Announcement of Courses & Course Numbers

COURSES

Credit Courses: Courses numbered 001-399 are graded courses authorized by the Governing Board of Solano Community College. All courses are not offered every year. Courses offered depend on prospective enrollment, the availability of instructors and physical facilities. Prospective students should consult the current Schedule of Classes for information on course offerings for a specific semester.

Noncredit Courses: The courses numbered 500-599 are offered on a noncredit basis. Regular attendance and participation are required. No grades or college credit are issued. Contact the Office of Admissions and Records or see the Schedule of Classes for current offerings.

Community Education Courses: The College offers a variety of Community Education courses and workshops that are designed to meet the needs of community residents and businesses. These courses are fee-based, not for credit courses that do not receive any tax support. No student records are kept by the Office of Admissions and Records. Community Education courses are not listed in this Catalog but in a separate bulletin, *Vistas*, published each semester (fall and spring). Contact the Community Education Office for course schedules and details about registration at (707) 864-7115 and online: **www.solano.edu/vistas.**

CO/PREREQUISITES AND ADVISORIES

It is the intent of Solano College to guide students into courses in which they will have the best opportunity for academic success. Therefore, many courses have co-requisite, prerequisites or advisories indicated in their descriptions.

Co-requisite details: There are two types of co-requisites. The first is a course or equivalent preparation that **must** be taken concurrently with another course. The second is a course or equivalent preparation that may be completed before **or** taken concurrently with another course. Both types of co-requisites are listed as such under "Prerequisites," but the second type is followed by the parenthetical phrase "may be taken concurrently." A student's enrollment in a course with a co-requisite is blocked until the requirements of the co-requisite are satisfied.

Prerequisite: A course or equivalent preparation that **must** be completed **before** enrolling in another course. A student's enrollment in a course with a prerequisite is blocked until the requirements of the prerequisite are satisfied.

Advisory: A course or equivalent preparation that will broaden or deepen a student's learning experience in a subsequent course. A student's enrollment in a course with an advisory is not blocked for lack of the advisory skills.

Co/Prerequisites. Course co-requisites and prerequisites ensure that the student has the minimum level of knowledge and/or skills to be successful in the specific course or program. The skills, concepts, and proficiencies learned in the prerequisite are not taught in the subsequent course. Co-requisite and prerequisite information for a course, if any, appears in the "Prerequisite" area of the catalog description. For registration purposes, if a student is currently enrolled in a prerequisite course, that student may enroll in a subsequent course **contingent** on successful completion of the prerequisite. If the student is unsuccessful in the prerequisite, he/she will be **dropped** automatically from the subsequent course.

Advisories. Advisories are recommendations made to enhance or deepen the student's learning experience in a course. While the advisory skills and proficiencies are not required in order for a student to be successful in the course, advisories should be taken seriously. For specific information, students should consult their counselor or faculty advisor. Solano College has established recommended minimum English and math standards for Associate-Degree level courses across the disciplines to advise students of the levels of writing, reading, and math skills they should have in order to have the most beneficial learning experience. Advisory information for a course appears in the "Course Advisory" area of the catalog description.

The recommended **minimum** skill level in English in an Associate-Degree level course (SCC minimum English standard) is eligibility for enrollment in one English course one level below English 001. The recommended **minimum** skill level in mathematics in an Associate-Degree level course (SCC minimum Math standard) is eligibility for enrollment in elementary algebra (Math 330).

Verification of a Co/Prerequisite. Students desiring to enroll in a course or program that specifies a co/prerequisite course and who have completed such a course at an institution other than Solano College must submit documentation to verify this completion. This documentation (unofficial or official transcript or report card) must be presented to a counselor, faculty advisor, or division dean or Office of Admissions or Records.

