be emphasized. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 39.2 Intermediate Volleyball

(Formerly PE 48.2) 1 unit/2 hours laboratory. CR/NC option. Recommended: Preparation PE 39.1 (formerly PE 48.1, PE 128.1) or equivalent.

Presentation of intermediate level volleyball skills, participation in match play, and a review of the rules of the game. Improvement of individual skills, team techniques, and game strategies will be emphasized. Enjoyment of the sport of volleyball. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 39.3 Advanced Volleyball

(Formerly PE 48.3) 1-2 units/up to 4 hours laboratory. CR/NC option. Recommended: Preparation PE 39.1 (formerly PE 48.1, PE 128.1) or equivalent.

Theory and practice of power volleyball. Advanced techniques of tactics in tournament competition.

Drills and practice, intensive review of rules;

tournament play optional. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 41.1 Beginning Baseball

(Formerly PE 115.1) 1 unit/2 hours laboratory. CR/NC option.

Develops beginning individual and group skills and techniques of baseball. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 41.2 Intermediate Baseball

(Formerly PE 115.2) 1-2 units/up to 4 hours laboratory. CR/NC option.

Develops intermediate individual and group skills and concepts of team play. Emphasis on participation through drills and game play. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 41.3 Advanced Baseball

(Formerly PE 115.3) 1-2 units/up to 4 hours laboratory. CR/NC option.

A progressive program of advanced techniques and strategies in baseball. Specialized time devoted to videotaping and film analysis for individual development. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 42.1 Beginning Basketball

(Formerly PE 116.1) 1-2 units/up to 4 hours laboratory. CR/NC option.

Introductory techniques of basketball. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 42.2 Intermediate Basketball

(Formerly PE 116.2) 1-2 units/up to 4 hours laboratory. CR/NC option. Recommended: Completion of PE 42.1.

Designed to develop intermediate individual skills and concepts of team play. Emphasis on participation through drills and game play. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 42.3 Advanced Basketball

(Formerly PE 116.3) 1-2 units/up to 4 hours laboratory. CR/NC option. Prerequisite: PE 42.2 (formerly PE 116.2) or equivalent.

In-depth lecture and laboratory study of individual offensive techniques, defensive skills and game strategies of women's basketball. Serves as technique course in coaching for physical education or recreation majors and prepares potential varsity players physically and mentally for intercollegiate competition. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 43 Flag Football

(Formerly PE 120) 1 unit/2 hours laboratory. CR/NC option. Touch football with emphasis on team play. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 44 Football Passing Game

(Formerly PE 121) 1 unit/2 hours laboratory. CR/NC option. Fundamentals of the football passing and kicking game, both from an offensive and defensive position. Types of pass action, defense coverages and kicking fundamentals. (CSU/UC)

May be taken for a total of 4 units.

### PE 45.1 Beginning Soccer

(Formerly PE 123.1) 1-2 units/up to 4 hours laboratory. CR/NC option.

Laws of the game, team strategy, as well as fundamental skill necessary to play the game. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 45.2 Intermediate Soccer

(Formerly PE 123.2) 1-2 units/up to 4 hours laboratory. CR/NC option.

A basic understanding of the game of soccer, including the laws of the game, fundamental skills, team tactics and positional coaching necessary to play the game. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 45.3 Advanced Soccer

(Formerly PE 123.3) 1-2 units/up to 4 hours laboratory. CR/NC option. Recommended: PE 45.2 (formerly PE 123.2) or equivalent.

A complete knowledge of the game of soccer, including excellent physical conditioning and skills, along with a thorough knowledge of team tactics and systems of play. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 46 Softball

(Formerly PE 124.1) 1 unit/2 hours laboratory. CR/NC option.

Instructional drills combined with class competition to develop individual skills as well as team offense and defense. Rules and strategies of game comparing slow and fast pitch. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

### PE 47 Mini Soccer

(Formerly PE 126) 1-2 units/up to 4 hours laboratory. CR/NC option.

Skills and techniques related to mini (indoor) soccer. (CSU/UC)

All P.E. activities - 4 times for credit in any combination of levels.

## Athletics (men)

### PE 50 Men's Varsity Baseball

2 units/10 hours laboratory. CR/NC option. Prerequisite: Health and Safety.

Practice for and participation in intercollegiate competition, emphasizing skills, fundamentals and strategies. (CSU/UC)

May be taken for a total of 4 times.

### PE 51A Men's Varsity Basketball

(Formerly PE 51) 1 unit/10 hours laboratory for 9 weeks. CR/NC option. Prerequisite: Health and Safety.

Practice for and participation in intercollegiate competition, emphasizing skills, fundamentals and strategies. (CSU/UC)

May be taken for a total of 4 times.

### PE 51B Men's Varsity Basketball

1 unit/10 hours laboratory for 9 weeks. CR/NC option. Prerequisite: Health and Safety.

Practice for and participation in intercollegiate competition, emphasizing skills, fundamentals and strategies. (CSU/UC)

May be taken for a total of 4 times.

### PE 52 Men's Varsity Cross Country

2 units/10 hours laboratory. CR/NC option. Prerequisite: Health and Safety.

Practice for and participation in intercollegiate competition, emphasizing skills, fundamentals and strategies. (CSU/UC)

May be taken for a total of 4 times.

### PE 53 Varsity Football

2 units/10 hours laboratory. CR/NC option. Prerequisite: Health and Safety.

Practice for and participation in intercollegiate competition, emphasizing skills, fundamentals and strategies. (CSU/UC)

May be taken for a total of 4 times.

### PE 54 Varsity Golf

2 units/10 hours laboratory. CR/NC option. Prerequisite: Health and Safety.

Practice for and participation in intercollegiate golf matches with the development of individual skills and match strategy. (CSU/UC)

May be taken for a total of 4 times.

### PE 62 Men's Varsity Soccer

2 units/10 hours laboratory. CR/NC option. Prerequisite: Health and Safety.

Practice for and participation in intercollegiate competition, emphasizing skills, fundamentals and strategies. (CSU/UC)

May be taken for a total of 4 times.

### PE 64 Men's Varsity Swimming & Diving

2 units/10 hours laboratory. CR/NC option. Prerequisite: Health and Safety.

Practice for and participation in intercollegiate competition, emphasizing skills, fundamentals and strategies. (CSU/UC)

May be taken for a total of 4 times.

### PE 65 Men's Varsity Tennis

2 units/10 hours laboratory. CR/NC option. Prerequisite: Health and Safety.

Practice for and participation in intercollegiate competition, emphasizing skills, fundamentals and strategies. (CSU/UC)

May be taken for a total of 4 times.

### PE 66 Men's Varsity Track & Field

2 units/10 hours laboratory. CR/NC option. Prerequisite: Health and Safety.

Practice for and participation in intercollegiate competition, emphasizing skills, fundamentals and strategies. (CSU/UC)

May be taken for a total of 4 times.

### PE 68 Men's Varsity Water Polo

2 units/10 hours laboratory. CR/NC option. Prerequisite: Health and Safety.

Practice for and participation in intercollegiate competition, emphasizing skills, fundamentals and strategies. (CSU/UC)

May be taken for a total of 4 times.

### PE 69 Varsity Wrestling

2 units/10 hours laboratory. CR/NC option. Prerequisite: Health and Safety.

Practice for and participate in intercollegiate competition, emphasizing skills, fundamentals and strategies. (CSU/UC)

May be taken for a total of 4 times.

## Athletics (women)

### PE 55 Women's Varsity Cross Country

2 units/10 hours laboratory. CR/NC option. Prerequisite: Health and Safety.

Practice for and participation in intercollegiate competition, emphasizing skills, fundamentals and strategies. (CSU/UC)

May be taken for a total of 4 times.

### PE 57 Women's Varsity Water Polo

2 units/10 hours laboratory. CR/NC option. Prerequisite: Health and Safety.

Practice for and participation in intercollegiate competition, emphasizing skills, fundamentals and strategies. (CSU/UC)

May be taken for a total of 4 times.

### PE 63 Women's Varsity Soccer

2 units/10 hours laboratory. CR/NC option. Prerequisite: Health and Safety.

Practice for and participation in intercollegiate competition, emphasizing skills, fundamentals and strategies. (CSU/UC)

May be taken for a total of 4 times.

### PE 67 Women's Varsity Track & Field

2 units/10 hours laboratory. CR/NC option. Prerequisite: Health and Safety.

Practice for and participation in intercollegiate competition, emphasizing skills, fundamentals and strategies. (CSU/UC)

May be taken for a total of 4 times.

### PE 75A Women's Varsity Basketball

(Formerly PE 75) 1 unit/10 hours laboratory for 9 weeks. CR/NC option. Prerequisite: High School Interscholastic participation or advanced level skills.

Practice for and participation in intercollegiate competition, emphasizing skills, fundamentals and strategies (CSU/UC)

May be taken for a total of 4 times.

### PE 75B Women's Varsity Basketball

1 unit/10 hours laboratory for 9 weeks. CR/NC option. Prerequisite: High School Interscholastic participation or advanced level skills.

Practice for and participation in intercollegiate competition, emphasizing skills, fundamentals and strategies (CSU/UC)

May be taken for a total of 4 times.

### PE 89 Varsity Softball

2 units/10 hours laboratory. CR/NC option. Prerequisite: Health and Safety.

Practice for and participation in intercollegiate competition, emphasizing skills, fundamentals and strategies. (CSU/UC)

May be taken for a total of 4 times.

### PE 90 Women's Varsity Swimming & Diving

2 units/10 hours laboratory. CR/NC option. Prerequisite: Health and Safety.

Practice for and participation in intercollegiate competition, emphasizing skills, fundamentals and strategies. (CSU/UC)

May be taken for a total of 4 times.

### PE 91 Women's Varsity Tennis

2 units/10 hours laboratory. CR/NC option. Prerequisite: Health and Safety.

Practice for and participation in intercollegiate competition, emphasizing skills, fundamentals and strategies. (CSU/UC)

May be taken for a total of 4 times.

### PE 93 Varsity Volleyball

2 units/10 hours laboratory. CR/NC option. Prerequisite: Health and Safety.

Practice for and participation in intercollegiate competition. Development of individual skills, game strategies and systems, and team interaction will be emphasized. (CSU/UC)

May be taken for a total of 4 times.

## Physical Science

### PHYS 1 Laboratory Physical Science

4 units/3 hours lecture, 3 hours laboratory. CR/NC option. Recommended: Eligibility for Engl 100B or equivalent.

A descriptive introduction into many physical science disciplines integrated with laboratory analysis.