Announcement of Courses & Course Numbers

Challenging a Co/Prerequisite. A student has the right to challenge a course co/prerequisite based on the following grounds: the co/prerequisite has not been established in accordance with the District process for establishing co/prerequisites; the co/prerequisite is either unlawfully discriminatory or is being applied in an unlawfully discriminatory manner; the prerequisite course has not been made "reasonably available" and the required completion of it will cause a delay of one or more terms in attaining the goal specified in the student's authorized Individualize Education Plan (IEP); or the student has the knowledge or ability to succeed in the course or program despite not meeting the co/prerequisite. In the challenge process, **the burden of proof is on the student**. In order to file a challenge, students must submit a "Petition to Challenge a Course Pre/Co-requisite," available at the Office of Admissions and Records. If the challenge is upheld, the student will be allowed to enroll, contingent on the availability of space in the course; if denied, the student will not be allowed to enroll or, if already enrolled, will be dropped automatically from the class. Refer to the form for more detailed information on the requirements and procedures for processing this petition.

COURSE NUMBERING SYSTEM

The following numbering system indicates transferability, credit or noncredit status and other related information. For specific transfer information, students should consult a counselor and refer to the catalog of the prospective transfer institutions.

COURSE NUMBERS

001-049 Qualify for the AA/AS Degree; transfer to the University of California system and the California State Universities.

050-099 Qualify for the AA/AS Degree and transfer to the California State Universities.

100-199 Qualify for the AA/AS Degree but, generally, do not transfer to four-year institutions. Some courses may be used to meet requirements in certain majors at some four-year institutions.

200-299 Vocational, credit courses which DO NOT apply to the AA/AS Degree and do not transfer to four-year institutions.

300-399 Credit courses which DO NOT apply to the AA/AS Degree. **Exception:** One English course one level below English 001 which may be applied to the Associate Degree as an elective and one elementary algebra course which may be used as an elective. These courses do not transfer to four-year institutions.

500-599 Noncredit courses.

600-799 Community Service courses. These courses are not for credit and usually charge a fee.

Some sequentially-numbered courses continue through two or more semesters and must often be taken in sequence. Check course prerequisites for appropriate course sequence.

The College reserves the right to cancel any class which does not meet the minimum enrollment requirements and whenever there are unexpected staffing or facility situations that cannot be satisfactorily resolved.

Course Families

The following courses are considered active participatory courses related in content according to Title 5 §55000. Active participatory courses that are closely related in content are grouped into families based on Title 5 guidelines. These courses are not repeatable, and students may enroll up to four times within an active participatory course family. Please see the Solano Community College online catalog for the most recent listing of active participatory course families – www.solano.edu.

Art Course Families

Life Drawing
ART 004 Life Drawing
ART 005 Life Drawing

Drawing
ART 014 Introduction to Drawing
ART 015 Intermediate Drawing

Professional Art Practices
ART 077A Practices for Artists
ART 077B Art on Site

Art Portfolio Development
ART 076A Portfolio Development – Artistic Inquiry
ART 076B Portfolio Development: Documentation

Mural Arts
ART 030A Architectural Ceramics, Murals and Tiles
ART 030B Mural Painting

Ceramic Hand-Building
ART 023 Introduction to Ceramics: Hand Building
ART 024 Intermediate Ceramics: Hand Building
ART 025 Ceramic Design and Decoration: Hand Building Methods

Ceramic Wheel-Throwing
ART 026 Introduction to Ceramics: Wheel Throwing Techniques
ART 027 Intermediate Ceramics: Wheel Throwing Techniques
ART 028 Ceramics Design: Wheel Throwing Techniques

Sculpture
ART 031 Sculpture
ART 033 Intermediate Sculpture

Acrylic and Oil Painting
ART 017 Intermediate Painting: Acrylic and Oil
ART 018 Advanced Intermediate Painting: Acrylic and Oil

Watercolor
ART 021 Watercolor
ART 022 Watercolor

Intaglio (Etching and Engraving)
ART 039 Etching and Engraving: Line Techniques
ART 040 Etching and Engraving: Tone
ART 041 Etching and Engraving Color

Illustration
ART 054 Illustration I
ART 055 Illustration II

Graphic Design
ART 056 Graphic Design I
ART 057 Graphic Design II

Music Course Families

Beginning Voice
MUSC 035A Beginning Voice I
MUSC 035B Beginning Voice II

Intermediate Voice
MUSC 036A Intermediate Voice I
MUSC 036B Intermediate Voice II