Topics include electromagnetic, gravitational, and nuclear energy, optics, chemistry, astronomy, meteorology, and dinosaurs. This course is designed to meet the career demands of those in elementary and secondary education which require a broad-based, descriptive science background. (Not open for students who have completed Physical Science 10) (CSU/UC)

AA/AS area C; CSU areas B1, B3; IGETC area 5A

### PHYS 10 Introduction to Physical Science

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

A descriptive, non-mathematical introduction into many of the major fields of study existing within the physical sciences. Topics include electromagnetic, gravitational, and nuclear energy, the atom, matter in motion, planetary motion, planets and stars, volcanoes and earthquakes, clouds and weather, and dinosaurs. This course is designed to meet the career demands of those pursuing a career in elementary education which requires a descriptive, broad-based science background. (Not open to students who have completed Physical Science 1) (CSU/UC)

AA/AS area C; CSU area B1; IGETC area 5B

## Physics

### PHYS 1 Introduction to Physics Problem Solving

3 units/3 hours lecture. CR/NC option. Prerequisite: Math 155. Credit will not be granted to students who have completed Phys 2A, Phys 4A, or equivalent.

An introduction to some basic concepts in physics with emphasis on the development of problem solving skills. This course is designed to assist students in preparing for enrollment in Physics 2A or Physics 4A. (CSU/UC)

AA/AS area B

### PHYS 2A General Physics Lecture

3 units/3 hours lecture. CR/NC option. Prerequisite: Math 27 (formerly Math 57) or equivalent with grade of "C" or better and not open to students enrolled in or who have completed Phys 4A or 4B. Recommended: Phys 1 or high school physics.

Translational and rotational motion, statics, conservation of momentum and energy, oscillations, mechanical waves and sound, fluid mechanics, heat and thermodynamics. C/B1 (CAN PHYS 2) (CSU/UC)

AA/AS area C; CSU area B1; IGETC area 5A; PHYS 2A + PHYS 3A = CAN PHYS 2; PHYS 2A + PHYS 2B + PHYS 3A + PHYS 3B = CAN PHYS SEQ A

### PHYS 2B General Physics Lecture

3 units/3 hours lecture. CR/NC option. Prerequisite: Phys 2A and not open to students enrolled in or who have completed Phys 4C.

Electricity and magnetism, light, atomic and nuclear physics. (CSU/UC)

AA/AS area C; CSU area B1; IGETC area 5A; PHYS 2B + PHYS 3B = CAN PHYS 4; PHYS 2A + PHYS 2B + PHYS 3A + PHYS 3B = CAN PHYS SEQ A

### PHYS 3A General Physics Lab

1 unit/3 hours laboratory. CR/NC option. Prerequisite: Phys 2A completed or in progress.

Laboratory experiments to accompany Physics 2A. (CSU/UC)

CSU areas B1, B3; IGETC area 5A; PHYS 2A + PHYS 3A = CAN PHYS 2; PHYS 2A + PHYS 2B + PHYS 3A + PHYS 3B = CAN PHYS SEQ A

### PHYS 3B General Physics Lab

1 unit/3 hours laboratory. CR/NC option. Prerequisite: Phys 2B completed or in progress.

Laboratory experiments to accompany Physics 2B. (CSU/UC)

CSU areas B1, B3; IGETC area 5A; PHYS 2B + PHYS 3B = CAN PHYS 4; PHYS 2A + PHYS 2B + PHYS 3A + PHYS 3B = CAN PHYS SEQ A

### PHYS 4A Physics for Scientists & Engineers

4 units/3 hours lecture, 3 hours laboratory, 1 hour by arrangement. Grade only. Prerequisite: Completion of or concurrent enrollment in MATH 1B. Recommended: One year of high school physics or Phys 1.

Measurement, vectors, translational and rotational motion, work and energy, conservation of energy and momentum, static equilibrium. (CSU/UC)

AA/AS area C; CSU areas B1, B3; IGETC area 5A; CAN PHYS 8

### PHYS 4B Physics for Scientists & Engineers

4 units/3 hours lecture, 3 hours laboratory. Grade only. Prerequisite: Phys 4A with a grade of "C" or better, Math 2A completed or in progress.

Heat, kinetic theory, thermodynamics, mechanical waves and sound, geometrical optics, interference, diffraction and polarization of light. (CSU/UC)

AA/AS area C; CSU areas B1, B3; IGETC area 5A

### PHYS 4C Physics for Scientists & Engineers

4 units/3 hours lecture, 3 hours laboratory. Grade only. Prerequisite: Phys 4A with a grade of "C" or better, Math 2A completed or in progress.

Electricity and magnetism. (CSU/UC)

AA/AS area C; CSU areas B1, B3; IGETC area 5A; CAN PHYS 12

### PHYS 4D Physics for Scientists & Engineers

2 units/2 hours lecture. Grade only. Prerequisite: Phys 4B with a grade of "C" or better, Math 2B completed or in progress.

Special relativity, atomic structure and quantum physics, nuclear processes, high energy physics. (CSU/UC)

CSU area B1

### PHYS 10 Descriptive Introduction

3 units/3 hours lecture. CR/NC option. Prerequisite: Math 150B or equivalent. Recommended: Eligibility for Engl 100A or equivalent.

Introductory survey of principles of classical and modern physics emphasizing basic concepts of physics while including some problem solving using elementary algebra. (CSU/UC)

AA/AS area C; CSU area B1; IGETC area 5A

## PHYS 10L Introduction to Physics Lab

1 unit/3 hours laboratory. CR/NC option. Prerequisite: Phys 10 completed or in progress.

Experimental laboratory to accompany Physics 10. (CSU/UC)

CSU areas B1, B3; IGETC area 5A

## PHYS 49 Special Studies in Physics

1-3 units/up to 9 hours by arrangement. Grade only.

Prerequisite: Application to department

Seminars and individual conferences by arrangement to provide for independent study and enriched academic experience. (CSU/UC)

Independent study including 49 and 98 courses - 6 unit total.

## Physiology

### PHYSIO 1 Human Physiology

5 units/3 hours lecture, 6 hours laboratory. CR/NC option. Prerequisite: Completion of CHEM 60 or higher (V6), and completion of BIO 10 or higher (V7).

Mechanisms underlying normal body functions from cells to systems such as neuromuscular, cardiovascular, digestive, renal, respiratory and reproductive. Selected examples of disturbances to the normal functioning of these systems will be considered and related to homeostatic mechanisms. Laboratory projects are conducted and designed to illustrate major principles of the aforementioned systems. (CSU/UC)

AA/AS area C; CSU areas B2, B3; IGETC area 5B; CAN BIOL 12; ANAT 1 + PHYSIO 1 = CAN BIOL SEQ B

### PHYSIO 50 Exercise, Fitness and Wellness

4 units/3 hours lecture, 3 hours laboratory. CR/NC option.

For anyone who wants to develop a deeper understanding of exercise, fitness and wellness, to know how and why the body responds to exercises and how best to exercise to achieve fitness and optimal health. Also of interest to students seeking certificates in aerobics, dance, massage therapy, personal training and physical therapy assistant. Topics include: muscular strength, aerobic fitness, weight control, nutrition and cardiovascular disease. Laboratory exercises include the determination of cardiovascular fitness, percent body fat, blood pressure, serum glucose and cholesterol. These topics will be explored to acquire the knowledge to design individual exercise, health and wellness programs. (CSU)

CSU area E

### PHYSIO 58 Human Physiology: Health and Disease

4 units/3 hours lecture, 3 hours laboratory. CR/NC option. Recommended: Completion of Chem 60. Eligibility for Engl 1A.

Designed for the beginning student preparing for health-related fields, especially vocational nursing. This course is particularly suitable for those with a general interest in the function of the human body or perhaps specific but limited interest such as required

of acupuncture or massage therapy. The course focuses on the mechanisms of body function, organized around the central theme of homeostasis. In contrast to Physiology 1, this course will minimize the biochemical and quantitative details but will nevertheless provide scientifically sound coverage of fundamental concepts of physiology. Students will compare health and disease and health care management through physical fitness and wellness. (CSU)

AA/AS area C

## Political Science

### POLS 1 Introduction to United States Government

3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100B or equivalent.

Principles and problems of government with emphasis on national, state and local government in the United States. (CSU/UC)

AA/AS areas F, D; CSU areas D, F2; IGETC area 4; CAN GOVT 2

### POLS 2 Introduction to Comparative Government

3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100B or equivalent.

A contemporary in-depth study of four nations, examining their historical, economic, social, cultural, and political dynamics and challenges. The course will compare, contrast and evaluate the following countries: Germany, Japan, China, and Mexico. (CSU/UC)

AA/AS area D; CSU area D; IGETC area 4

### POLS 18 Political Theory

3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100B or equivalent.

An introduction to the history of political thought from Plato to the present. A survey of political writings from ancient, medieval and modern sources. Topics include answers to questions, such as the nature of justice and the relationship of the individual to the state, as well as ideologies, such as marxism and liberalism. (CSU/UC)

AA/AS area D; CSU area D; IGETC area 4

### POLS 20 Political Power: the Experience of American Cultural Groups

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 1A or equiv.

An examination of how political power as expressed in government policy, laws, court opinions, social perceptions, social status indicators, and economic interests interplay and affect political participation rates. The experiences of at least three groups: African American, Asian American, Chicano/Latino American, European American, Indigenous Peoples of the Americas, and Americans of Middle Eastern origin will be explored, contrasted, and compared in this American Cultures course. From three to six groups will be examined and each will be given

equal attention during the semester. Successful and unsuccessful responses to the government's use of political power will be analyzed. (CSU/UC)

AA/AS area G; CSU area D; IGETC area 4

### POLS 25 Introduction to International Relations

3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100B or equivalent.

Introduction to politics, theory and institutions of international relations with emphasis on contemporary practice. (CSU/UC)

AA/AS area D; CSU area D; IGETC area 4

### POLS 52 Model United Nations

3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100B or equivalent.

Preparation and study for the Model United Nations Conference. Focus on historical, institutional and theoretical background of the United Nations as well as the role played by selected countries in the UN structure and operations and their positions on current international problems and issues. (CSU)

### POLS 70 California State & Local Government

3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100B.

Organization, operation and politics of state, county, municipal and special district governments in California. Analysis of various issues facing the state, including education, public finance, environment, planning, and socio-economic conditions. (CSU)

AA/AS area D; CSU area D

### POLS 100 Essentials of U.S. Government

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 355 or equiv.

Principles and problems of government with emphasis on national, state, and local government in the United States.

## Psychiatric Technician

### PSYT 71 Fundamentals of Nursing

9 units/9 hours lecture. Grade only. Prerequisite: Admission into the Psychiatric Technician program: high school graduation or equivalent; Computational Math Exam (minimum score: 25) or completion of CSKL 373A; APS/Essay test (eligibility for Engl 100A). Completion of Anat 51 or HLC 50, with a C or better. Corequisite: Concurrent enrollment in Psyt 71L. Recommended: HLC 60. Previous Work Experience (WE OC 99) at a State Hospital, Psychiatric, or Long Term Care setting.

Course presents theoretical basis for care of adult patients with common medical/surgical conditions. Emphasis is on planning patient care for implementation in sub-acute and long term care settings. Pharmacology and application of anatomical, physiological and psychosocial concepts are integrated throughout the course. (CSU)



### PSYT 71L Fundamentals of Nursing

6 units/17.9 hours by arrangement. Grade only. Prerequisite: Admission to the Psychiatric Technician Program; high school graduation or equivalent; Computational Math Exam (minimum score of 25); APS/ESSAY exam (eligibility for Engl 100A). Corequisite: Concurrent enrollment in PSYT 71. Recommended: Previous work experience (WEOC 99) at state hospital, psychiatric, or long term care settings.

Emphasis is on the application of fundamental principles of nursing care for adult patients with common medical, surgical conditions. Focus is on planning and implementation of patient care in subacute and long term care settings, including medication, administration, and charting. Anatomical physiological and psychosocial concepts are applied throughout the course. (CSU)

### PSYT 74 Mental Health & Psychiatric Nursing

8 units/8.1 hours lecture. Grade only. Prerequisite: Successful completion of PSYT 71, PSYT 71L. Corequisite: PSYT 74L.

Course presents theoretical basis for care of mentally disordered adolescents and adults. Emphasis is on planning for implementation of care in hospital, community psychiatric settings, and chemical dependency facilities. Pharmacology and application of psychological, psychosocial and interpersonal concepts are integrated throughout the course. (CSU)

### PSYT 74L Mental Health & Psychiatric Nursing - Clinical

6.5 units/19.1 hours by arrangement. Grade only. Prerequisite: Completion of PSYT 71 and 71L with a grade of "C" or better. Corequisite: Concurrent enrollment in PSYT 74.

Clinical experience in hospital and community psychiatric treatment settings. Application of principles and concepts of psychiatric theory in planning, implementation and evaluation; role-playing, process recordings, case studies, group discussion, knowledge of and administration of psychotropic and other medications. (CSU)

### PSYT 75 Developmental Disabilities - Theory

(Formerly PSYT 73) 8 units/7.7 hours lecture. Grade only. Prerequisite: Successful completion of PSYT 71 and 71L. Corequisite: PSYT 75L (formerly PSYT 73L).

Course presents theoretical basis for care and treatment of clients with mental retardation and other developmental disabilities. Emphasis is on planning for continuing care and treatment of the client in developmental centers and community placement. Classifications, treatment programs, interventions, diagnostic tests and measurement, pharmacology, and normalization concepts are integrated throughout the course. (CSU)

### PSYT 75L Developmental Disabilities Clinical

(Formerly PSYT 73L) 6.5 units/19.1 hours by arrangement. Grade only. Prerequisite: Successful completion of PSYT 71 and PSYT 71L. Corequisite: PSYT 75 (formerly PSYT 73).

Course presents clinical application of theory tenets in the care of developmentally disabled clients (including mentally retarded and autistic individuals) in the State Developmental Center System and in community settings. Focus is on medical care administration, documentation, activities of daily living, behavior management, and normalization. (CSU)

### PSYT 98 Special Studies in Psychiatric Technician Education

1-3 units/up to 3 hours lecture, 6 hours by arrangement. Grade only. Prerequisite: Application to department.

Seminars or individual conferences by arrangement to provide for independent study and enriched academic experience. (CSU)

Independent study including 49 and 98 courses - 6 unit total.

### PSYT 299 Selected Topics in Psychiatric Technology

0.5-3 units/up to 3 hours lecture. CR/NC option. Prerequisite: Advanced level work may require prerequisites.

Recommended: Eligibility for Engl 100A or equivalent.

A series of courses designed to meet specific psychiatric technology training needs as they are identified. Each class carries a specific workshop title relating to the subject matter to be covered.

May be repeated with different topics.

## Psychology

### PSYCH 1A General Psychology

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Scientific study of human behavior; emotions, thinking, heredity, environment, learning, intelligence, and human diversity. Emphasis upon the principles, practices, and problems of the experimental method. (CSU/UC)

AA/AS area D; CSU area D; IGETC area 4; CAN PSY 2

### PSYCH 1B Introduction to Experimental Psychology

3 units/3 hours lecture. Grade only. Prerequisite: Psych 1A. Recommended: Eligibility for Engl 100A or equivalent.

Introduction to research methods in psychology. Principles of experimental design and analysis. Application of these principles to classroom experiments in sensation, perception, bio-feedback conditioning, and social learning. (CSU/UC)

CAN PSY 8

### PSYCH 3 Human Sexuality

3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent.

Introduction to clinical and scientific studies of human sexuality. Special emphasis on contemporary research, modern medical understanding, and psychological insights into human sexual response. Topics surveyed include sexual development, birth control, sexual health and disease, attraction and love, sexual dysfunction, and therapy. (CSU/UC)

CSU area E; IGETC area 4

### PSYCH 4 Child Growth & Development

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

The child from pre-natal life to the adolescent years with emphasis on biological, intellectual, and emotional growth, and social and personality development. (CSU/UC)

CSU area D; IGETC area 4

### PSYCH 5 Abnormal Psychology

3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equiv.

Introduction to the major theoretical orientations, important psychotherapeutic methods, selected disorders including depression, schizophrenia and psychosomatic disorders and current issues in abnormal psychology. (CSU/UC)

AA/AS area D; CSU area D; IGETC area 4

### PSYCH 30 Social Psychology

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Social basis of behavior. Emphasis on socialization, language, personality, leadership, and change. (CSU/UC)

AA/AS area D; CSU area D; IGETC area 4

### PSYCH 34 Psychological Principles of Racism & Sexism

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

The study of the socio-psychological principles, dynamics, and processes regarding the attitudes, beliefs, and behaviors that influence and help maintain race and gender inequities. (CSU/UC)

AA/AS areas D, G; CSU area E; IGETC area 4

### PSYCH 35 Psychology of Identity

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

A study of the psychological principles, concepts, and processes that underlie the formation and development of human identity. (CSU/UC)

CSU area E; IGETC area 4

### PSYCH 40 Psychological Perspectives on Gender

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

An examination of the research and theory from psychology and related fields in order to evaluate the behavior, biology, and social context in which women and men function. Classical and contemporary views of gender roles and the effects of gender role on individual development and relationships with others. (CSU/UC)

CSU area E; IGETC area 4

### PSYCH 48 Selected Current Topics in Psychology

1-3 units/up to 3 hours lecture. CR/NC option. Prerequisite: Psych 1A or equivalent. Recommended: Eligibility for Engl 100A or equivalent.

Intensive study of selected topics of current importance in psychology by an instructor who has specialized in that area. Particular emphasis is listed in the Class Schedule. Purpose of the course is to stimulate serious thought by means of an in-depth presentation. (CSU/UC)

May be repeated with different topics.

### PSYCH 52 Interpersonal Relations

(Formerly PSYCH 32) 3 units/3 hours lecture. CR/NC only. Recommended: Eligibility for Engl 100A or equivalent. Psych 1A completed or in progress.

Knowledge and skills leading to the effectiveness in interpersonal relations and increased understanding of self and others with emphasis on communication. (CSU)

CSU area E

### **PSYCH 53 Growth & Communications**

*(Formerly PSYCH 33) 3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.* Principles of mental hygiene and personality development. Emphasis upon emotions, reactions to frustration, measurement of personality, individual and group differences. (CSU)  
AA/AS area D; CSU area E

### **PSYCH 56 Death & Dying**

*(Formerly PSYCH 6) 3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.* In-depth analysis of traditional and contemporary psychological perspectives on death and dying. Emphasis on theories and studies of the dying process, social factors affecting death and dying and patterns of adaptive and maladaptive bereavement. (CSU)  
CSU area E

### **PSYCH 301 Introduction to Psychology**

*3 units/3 hours lecture. CR/NC option. Prerequisite: Students must be eligible for Engl 100A or its equivalent. Recommended: Eligibility for Engl 105 or equivalent.* Non-technical introduction to the study of human behavior to help students adjust themselves to college, vocation, family and society. Content and emphasis of each section specified in Behavioral Sciences Department course description bulletin.

### **PSYCH 334 Psychological Principles of Racism & Sexism**

*(Formerly PSYCH 134) 3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 355 or equivalent.* The study of the socio-psychological principles, dynamics, and processes regarding the attitudes, beliefs, and behaviors that influence and help maintain race and gender inequities.

### **PSYCH 335 Psychology of Identity**

*(Formerly PSYCH 135) 3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 355 or equivalent.* A study of the psychological principles, concepts, and processes that underlie the formation and development of human identity.

## **Radiologic Technology**

### **RADT 60 Introduction to Medical Imaging**

*3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100B.* Introduction and survey of medical imaging, its technologies, health care providers, and radiologic and health care practices as they relate to patients of diverse backgrounds. Open to all students. (CSU)

### **RADT 61A Radiographic Positioning I**

*4 units/3 hours lecture, 3 hours laboratory. Grade only. Prerequisite: Admission to the Radiologic Technology program or possession of licensure as a radiologic technologist. Corequisite: RADT 60, RADT 61AL, RADT 64, & RADT 64L* Radiographic anatomy, positioning, and film critique. Instruction includes lecture, positioning

demos and practice, and self-paced study utilizing multimedia programs. Students learn to perform radiologic procedures of the chest, abdomen, extremities, hips, and pelvis and to evaluate radiographs for diagnostic quality. (CSU)

### **RADT 61AL Clinical Experience I**

*2 units/6 hours laboratory. Grade only. Prerequisite: Admission to the Radiologic Technology program or possession of licensure as a radiologic technologist.* Performance for competency evaluation of radiologic procedures in assigned radiology departments under the direct supervision of a registered radiologic technologist. Students draw upon principles of anatomy and physiology, patient care, radiation protection, and radiographic technique in the practice of patient positioning. Clinical experience is gained through attendance and completion of the course objectives. (CSU)

### **RADT 61B Radiographic Positioning II**

*3 units/2 hours lecture, 3 hours laboratory. Grade only. Prerequisite: Admission to the Radiologic Technology program or possession of licensure as a radiologic technologist. Recommended: Multi-Media equipment knowledge.* Radiographic anatomy, positioning and film critique. Instruction includes lecture, positioning demos and practice, and self-paced study utilizing multimedia programs. Students learn to perform radiologic procedures of the digestive, urinary, biliary systems, spine, sternum, ribs, mammography, and cystogram, and to evaluate radiographs for diagnostic quality. (CSU)