Guitar
MUSC 038 Class Lessons in Beginning Guitar
MUSC 039 Class Lessons in Intermediate Guitar

Jazz Piano
MUSC 042A Jazz and Pop Piano
MUSC 042B Jazz and Pop Piano

Beginning Piano Family
MUSC 027 Elementary Piano, Part I
MUSC 028 Elementary Piano, Part II

Intermediate Piano Family
MUSC 029 Intermediate Piano, Part I
MUSC 030 Intermediate Piano, Part II

Instrumental Group Study
MUSC 031 Class Lessons in Woodwinds
MUSC 032 Class Lessons in Brass
MUSC 033 Class Lessons in Strings
MUSC 034 Class Lessons in Percussion

Kinesiology Course Families

Health Education
HED 002 Health Education
HED 003 Women's Health Issues

Adapted Kinesiology/ Physical Education
KINE 001A Adapted Aquatics
KINE 001D Adapted Weight Training
KINE 091 Adapted Back Rehab

Aquatics
KINE 002A Beginning Swimming
KINE 002B Intermediate Swimming
KINE 002D Swim for Fitness
KINE 002E Aqua Aerobics

Combatives
KINE 003A Beginning Self Defense
KINE 003D Beginning Judo
KINE 003E Intermediate Judo
KINE 006G Tai Chi

Course Families

Cardio/Respiratory Fitness
KINE 005C Fitness for Life
KINE 005E Cardio Conditioning
KINE 005P Step Aerobics
KINE 006A Cardio Kickboxing

Resistance Training
KINE 005D Circuit Training
KINE 005J Beginning Body
    Conditioning
KINE 005K Intermediate Body
    Conditioning
KINE 005M Beginning Weight
    Training
KINE 005N Intermediate Weight
    Training
KINE 078 Fit Ball Training

Metabolic Fitness
KINE 005Q Elite Fitness Training
KINE 005R Core Conditioning
    Training
KINE 083 Fire Candidate Physical
    Fitness

Individual Sports
KINE 007A Beginning Bowling
KINE 007F Beginning Archery
KINE 008A Beginning Tennis
KINE 008B Intermediate Tennis
KINE 008E Beginning Badminton
KINE 008F Intermediate Badminton

Cycling
KINE 007B Beginning Road Bicycling
KINE 007C Beginning Mountain
    Biking

Team Sports
KINE 009A Beginning Basketball
KINE 009B Indoor/Outdoor Soccer
KINE 009C Intermediate Soccer
KINE 009E Intermediate Basketball
KINE 009F Beginning Baseball
KINE 009G Softball
KINE 009H Beginning Volleyball
KINE 009P Intermediate Volleyball

Athletics Theory
KINE 020D Baseball Theory and
    Practice I
KINE 020E Baseball Theory
    and Practice II
KINE 020F Football Theory
    and Practice I
KINE 020G Football Theory
    and Practice II
KINE 020J Softball Theory
    and Practice II
KINE 020M Volleyball Theory
    and Practice I
KINE 020N Volleyball Theory
    and Practice II
KINE 020P Softball Theory
    and Practice I
KINE 020Q Soccer Theory
    and Practice I
KINE 020R Soccer Theory
    and Practice II
KINE 020X Basketball Theory
    and Analyses I
KINE 020Y Basketball Theory
    and Analyses II

Yoga
KINE 006E Fundamentals of Yoga
KINE 006F Intermediate Yoga

Pilates
KINE 006C Pilates for Fitness

Dance/Kinesiology

Jazz Dance
KINE 004D Jazz Dance Technique
KINE 004H Beginning Jazz Dance
KINE 004P Intermediate Jazz Dance

Tap Dance
KINE 004B Beginning Tap Dance
KINE 004C Intermediate Tap Dance

Ballet
KINE 004K Beginning Ballet
KINE 004M Intermediate Ballet

Modern Dance
KINE 004A Beginning
    Contemporary Modern Dance

Hip Hop
KINE 004F Beginning Hip-Hop
    Dance

Ballroom
KINE 004J Beginning Ballroom
    Dance

Swing
KINE 004N Beginning Swing Dance

Dance Production
KINE 004E Dance Production
KINE 004G Dance Choreography

Accounting

Program Description
In recent years, accounting has been one of the fastest growing professions, and the monetary rewards for the individual just entering the field and those achieving corporate positions are among the highest. Accountants deal with the financial condition of a company, an individual, or an organization. An accountant is an analyst who is employed because of expertise in financial matters.