### **RADT 61BL Clinical Experience II**

*5 units/16 hours by arrangement. Grade only. Prerequisite: Admission to the Radiologic Technology program or possession of licensure as a radiologic technologist.* Performance for competency evaluation of radiologic procedures in assigned radiology departments under the supervision of a registered radiologic technologist. Students draw upon principles of anatomy and physiology, patient care, radiation protection, and radiographic technique in the practice of patient positioning. Clinical experience is gained through attendance and completion of the course objectives. (CSU)

### **RADT 61C Radiographic Positioning III**

*1 unit/1 hour lecture, 3 hours laboratory for 8 weeks. Grade only. Prerequisite: Admission to the Radiologic Technology program or possession of licensure as a radiologic technologist.* Radiographic anatomy, positioning, and film critique. Instruction includes lecture, positioning demos and practice, and self-paced study utilizing multimedia programs. Students learn to perform radiologic procedures of the skull and evaluate radiographs for diagnostic quality. (CSU)

### **RADT 61CL Clinical Experience III**

*5 units/34 hours by arrangement for 8 weeks. Grade only. Prerequisite: Admission to the Radiologic Technology program or possession of licensure as a radiologic technologist.* Performance for competency evaluation of radiographic procedures in assigned radiology departments under the direct supervision of a

registered radiologic technologist. Students draw upon principles of anatomy and physiology, patient care, radiation protection, and radiographic technique in the practice of patient positioning. Clinical experience is gained through attendance and completion of the course objectives. (CSU)

### **RADT 62AL Clinical Experience IV**

*(Formerly RADT 62A) 10 units/30 hours by arrangement. Grade only. Prerequisite: Admission to the Radiologic Technology program or possession of licensure as a radiologic technologist.* Performance for competency evaluation of radiographic procedures in assigned radiology departments under the direct supervision of a registered radiologic technologist. Students draw upon principles of anatomy and physiology, patient care, radiation protection, and radiographic technique in the practice of patient positioning. Clinical experience is gained through attendance and completion of the course objectives. (CSU)

### **RADT 62B Licensing /Registry Examination Preparation**

*3 units/6 hours lecture for 8 weeks. Grade only. Prerequisite: Admission to the Radiologic Technology Program or possession of licensure as a radiologic technologist.* Review of the Radiologic Technology curriculum in preparation for the State licensing and ARRT registry examinations. (CSU)

### **RADT 62BL Clinical Experience V**

*9 units/27 hours by arrangement. Grade only. Prerequisite: Admission to the Radiologic Technology Program or possession of licensure as a Radiologic Technologist.* Performance for competency evaluation of radiographic procedures in assigned radiology departments under the supervision of a registered radiologic technologist. Students draw upon principles of anatomy, patient care, radiation protection, and radiographic technique in the practice of patient positioning. Clinical experience is gained through attendance and completion of the course objectives. (CSU)

### **RADT 63A Radiation Physics and Quality Assurance**

*3 units/2 hours lecture, 3 hours laboratory. Grade only. Prerequisite: Admission to the Radiologic Technology program or possession of licensure as a radiologic technologist.* Photographic aspects of radiography, principles of radiographic exposure and formulation of radiographic technique. Laboratory experiments in radiographic exposures and formulating technique charts, basic quality assurance and quality control procedures will be included. Principles of general physics, electrostatics, calculation of radiation doses, and quality assurance. (CSU)

### **RADT 63B Radiation Physics and Protection**

*3 units/2 hours lecture, 3 hours laboratory. Grade only. Prerequisite: Admission to the Radiologic Technology program or possession of licensure as a radiologic technologist, RADT 63A.*

Properties and characteristics of atomic structures, magnetism, X-ray generation, radiobiology, radiation safety and protection, and fluoroscopy and its related equipment. Laboratory experiments. (CSU)

### **RADT 64 Patient Care in Medical Imaging**

*3 units/3 hours lecture. Grade only. Prerequisite: Admission to Radiologic Technology program or possession of licensure as a radiologic technologist.*

This course provides students with basic concepts of patient care, including consideration for the physical and psychological needs of the patient and family. Routine and emergency patient care procedures, infection control, and the role of the radiologic technologist in patient education. (CSU)

### **RADT 64L Patient Care in Radiology/Laboratory**

*2 units/1 hour lecture, 3 hours laboratory. Grade only. Prerequisite: Admission to the Radiologic Technology program or possession of licensure as a radiologic technologist. Corequisite: RADT 64, RADT 61A, RADT 61AL.*

Skills laboratory demonstration and practice of patient care skills required of the radiologic technologist in all clinical environments. (CSU)

### **RADT 65 Pathology in Radiology**

*2 units/2 hours lecture. Grade only. Prerequisite: Admission to the Radiologic Technology program or possession of licensure as a radiologic technologist, RADT 63B.*

Guest lecturers cover all aspects of radiographic pathology, including normal variations and abnormal changes due to diseases and trauma. Modifications of standard and special techniques necessary to obtain high quality diagnostic radiologic studies. (CSU)

### **RADT 66 Special Modalities**

*4 units/3 hours lecture, 3 hours laboratory. Grade only. Prerequisite: Admission to the Radiologic Technology Program or possession of licensure as a radiologic technologist.*

Principles of radiographic special procedures and specialized imaging modalities. Principles of venipuncture, fluoroscopy and its related equipment, CT, Mammography, and MRI. Demonstration and laboratory of venipuncture. (CSU)

### **RADT 66L Clinical Experience VI**

*5 units/34 hours by arrangement for 8 weeks. Grade only. Prerequisite: Admission to the Radiologic Technology Program or possession of licensure as a radiologic technologist.*

Performance for competency evaluation of radiologic and fluoroscopic procedures in assigned radiology departments under the direct supervision of a registered radiologic technologist. Students draw upon principles of anatomy, patient care, radiation protection, and radiographic technique in the practice of patient positioning. Clinical experience is gained through attendance and completion of the course objectives. (CSU)

### **RADT 67L Clinical Experience & Employment Preparation**

*(Formerly RADT 67) 3 units/9 hours by arrangement. Grade only. Prerequisite: Admission to the Radiologic Technology program or possession of licensure as a radiologic technologist.*

Performance competency evaluation of all routine radiologic and fluoroscopic procedures in assigned radiology departments under the direct supervision of a registered radiologic technologist. Students draw upon principles of anatomy and physiology, patient care, radiation protection, and radiographic technique in the practice of patient positioning. The graduating student is preparing for employment in the medical imaging field. (CSU)

### **RADT 98 Special Studies in Radiologic Technology**

*1-3 units/up to 3 hours by arrangement. Grade only. Prerequisite: Admission to the Radiologic Technology program or possession of licensure as a radiologic technologist.*

Seminars or self-paced study by arrangement to provide for independent study, enriched academic experience, and continuing education in the field of medical imaging. (CSU)

*Independent study including 49 and 98 courses - 6 unit total.*

### **RADT 203 Fluoroscopy Permit Certification**

*3 units/3 hours lecture, 1 hour laboratory. Grade only. Prerequisite: Must be eligible for examination in Diagnostic or currently licensed as a certified radiologic technologist (License must be current and valid).*

The content of this course meets and exceeds the minimum curriculum of the State of California Standards of a Fluoroscopy Permit Certification.

## **Religious Studies**

### **RELS 48 Selected Topics**

*1-3 units/up to 3 hours lecture. CR/NC option. Recurrent philosophical themes and problems as they are met in selected subject areas. Course emphasis varies at the discretion of instructor. (CSU/UC)*

*May be repeated with different topics for a total of 6 units.*

## **Russian**

### **RUSS 39.1 Russian Literature in English Translation**

*3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100B or equivalent.*

Lectures, collateral readings, and discussions of representative works in English translation, of nineteenth century authors. (CSU/UC)  
*AA/AS area E; CSU area C2; IGETC area 3B*

### **RUSS 39.2 Russian Literature in English Translation**

*3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100B or equivalent.*

Lectures, discussions and film study on selected readings of representative twentieth century Russian authors in English translation. (CSU/UC)  
*AA/AS area E; CSU area C2; IGETC area 3B*

### **RUSS 50A Conversation for Beginners-Part I**

*3 units/3 hours lecture, 1 hour by arrangement. CR/NC option. Recommended: Eligibility for English 100A or equiv.*

A beginning communication course designed to teach basic language skills needed for survival at school, on the job and in the community. Students participate in a variety of reading pronunciation, listening and conversational activities to improve their oral/aural competency. Not open to students with 2 years high school Russian or 1 year college Russian with "A" or "B" within past 3 years. (CSU)

### **RUSS 50B Conversation for Beginners-Part II**

*3 units/3 hours lecture. CR/NC option. Prerequisite: Completion of Russ 50A or equivalent. Not open to native speakers of Russian. Not open to students with 2 years of high school Russian or one year of college Russian with "A" or "B" grade within the past 3 years. Recommended: Eligibility for Engl 100A or equivalent.*

A high-beginning/low intermediate oral communication course designed to improve those listening and speaking skills needed for cross-cultural understanding in social, academic and work-related situations. (CSU)

*May be taken for a total of 6 units.*

### **RUSS 58 High Intermediate Conversation**

*2 units/2 hours lecture. CR/NC option. Recommended: Completion of Russ 50B or equivalent.*

A high-intermediate oral communication course designed to improve those listening and speaking skills needed for successful interaction in social, academic or work-related situations. Emphasis on finding, getting, and keeping a job in the U.S. and communicating more effectively in social and academic contexts. Not open to native speakers of Russian or to students with 2 years of high school Russian or 1 year of college Russian with "A" or "B" grade within past three years. (CSU)

*May be taken for a total of 18 units.*

### **RUSS 98 Special Studies in Russian**

*1-3 units/up to 3 hours laboratory, 4 hours by arrangement. Grade only. Prerequisite: Application to department.*

*Recommended: Eligibility for Engl 100A or equivalent.*

Seminars and individual conferences by arrangement to provide for independent study, and enriched academic experience. (CSU)

*Independent study including 49 and 98 courses - 6 unit total.*

## Social Science

### **SOCS 5 Critical Thinking and Writing in the Social Sciences**

*3 units/3 hours lecture. CR/NC option. Prerequisite: Completion of Engl 1A with grade of 'C' or better.*  
A thematic examination of an important issue confronting the contemporary world. Students will engage in a process of questioning, analyzing, and evaluating data, concepts and methodologies employed by social scientists. The course includes a significant writing component and students will demonstrate the ability to read critically, write clearly and think critically. (CSU/UC)  
CSU area A3; IGETC area 1B

### **SOCS 12 Environmental Policy and Politics**

*3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100B or equivalent.*  
An introduction to environmental studies. Examination of political processes for implementing solutions to environmental problems. Interplay of ecology, economics and ethnics, their translation to public policy. Consideration of the socio-ecological design of a sustainable society, the requisite public policy and political advocacy, and strategies for social change. Emphasis on national and international environmental issues. (CSU/UC)  
AA/AS area D; CSU area D; IGETC area 4

### **SOCS 48 Selected Topics in the Social Sciences**

*1-3 units/up to 3 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equiv.*  
In-depth analysis of a topic through lecture, discussion, and research. (CSU/UC)

### **SOCS 49 Special Studies in Social Science**

*1-3 units/up to 3 hours laboratory. Grade only. Prerequisite: Application to the department.*  
Seminars or individual conferences by arrangement to provide for independent study and enriched academic experience. (CSU/UC)  
Independent study including 49 and 98 courses - 6 unit total.

### **SOCS 100 American Politics**

*(Formerly SOCS 300) 3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*  
Thematic survey of the development and operation of major American political and socio-economic institutions.  
AA/AS areas F, D

### **SOCS 200 Introduction to the Social Sciences**

*1-3 units/up to 3 hours lecture. CR/NC option.*  
An introduction to and overview of the Social Sciences disciplines: History, Economics, and Political Science, with an emphasis on the development of the study and critical thinking skills necessary for college success.

## Sociology

### **SOC 1 Introduction to Sociology**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for English 100A or equivalent.*  
Human social behavior is explored from the point of view of several different levels of analysis. These levels range from face to face social interaction in groups and institutions to American society, Western Civilization, and the World as a whole. This exploration is accomplished through the use of lecture, small group interaction, films, video tapes, and guest speakers. (CSU/UC)  
AA/AS area D; CSU area D; IGETC area 4; CAN SOC 2

### **SOC 2 Social Problems & Deviance**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*  
Problems of contemporary society: war, poverty, automation; the social problems of individuals labeled as deviants. (CSU/UC)  
AA/AS area D; CSU area D; IGETC area 4; CAN SOC 4

### **SOC 10 Marriage & the Family**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*  
A systematic study of the functions and characteristics of the family as a social institution. A broad range of sociological research findings and basic concepts such as culture, socialization, stratification, and social change are utilized in examining the family as a primary institution. (CSU/UC)  
AA/AS area D; CSU area E; IGETC area 4; CAN FCS 12

### **SOC 30 Race & Ethnic Relations**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*  
Advanced analysis of racism in America from sociological and psychological perspectives to determine racism's origins, causes, costs and consequences. Personal, cultural, social, and institutional example of facism are identified and used for the analysis. (CSU/UC)  
AA/AS areas D, G; CSU area D; IGETC area 4

### **SOC 32 Black Families**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*  
Black family models, their dynamic capability and structural functions. (CSU/UC)

### **SOC 48 Selected Topics**

*3 units/3 hours lecture. CR/NC option. Prerequisite: Psych 1A, Soc 1 or Anthro 1 or Anthro 12 or equivalent. Recommended: Eligibility for Engl 100A or equivalent.*  
An intensive study of selected topics of current importance in sociology by an instructor who has specialized in that area. The particular emphasis will be listed in the Class Schedule. (CSU/UC)  
May be taken for a total of 6 units.

### **SOC 55 Sociology of Crime & Corrections/an Intro to Criminology**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.*  
Sociological concepts and theories applied to the analysis of the control of crime and deviant behavior. Topics covered will include: substance abuse, sexual crimes, violence, gun control, capital punishment, organized crime, corporate deviance, and government deviance. Cross-cultural comparisons of the variety of societal responses to crime and deviance. (CSU)

### **SOC 61 Aging & Society**

*3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent. Soc 1.*  
Addresses the problems of aging from both a sociological and psychological perspective. Demographic materials on life expectancy and the life span. Aging throughout the life circle will be examined. Theories of aging will be studied. Stereotypes will be clarified. Problems with housing, finances, crime, and fraud for the aged will be analyzed. Other topics include death and dying, minority aged, cross-cultural perspectives, and social services. (CSU)  
CSU area E

### **SOC 360 Contemporary Issues in American Society**

*1-3 units/up to 3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 355 or equivalent.*  
Techniques for analyzing current social problems. May be taken for a total of 3 units.

## Spanish

### **SPAN 1 Elementary Spanish-Part I**

*4 units/4 hours lecture, 2 hours by arrangement. CR/NC option. Recommended: Completion of Engl 100B or equivalent. Not recommended for students with 2 years of high school Spanish with at least "B" average or equivalent within the past 3 years.*  
Elementary listening, speaking, reading and writing in Spanish. Introduction to Spanish and Spanish-American culture. (CSU/UC)  
AA/AS area E; CSU area C2; IGETC language; CAN SPAN 2; SPAN 1 + SPAN 2 = CAN SPAN SEQ A

### **SPAN 2 Elementary Spanish-Part II**

*4 units/4 hours lecture, 2 hours by arrangement. CR/NC option. Prerequisite: Two years of high school Spanish or Span 1. Recommended: Completion of Engl 100B or equiv.*  
Continuation of Spanish 1. Listening, speaking, reading and writing in Spanish. Introduction to Spanish and Spanish-American culture. Not recommended to students with three years of high school Spanish with at least "B" average or equivalent within past three years. (CSU/UC)  
AA/AS area E; CSU area C2; IGETC area 3B; CAN SPAN 4; SPAN 1 + SPAN 2 = CAN SPAN SEQ A  
May be taken for a total of 4 units.

### SPAN 2S Elementary Spanish

4 units/4 hours lecture, 2 hours by arrangement. CR/NC option. Recommended: Completion of ENGL 100A or equivalent. Recommended for students with native or native-like speaking skills and an interest in Humanities.

Spanish for Spanish-speaking student. The purpose of the class is to bring native speakers' reading and writing abilities and culture awareness up to standard. Basic Spanish grammar, written essays with literature components & structure are reviewed & evaluated. (CSU/UC)

AA/AS area E; CSU area C2

May be taken for a total of 4 units.

### SPAN 3 Intermediate Spanish-Part I

4 units/4 hours lecture, 1 hour by arrangement. CR/NC option. Prerequisite: Three years of high school Spanish or Span 2 or 2S. Recommended: Completion of Engl 100B or equivalent (including parallel course in a native language other than English).

Review of first-year linguistic and cultural information. Speaking, reading, and writing. Discussion and essays. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B; CAN SPAN 8; SPAN 3 + SPAN 4 = CAN SPAN SEQ B

### SPAN 4 Intermediate Spanish - Part II

4 units/4 hours lecture. CR/NC option. Prerequisite: Completion of 4 years of high school Spanish or Span 3. Recommended: Completion of Engl 100B or equivalent (including parallel course in a native language other than English).

Spanish language skills improved through research compositions, analytical essays, readings, and critical discussions focusing on American cultures. Utilizing modern and classical Spanish language literature, students will explore at least three of the following groups in those areas of the United States most affected by Spanish and its literature: African American, Asian American, Chicano/Latino American, European American, Indigenous Peoples of the Americas, and Americans of Middle Eastern origin. (CSU/UC)

AA/AS areas E, G; CSU area C2; IGETC area 3B; CAN SPAN 10; SPAN 3 + SPAN 4 = CAN SPAN SEQ B

### SPAN 8 Conversational Spanish

2 units/2 hours lecture. CR/NC option. Prerequisite: Span 2 completed or ability to carry on a simple conversation in Spanish. Recommended: Eligibility for Engl 100A or equivalent.

A high-active oral performance communication course emphasizing those oral skills needed to effectively communicate in academic, social, or job-related and contemporary contexts. Students react orally and in writing to readings, summarize journal and newspaper articles, videos, news reports, and give short oral presentations and participate in group discussions and problem-solving activities. (CSU/UC)

May be taken for a total of 4 units.

### SPAN 39.1 Spanish-American Literature in Translation

3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100B or equivalent.

Lectures, collateral reading, analytical discussion and critical essays of representative works in English translation; survey of specific period or movement in literature. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B

### SPAN 39.2 Spanish-American Literature in Translation

3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 100B or equivalent.

Continuation of Spanish 39.1. Lectures, collateral reading, analytical discussion and critical essays of representative works in English translation; survey of specific period or movement in literature. (CSU/UC)

AA/AS area E; CSU area C2; IGETC area 3B

### SPAN 49 Special Studies in Spanish

1-3 units/up to 3 hours lecture, 6 hours by arrangement. Grade only. Prerequisite: Application to department.

Recommended: Eligibility for Engl 100A or equivalent. Seminars or individual conferences by arrangement to provide for independent study and enriched academic experience. (CSU/UC)

Independent study including 49 and 98 courses - 6 unit total.

### SPAN 50A Conversation for Beginners - Part I

0.5-3 units/up to 3 hours lecture, 1 hour laboratory. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

A beginning oral communication course designed to improve those listening and speaking skills needed for survival at school, on the job, and in the community. Students participate in a variety of oral and written activities which promote pronunciation, comprehension, and communication abilities. Not open to students with two years of high school Spanish or one year of college Spanish with "A" or "B" grade within the past three years. Not open to native speakers of Spanish. (CSU)

### SPAN 50B Conversation for Beginners - Part II

3 units/3 hours lecture, 1 hour by arrangement. CR/NC option. Prerequisite: Completion of SPAN 1 or SPAN 50A with a grade of "C" or better. Recommended: Eligibility for English 100A or equiv.

A high-beginning/low intermediate oral communication course designed to improve those listening and speaking skills needed for cross-cultural understanding in social, academic, and work-related situations. Not open to native speakers of Spanish. Not open to students with two years of high school Spanish or one year of college Spanish with "A" or "B" grade within the past three years. (CSU)

May be taken for a total of 6 units.

### SPAN 50C Intermediate Conversation

3 units/3 hours lecture, 1 hour by arrangement. CR/NC option. Prerequisite: Completion of SPAN 50B or SPAN 2 with a grade of "C" or better. Recommended: Eligibility for Engl 100B or equivalent.

An intermediate oral communication course designed to further develop those listening and speaking skills needed for effective cross-cultural understanding in social, academic, and career-related situations. (CSU)

May be taken for a total of 6 units.

### SPAN 55 Spanish Intensive Workshop

1-4 units/up to 24 hours lecture, 24 hours laboratory for 2 weeks. CR/NC option. Recommended: Completion of Span 50B or Span 1 or equivalent.

An intermediate-to-advanced oral and written

communication course designed to improve those listening, speaking, reading and writing skills needed for successful interaction in social, academic, or work-related situations. Emphasis on finding, getting and keeping a job in the U.S. and communicating more effectively in social and academic contexts. Offered in compact immersion format. Reading and writing content applicable for native speakers, as well as non-natives. (CSU)

May be taken for a total of 12 units.

### SPAN 58 High Intermediate Conversation

2 units/2 hours lecture. CR/NC option. Prerequisite: Completion of SPAN 50C or 2 or 3 with a grade of "C" or better.

A high-intermediate oral communication course designed to improve those listening and speaking skills needed for successful interaction in social, academic, or work-related situations. Emphasis on finding, getting and keeping a job in the U.S. and communicating more effectively in social and academic contexts. (CSU)

May be taken for a total of 18 units.

### SPAN 70 Beginning Spanish for Health Occupations

3 units/3 hours lecture, 1 hour by arrangement. CR/NC option. Prerequisite: Employed in a health-related occupation, related field, or an active volunteer health occupation worker, or employed in SRJC Health Sciences program and completion of SPAN 50A or SPAN 1 or SPAN 2 with a grade of "C" or better. Recommended: Eligibility for English 100A or equiv.

Development of health occupation-related communication skills through Spanish language activities and exercises relevant to the workplace. (CSU)

May be taken for a total of 6 units.

### SPAN 71 Spanish for Law Enforcement

0.5-3 units/up to 3 hours lecture, 1 hour by arrangement. CR/NC option. Prerequisite: Employed in a law enforcement occupation, related field, an active volunteer law enforcement officer, or employed in SRJC Administrative of Justice Program. Recommended: Completion of Engl 100B.

Development of law enforcement-related communication skills through Spanish language activities and exercises relevant to the workplace. (CSU)

May be taken for a total of 6 units.

## Special Education

### SE 80 Adaptive P.E. Assistant Training

1-2 units/up to 2 hours lecture. CR/NC option.

Provides practical experience and formal training for students who are interested in pursuing a career in P.E., Special Ed., or other health related professions which involves working with physically limited and/or learning disabled individuals. (CSU)

### SE 208A Sign Language

3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100A or equivalent. Fundamentals of sign language (manual communication and fingerspelling); problems relating to deafness; introduction to the three most commonly used methods. May be taken for a total of 6 units.

### SE 208B Sign Language

3 units/3 hours lecture. Grade only. Prerequisite: Completion of SE 208A. Recommended: Eligibility for Engl 100A or equivalent.

Emphasis is placed on the acceleration of receptive as well as transmissive skills. The exploration of the grammatical structure of conceptual signing (Amesian) which differs from that of English syntax. May be taken for a total of 6 units.

### SE 215 Fingerspelling in the Context of American Sign Language

3 units/3 hours lecture. CR/NC option. Prerequisite: ASL 51A (formerly ASL 51A, SE 214A). Recommended: Eligibility for Engl 100A or equivalent.

Focus on the appropriate use of fingerspelling in the context of ASL. Fingerspelling is used extensively within signed sentences and conversation, so a basic knowledge of ASL grammar and vocabulary is required.

May be taken for a total of 2 times.

### SE 252 Assessment & Techniques for Remediation of Learning Disabled

(Formerly SE 212A) 3 units/3 hours lecture. CR/NC option. Prerequisite: Eligibility for English 100A or equivalent.

Observation and formal assessment of learning abilities and techniques for remediation of learning disabilities.

### SE 270 Creative Process for Self-Awareness

2 units/1 hour lecture, 2 hours laboratory. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Intensive experiential course in the creative arts processes, focusing on art as a tool for self-discovery. Using art journal keeping, media exploration, and group discussion, the course will explore creativity theories, the field of art therapy and ways to develop creative potential. Emphasis placed on applying techniques to personal and professional situations. May be taken for a total of 4 units.

### SE 285A Developmental Movement I

3 units/3 hours lecture. CR/NC option. Recommended: Engl 100A or equivalent.

Study of the analysis of locomotor, gross and fine motor movement; how to assess and remediate these movements. Prepare students to test and analyze individual movements, such as gross and fine motor, coordination, balance, perceptual motor, agility, laterality and directionality and self-image, to learn remedial movement programs that help overcome movement disabilities and to become tutors in the Movement Laboratory. May be taken for a total of 6 units.

### SE 285B Developmental Movement II

(Formerly SE 235B) 3 units/3 hours lecture. CR/NC option. Study of motor proficiency test battery, how to

administer tests, analyze results, and administer remedial movement programs. This course prepares junior college students to test and analyze individual movements, such as gross and fine motor, coordination, balance, perceptual-motor, agility, laterality and directionality, and self image, and to learn remedial movement programs that help overcome movement disabilities and learning disabilities; and become tutors in the Movement Laboratory. May be taken for a total of 6 units.

### SE 285C Developmental Movement Practicum

(Formerly SE 235C) 2 units/2 hours lecture. CR/NC option. Prerequisite: SE 285A & SE 285B (formerly SE 235B).

Continuation of Developmental Movement I & II culminating in administration of remedial movement programs. May be taken for a total of 6 units.

## Speech

### SPCH 1A Introduction to Speech

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 1A.

The study of public speaking. Improves student's ability to prepare, organize and deliver a speech and to evaluate critically various forms of communication. (CSU/UC)

AA/AS area B; CSU area A1; IGETC area 1C; CAN SPCH 4

### SPCH 2 Introduction to Oral Interpretation

3 units/3 hours lecture. CR/NC option. Recommended: Completion of Engl 1A or equivalent.

Experiencing literature through reading and oral interpretation of prose, poetry and drama. Theory and practice in the art and technique of exploring, illuminating and orally presenting the logical, emotional, and aesthetic meanings of creative literature. (CSU/UC)

AA/AS area E; CSU area C2

### SPCH 3A Introduction to Argumentation

3 units/3 hours lecture for 16 weeks. CR/NC option. Recommended: Eligibility for ENGL 1A or completion of ENGL 100B with "B" or better.

Through in-class debates on contemporary issues, the course teaches how to make a claim and how to support it, how to recognize invalid arguments and how to refute them, how to reason and speak clearly. These techniques are useful in both formal and informal situations. (CSU/UC)

AA/AS area B; CSU area A3; CAN SPCH 6

### SPCH 9 Critical Thinking and Argumentation

3 units/3 hours lecture. CR/NC option. Prerequisite: Completion of Engl 1A or equivalent.

Primary emphasis on argumentation as the study of analysis, evidence, reasoning, refutation and rebuttal, etc., in oral and written communication. Significant component of instruction in written argumentation, with special attention to the essay form. Critical thinking approaches to commercial,

legal, political, and academic argumentation and persuasion. (CSU/UC)

AA/AS area B; CSU area A3; IGETC area 1B

### SPCH 57A Forensics (SRJC Speech Team)

(Formerly SPCH 7A) 1-3 units/up to 3 hours lecture. CR/NC option. Corequisite: SPCH 107L. Recommended: Eligibility for ENGL 1A or completion of ENGL 100A & 100B with "B" or better.

Preparation for and participation in intercollegiate and/or intramural speech tournaments. Activities range from debate to reader's theatre. (CSU)

### SPCH 57B Forensics (SRJC Speech Team)

(Formerly SPCH 7B) 3 units/3 hours lecture. CR/NC option. Prerequisite: SPCH 57A (formerly SPCH 7A). Eligibility for Engl 1A or completion of Engl 100A and Engl 100B with grades of "B" or better.

Preparation for and participation in intercollegiate speech tournaments. Activities range from debate to reader's theatre. (CSU)

### SPCH 57C Forensics (SRJC Speech Team)

(Formerly SPCH 7C) 3 units/3 hours lecture. CR/NC option. Prerequisite: Speech 57B (formerly SPCH 7B); Eligibility for ENGL 1A or completion of ENGL 100A and ENGL 100B with grades of "B" or better.

Preparation for and participation in intercollegiate speech tournament. Activities range from debate to reader's theatre. (CSU)

### SPCH 57D Forensics (SRJC Speech Team)

(Formerly SPCH 7D) 3 units/3 hours lecture. CR/NC option. Prerequisite: SPCH 57C (formerly SPCH 7C); Eligibility for ENGL 1A or completion of ENGL 100A and ENGL 100B with grades of "B" or better.

Preparation for and participation in intercollegiate speech tournaments. Activities range from debate to reader's theatre. (CSU)

### SPCH 58 Forensics Workshop

2 units/30 hours lecture, 1.5 hours by arrangement for 2 weeks. CR/NC option. Prerequisite: Audition; eligibility for Engl 1A or completion of Engl 100A and 100B with grades of "B" or better. Recommended: Eligibility for English 1A or equiv.

Intensive work in forensics activities, stressing theoretical aspects and preparing for competition. (CSU)

### SPCH 60 Communication Skills

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Training for effective communication and public speaking in vocational, professional and other organizational settings. This class focuses on four areas: public speaking, interpersonal communication, communication in groups, and interviewing, with special emphasis on oral communication. (CSU)

AA/AS area B; CSU area A1

### SPCH 60.1 Organizational Communication

0.5 unit/3 hours lecture for 3 weeks. CR/NC option. Recommended: Eligibility for Engl 100A or equivalent.

Study of verbal and nonverbal communication within organizations, including listening, systems theory, and upward, horizontal, and downward communication. (CSU)

AA/AS area B

## SPCH 60.2 Interviewing Skills

0.5 unit/3 hours lecture for 3 weeks. CR/NC option.  
Recommended: Eligibility for Engl 100A or equivalent.  
Study of interviewing, with an emphasis on interview preparation, resume writing, open versus closed questions, nonverbal communication, intercultural communication, and interview practice. (CSU)  
AA/AS area B

## SPCH 60.3 Communicating Effectively in Groups

0.5 unit/3 hours lecture for 3 weeks. CR/NC option.  
Recommended: Eligibility for Engl 100A or equivalent.  
Study of small-group discussion, with an emphasis on consensus building, leadership, and decision-making. (CSU)  
AA/AS area B

## SPCH 60.4 Problem Solving in Groups

0.5 unit/3 hours lecture for 3 weeks. CR/NC option.  
Recommended: Eligibility for Engl 100A or equivalent.  
Study of small-group problem solving, with an emphasis on conflict resolution, negotiations, and problem-solving. (CSU)  
AA/AS area B

## SPCH 60.5 Presenting Ideas Informatively

0.5 unit/3 hours lecture for 3 weeks. CR/NC option.  
Recommended: Eligibility for Engl 100A or equivalent.  
Study of informative speaking, with an emphasis on delivery, visual aids, organization, language use, and learning styles. (CSU)  
AA/AS area B

## SPCH 60.6 Presenting Ideas Persuasively

0.5 unit/3 hours lecture for 3 weeks. CR/NC option.  
Recommended: Eligibility for Engl 100A or equivalent.  
Study of persuasive speaking, with an emphasis on delivery, proof, organization, language use, and persuasion theory. (CSU)  
AA/AS area B

## SPCH 107L Forensics Lab

1-3 units/up to 9 hours by arrangement. CR/NC only.  
Prerequisite: Concurrent enrollment in SPCH 57A (formerly SPCH 7A), SPCH 57B (formerly SPCH 7B), SPCH 57C (formerly SPCH 7C) or SPCH 57D (formerly SPCH 7D).  
Intensive work in forensics activities, stressing theoretical aspects and preparing for competition.  
May be taken for a total of 4 times.

## Theatre Arts

### THAR 1 Introduction to Drama

3 units/3 hours lecture. CR/NC option. Recommended: Eligibility for Engl 1A.  
Through the study of and commentary on significant plays in the history of Western theatre, the student will develop comprehension and critical thinking skills. An emphasis is placed on understanding the production values of script in historical context, from the Classical Greek to the modern stage. Attendance at SRJC Theatre Arts Department productions is required. (CSU/UC)  
AA/AS area E; CSU area C1; IGETC area 3A

### THAR 6 Multi Cultural Perspectives in American Theatre

3 units/3 hours lecture. Grade only. Recommended: Eligibility for Engl 100A and THAR 1.  
Through the study of contemporary African, Asian, Latino, and Native American drama, the student will formulate a comprehensive analysis of culture and how it affects American Theatre. The course will focus on script analysis, video presentations, and play productions, in order to gain an understanding of how each culture expresses itself theatrically. (CSU/UC)  
AA/AS areas E, G; CSU area C1; IGETC area 3A

### THAR 10A Introduction to Techniques of Acting

3 units/2 hours lecture, 3 hours laboratory, 1 hour by arrangement. Grade only. Recommended: Eligibility for English 100A or equiv.  
An intensive study of fundamental acting concepts as exhibited through improvisation, individual, and group performance. (CSU/UC)  
CAN DRAM 8

### THAR 10B Techniques of Acting

3 units/2 hours lecture, 3 hours laboratory, 1 hour by arrangement. Grade only. Prerequisite: Completion of THAR 10A.  
An intensive study of characterization: focusing on psychological, physical, and vocal techniques, as exhibited through modern/contemporary scene work. (CSU/UC)

### THAR 11 Rehearsal & Performance

1-3 units/up to 6 hours by arrangement. Grade only.  
Prerequisite: By audition.  
Preparation and presentation of plays for public performance. (CSU/UC)  
May be taken for a total of 18 units.

### THAR 12 Readers Theatre

3 units/3 hours lecture. Grade only. Recommended: Completion of Engl 100A or equivalent.  
Introduction to the various styles of readers theatre. Scripting, arranging, programming, staging, and performing literature from all genres: poetry, prose, and drama. Theory and practice in the art and technique of oral interpretation for readers theatre productions. (CSU/UC)  
AA/AS area E; CSU area C2

### THAR 13 Advanced Acting Workshop

3 units/2 hours lecture, 2 hours laboratory, 1 hour by arrangement. Grade only. Prerequisite: Completion of THAR 10B.  
Advanced theory and performance of non-realistic acting styles such as comedy of manners, farce, Shakespeare, etc. (CSU/UC)  
May be taken for a total of 6 units.

### THAR 19 Movement & Improvisation

(Formerly THAR 9) 2 units/2 hours lecture, 1 hour laboratory. Grade only.  
An intensive study of individual and group movement skills. Development of performance, movement and improvisational skills. (CSU/UC)  
May be taken for a total of 4 units.

### THAR 20 Stagecraft

3 units/1 hour lecture, 6 hours by arrangement. Grade only.  
Corequisite: THAR 25.  
Methods, materials and techniques of realizing the physical production on the stage, including scenery, properties, lighting and sound. (CSU/UC)  
CAN DRAM 12  
May be taken for a total of 12 units.

### THAR 21 Introduction to Costuming

3 units/2 hours lecture, 3 hours laboratory. Grade only.  
Corequisite: THAR 25. Recommended: THAR 1.  
Principles of costuming in theatre arts. Basic pattern drafting, cutting, and fitting of theatrical costumes. Practical application of theory through the construction of costumes for productions. The history of western costume as it related to the shows produced during any particular semester. (CSU/UC)  
May be taken for a total of 12 units.

### THAR 22A Introduction to Make-Up

2 units/1 hour lecture, 3 hours laboratory. Grade only.  
Corequisite: THAR 25. Recommended: THAR 1.  
Introduction to the basic materials and techniques of stage make-up. Traditional and contemporary techniques of make-up application in both classroom and production environments. (CSU/UC)  
CAN DRAM 14  
May be taken for a total of 12 units.

### THAR 22B Intermediate Make-Up

2 units/4 hours laboratory. Grade only. Prerequisite: THAR 22A. Corequisite: THAR 25. Recommended: THAR 1.  
Additional materials and techniques in make-up for stage, screen, video and photography. (CSU/UC)  
May be taken for a total of 4 units.

### THAR 23 Theatre Graphics & Design

3 units/2 hours lecture, 5 hours laboratory. Grade only.  
Recommended: THAR 1 and 20.  
Means, methods and materials utilized in designing for the stage. (CSU/UC)  
May be taken for a total of 9 units.

### THAR 24 Design Workshop

3 units/2 hours lecture, 4 hours laboratory. Grade only.  
Prerequisite: THAR 23 or equivalent.  
Practical application of the principles of theatrical design in the areas of scenery, costume and lighting through class projects. (CSU/UC)  
May be taken for a total of 6 units.

### THAR 25 Technical Theatre Production Lab

1-3 units/up to 1 hour laboratory, 5 hours by arrangement. Grade only.  
Technical preparation and presentation of plays for public performances. (CSU/UC)  
CAN DRAM 16  
May be taken for a total of 12 units within 4 semesters.

### THAR 26 Theatrical Lighting

3 units/2 hours lecture, 2 hours laboratory, 2 hours by arrangement. Grade only. Prerequisite: THAR 20. An introduction to the basic concepts of theatre lighting, including the operation of stage lighting, planning and rigging. Instruction in light sources, the theory of electricity in the theatre, color media and theory, lighting design, light plots, equipment, control system, and rehearsal/performance procedures and operation. (CSU/UC)  
CAN DRAM 10  
May be taken for a total of 6 units.

### THAR 42 Theatre Dance Techniques

2 units/6 hours laboratory. Grade only. An intensive study of individual and group movement skills. Development of performance and choreographic skills. (CSU/UC)  
May be taken for a total of 6 units.

### THAR 47 Summer Production Workshop

6 units/40 hours by arrangement for 10 weeks. Grade only. Prerequisite: Audition or interview. Recommended: Previous experience in theatre production. Acting, singing, dancing, stagecraft, costuming and theatre management taught through a comprehensive program of rehearsal and public performance for the beginning student. (CSU/UC)  
May be taken for a total of 18 units.

### THAR 48.1 Summer Repertory Workshop Preparation

(Formerly THAR 48A) 4 units/30 hours by arrangement for 11 weeks. Grade only. Prerequisite: Acting audition or technical audition or management audition. Recommended: Substantial experience in Theatre Arts. Preproduction preparation and rehearsal in the professional environment for the career-oriented student. (CSU/UC)  
May be taken for a total of 12 units.

### THAR 48.2 Summer Repertory Workshop Performance

(Formerly THAR 48B) 6 units/40 hours by arrangement for 11 weeks. Grade only. Prerequisite: Acting audition or technical audition or management audition. Recommended: Extensive work in the theatre arts. Performance production in the professional tradition for the career oriented student. (CSU/UC)  
May be taken for a total of 18 units.

### THAR 49 Special Studies in Theatre Arts

1-3 units/up to 3 hours by arrangement. Grade only. Prerequisite: Application to Department. Seminars or individual conferences by arrangement to provide for independent study and enriched academic experience. (CSU/UC)  
Independent study including 49 and 98 courses - 6 unit total.

### THAR 50 Introduction to Theatre Management

3 units/2 hours lecture, 3 hours laboratory, 3 hours by arrangement. Grade only. Prerequisite: Completion of or concurrent enrollment in THAR 25; OR prior qualification for THAR 50. Introduction to the principles and practices of management in the theatre, including stage

management, production management, business management and promotions. Practical application of theory through management of one or more productions in various areas. (CSU)

### THAR 50L Theatre Management Laboratory

1-3 units/up to 3 hours laboratory. Grade only. Prerequisite: Satisfactory completion of, or concurrent enrollment in THAR 50 or equivalent. Recommended: Completion of THAR 50. Lab work in one or more areas of theatre management associated with a current Theatre Arts Department production or another production approved by the instructor. (CSU)  
May be taken for a total of 3 times.

### THAR 98 Selected Topics in Theatre Arts

0.5-3 units/up to 3 hours lecture, 9 hours laboratory. CR/NC option. Recurrent topics in techniques and skills relating to and used in theatre arts production and performance. (CSU)  
Independent study including 49 and 98 courses - 6 unit total.

### THAR 148.1 Summer Repertory Workshop Preparation Intermediate

4 units/30 hours by arrangement for 11 weeks. Grade only. Prerequisite: Acting audition or technical audition or management audition. Preproduction preparation and rehearsal in the professional environment for the intermediate career-oriented student.  
May be taken for a total of 12 units.

### THAR 148.2 Summer Repertory Workshop Performance Intermediate

6 units/40 hours by arrangement for 11 weeks. Grade only. Prerequisite: Acting audition or technical audition or management audition. Performance production in the professional tradition for the intermediate career-oriented student.  
May be taken for a total of 18 units.

### THAR 300 Introduction to Creative Drama

1-2 units/up to 1 hour lecture, 2 hours laboratory, 1 hour by arrangement. CR/NC option. Prerequisite: Audition. Introduction to creative performance including theatre games, improvisation and pantomime. Intended training in the art of ensemble and individual performance in preparation for possibility of public performance.

### THAR 353 Summer Field Studies in Shakespearean Staging

(Formerly THAR 53) 1 unit/5 hours lecture, 30 hours by arrangement for 1 week. CR/NC option. Recommended: Reading of the plays to be staged. Field trip to the Ashland Oregon Shakespeare Festival incorporating studies of the Ashland theatres and the production techniques used in the current season's repertory.  
May be taken for a total of 4 units.

## Welding

### WELD 70A Beginning Welding- Introduction to Basic Fundamentals

2 units/1 hour lecture, 3 hours laboratory. Grade only. Recommended: Eligibility for English 100A or equiv. Fundamentals of arc and oxy-acetylene welding and cutting. (CSU)  
May be taken for a total of 4 units.

### WELD 70B Arc & Oxy-Acetylene Welding

2 units/1 hour lecture, 3 hours laboratory. Grade only. Prerequisite: Weld 70A. Recommended: Eligibility for English 100A or equiv. Arc and oxy-acetylene welding and cutting. (CSU)  
May be taken for a total of 4 units.

### WELD 70C Heli-Arc (T.I.G.) and Wire (M.I.G.) Welding

2 units/1 hour lecture, 3 hours laboratory. Grade only. Recommended: Weld 70A or equiv. welding class or trade experience in gas and arc welding. Introduction to tools and equipment necessary for gas arc welding of carbon steel, stainless steel, aluminum and magnesium. Provides supervised manipulative practice of welding techniques. (CSU)  
May be taken for a total of 4 units.

### WELD 75A Vocational Welding

6 units/3 hours lecture, 9 hours laboratory. Grade only. Recommended: Weld 70 or equiv. Welding class or trade experience in gas and arc welding. Metal arc, inert arc, oxy-acetylene welding and related topics. (CSU)

### WELD 75B Vocational Welding

6 units/3 hours lecture, 9 hours laboratory. Grade only. Recommended: Eligibility for English 100A or equiv. Arc, oxy-acetylene, inert gas welding, plasma cutting and related topics. (CSU)

### WELD 98 Special Studies in Welding

1-6 units/up to 3 hours by arrangement. Grade only. Prerequisite: A completed, semester length welding course. Recommended: Eligibility for English 100A or equiv. Seminars or individual conferences by arrangement to provide for independent study and enriched academic experience. (CSU)  
Independent study including 49 and 98 courses - 6 unit total.

### WELD 399 Selected Topics in Welding Technology

0.5-2 units/up to 1 hour lecture, 3 hours laboratory. CR/NC option. Variety of welding technology related topics offered in a short, time-intensive format.  
May be repeated with different topics.



## Work Experience

### **WRKEX 97 General Work Experience**

*0.5-6 units/up to 27 hours by arrangement. CR/NC option.*

General Work Experience is supervised employment 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. Students gain this experience by enrollment in the parallel or alternate plan. (CSU)

*May be taken for a total of 6 units.*

### **WEOC 99 Occupational Work Experience Education**

*0.5-8 units/up to 36 hours by arrangement. Grade only.*

Occupational Work Experience is supervised employment extending classroom learning at an on-the-job learning station relating to the student's educational or occupational goal. Students gain this experience by enrollment in the parallel or alternate plan. (CSU)

*May be taken for a total of 16 units.*

### **WEOC 99I Occupational Work Experience-Intern Program**

*0.5-8 units/up to 40 hours by arrangement. Grade only.*

Occupational Work Experience Internship is supervised employment extending classroom learning at an on-the-job learning station relating to the student's educational or occupational goal. May be repeated for a total of sixteen (16) units, four (04) units maximum per semester (Repeat Code 25 for all Parallel Plan). Must be enrolled in 7 units including Work Experience units (for summer school - Work Experience and one other course). Alternate Plan - designed to offer students opportunities to attend college full-time one semester and work full-time the following semester. Job experience must relate directly to the student's educational goals. Up to eight (08) units may be earned in one semester. Students may not be enrolled in more than one other course or transfer from Alternate to Parallel or vice-versa without completing 7 units between plans. (CSU)

*May be taken for a total of 16 units.*

### **WEOC 399 Customized Work Force Training, Selected Topics**

*0.5-3 units/up to 3 hours lecture. CR/NC option. Prerequisite: Completion of Division of Apprenticeship Standards approved program or the equivalent in a specific trade.*

This course is designed to provide journeypersons involved in building trades the upgrading of skills necessary to keep pace with industry needs.

*May be repeated with different topics.*

### **WEOC399.12 Job Search and Retention**

*0.5-1 unit/up to 1 hour lecture. CR/NC only. Recommended: Eligibility for Engl 100A or equivalent.*

Exploration of job market; use of letter of application, job application, resume, job interview; and skills necessary to find and retain employment.

# Index

## A

Academic Calendars 2  
    Academic Year 2001-2002 2  
Academic Integrity Statement 7  
    Faculty Responsibilities 7  
    Student Responsibilities 7  
Academic Regulations and Standards 7  
    Academic Integrity 7  
    Academic Standards for Probation, Dismissal, and Readmission 7–9  
    Grading 8–9  
    Repetition of a Course 9  
Academic Standards for Probation, Dismissal, and Readmission 7–9  
    Academic Probation 7  
    Exceptions to Dismissal 8  
    Progress Probation 7  
    Progress Renewal Procedure 8  
    Qualification for Readmission following Academic/Progress Dismissal 8  
    Removal from Probation 7  
    Standards for Dismissal 7  
Adapted Physical Education 18  
Administration of Justice 18–22  
Admissions Requirements 4–5  
    Associate Degree Nursing Program 4  
    High School Concurrent Enrollment Students 4  
    International Students in F-1 Visa Status 5  
    Personal Identification Number (PIN) 4  
    Social Security Number 4  
Aeronautics 22  
Affirmative Action Statement 3  
    Equal Opportunity Statement 3  
    Gender Equity 3  
    Sexual Harassment 3  
Agriculture 22–29  
American Sign Language 29  
Anatomy 29  
Announcement of Courses 18  
Anthropology 29–30  
Application for Admission 4  
Applied Graphics 30–32  
Applied Technology 32–33  
Apprenticeship Education 33  
    Carpenter  
    Electrician  
    Painter  
    Plumber  
    Roofer  
Art 33–37  
Associate Degree Nursing Program 4  
Associate of Arts & Associate of Science Degrees 10  
    Degree Honors 10  
    General Education Requirements 10  
    Major Requirements 10  
    Residence Requirement 10  
    Scholarship Requirement 10  
    Unit Requirement 10

Astronomy 37–38  
Automotive Technology 38–39

## B

Banking and Financial Services 40  
Behavioral Science 39  
Biology 39–40  
Botany 40  
Business Administration 40–47  
    Banking and Financial Services 40  
    Business Administration Courses 40–42  
    Business Management 42–44  
    Business Marketing 44–45  
    Hospitality 45  
    Human Resources 45–46  
    Real Estate 46–47  
Business Bookkeeping 47  
Business General 47–48  
Business Management 42–44  
Business Marketing 44–45  
Business Office Technology 47–54  
    Business Bookkeeping 47  
    Business General 47–48  
    Business Office Technology 48–54

## C

California Articulation Number (CAN) System 16  
Career Certificates 14, 15  
Catalog Rights 10  
Change of Grades 9  
Chemistry 54–55  
Child Development 55–58  
Chinese 58  
Civil & Surveying Technology 58–59  
College Skills 59–62  
Communication Studies 62  
Community Health Worker 62–63  
Community Involvement 63  
Computer & Information Sciences 63–70  
Construction Management Technology 71–72  
Consumer and Family Studies 72–73  
Consumer Issues 73  
Counseling 73–75  
Course Numbering 17  
Course Offerings 17  
Course Symbols 17  
CSU General Education Pattern 12  
    2001 California State University General Education Requirements  
    and Associate Degree Option B 12  
Culinary Training 75–80

## D

Dental 81–83  
    Dental Education (Assisting & Hygiene) 81

# Index

Dental Education - Assisting 81–82  
Dental Education - Hygiene 82–83  
Diesel/Equipment Technology 83–84  
Dietetic Technology 84  
Disability Resources 84–86  
Dismissal Standards 7

## E

Earth and Space Science 86  
Economics 86  
Education 86  
Electronic Technology 86–88  
Emergency Medical Care 88–89  
Engineering 90  
English 90–92  
English as a Second Language 93–94  
Environmental Science 95  
Environmental Technology 95  
Equal Opportunity Statement 3  
Expenses 6

## F

Faculty Responsibilities 7  
Fashion Studies 95–97  
Fee Schedule and Information 6  
Expenses 6  
Refunds 6  
Fire Technology 97–99  
Floristry 99  
Foods and Nutrition 100  
French 100–101

## G

Gender Equity 3  
General Course Information 17  
General Education Statement of Philosophy 10  
Geography 101  
Geology 102  
German 102  
Grading 8–9  
Change of Grades 9  
Grade Point Average (GPA) 8  
Grade Reports 9  
Grades and Grade Points 8  
Unit Defined 8

## H

Health Care 103  
Health Education 104  
High School Concurrent Enrollment Students 4  
History 104–105  
Hospitality 45  
Human Resources 45–46  
Humanities 105–106

www.santarosa.edu

## I

Industrial Education 106  
Interdisciplinary Studies 106  
Interior Design 106–107  
International Students in F-1 Visa Status 5  
Admission requirements 5  
Application Filing Periods 5  
Intersegmental General Education Transfer Curriculum 13  
2001 IGETC Transfer Pattern to the UC and CSU Systems and  
Associate Degree Option C 13  
Italian 108

## J

Japanese 108  
Journalism 109

## L

Latin 109  
Library and Information Resources 110–111

## M

Machine Tool Technology 111–112  
Mathematics 112–113  
Media Studies 113–114  
Medical Assisting 114–116  
Meteorology 116  
Microbiology 116  
Music 116–122

## N

Natural Resources 122–123  
Nonresident Student 4  
Nursing 123–126  
Nursing - Aide 123–124  
Nursing - RN 124–125  
Nursing - Vocational 125–126

## O

Open Classes 4

## P

Personal Identification Number (PIN) 4  
Philosophy 126–127  
Physical Education 127–135  
Physical Science 135  
Physics 135–136  
Physiology 136  
Political Science 136  
Prerequisites, Corequisites and Advisories 17  
Provisional Prerequisites 17  
Probation, Academic 7  
Probation, Progress 7

# Index

Probation Removal 7  
Progress Probation 7  
Psychiatric Technician 136–137  
Psychology 137–138

## R

Radiologic Technology 138–139  
Readmission-Academic/Progress Dismissal 8  
    Exceptions to Dismissal 8  
Real Estate 46–47  
Refunds 6  
Religious Studies 139  
Renewal, Progress Procedure 8  
Repeat Codes 17  
Repetition of a Course 9  
Residency  
    Determination of In-State Residency 5  
    Nonresident Student 4  
    Residency Requirements 4  
    Resident Student 4  
Russian 139

## S

Sexual Harassment 3  
Social Science 140  
Social Security Number 4  
Sociology 140  
Spanish 140–141  
Special Education 141–142  
Speech 142–143  
SRJC Technology Academy 3  
Student Responsibilities 7

## T

Theatre Arts 143–144

## U

Unit Defined 8, 17

## W

Welding 144  
Work Experience 145