Certificate of Achievement and Associate in Science Degree
A Certificate of Achievement can be obtained upon completion of the 29-unit major with a grade of C (2.0) or better in each course. The Associate in Science Degree can be obtained by completing a total of 60 units, including the required courses in the major, the general education requirements, and electives. All courses in the major must be completed with a grade of C or better or a P if the course is taken on a Pass/No Pass basis.

Program Outcomes
Students who earn an Accounting A.A. or transfer with a focus on accounting will be able to:
1. Demonstrate the use of the accounting cycle to prepare the income statement, statement of owner's equity, and balance sheet while applying the generally accepted accounting principles and concepts.
2. Analyze and evaluate managerial decisions using basic managerial accounting concepts and theory.

Students who earn an Accounting Certificate will be able to:
1. Demonstrate the use of the accounting cycle to prepare the income statement, statement of owner's equity, and balance sheet while applying the generally accepted accounting principles and concepts.

REQUIRED COURSES . . . . **Units**
ACCT 001 Principles of Accounting - Financial. 4
ACCT 002 Principles of Accounting - Managerial. 4
ACCT 050 Computer Accounting 3
ACCT 176 Intermediate Accounting 3
ACCT 177 Cost Accounting 3
ACCT 183 Principles of Income Tax 3
CIS 050 Microcomputer Applications 3
OR
CIS 001 Introduction to Computer Science. 3
CIS 066 Microsoft Word. 3
CIS 073 Microsoft Excel 3
   Total Units **29**

Recommended Electives:
OCED 090 Occupational Work Experience
OCED 091 General Work Experience

Account Clerk Job-Direct Certificate
All courses in the major must be completed with a grade of C or better

REQUIRED COURSES . . . . **Units**
ACCT 180 Introduction to Accounting 3
BUS 100 Work Readiness 1.5
CIS 073 Microsoft Excel 3
OT 162 Ten-Key. 1
   Total Units **8.5**

Accounting

ACCT 001   **4 Units**
Principles of Accounting - Financial
Course Advisory: SCC minimum English and Math standards; Working knowledge of Excel helpful. A study and analysis of the accounting cycle, accruals and deferrals, inventory, receivables, plant assets, accounting systems, error correction, and financial reporting. *Four hours lecture.*

ACCT 002   **4 Units**
Principles of Accounting - Managerial
Prerequisite: ACCT 001 with a grade of C or CR or better. Course Advisory: Working knowledge of Excel helpful. A study and analysis of the managerial accounting concepts and theory including the following: job order cost accounting; process cost accounting; departmental accounting; product analysis; pricing decisions; flexible budgeting; standard cost analysis; cost volume, profit analysis; preparation of operational, capital and financial budgets; analysis of financial reporting; and tax implications of managerial decisions. In addition, a study of corporate reporting, bonds and long-term liabilities, long-term investments, and reporting and analyzing cash flows. *Four hours lecture.*

ACCT 050   **3 Units**
Computer Accounting
Prerequisite: ACCT 001. Course Advisory: SCC minimum English and Math standards. A hands-on course covering a complete computerized accounting system. Topics include a review of basic accounting concepts, preparation of business reports and graphs, and the creation of an accounting system for a company. *Three hours lecture.*

ACCT 176   **3 Units**
Intermediate Accounting
Prerequisite: ACCT 002 with a grade of C or CR or better. Course Advisory: Working knowledge of Excel helpful. Accounting theory as applied to common issues faced by accountants in today's businesses. Lecture, group-study, and computer-based study emphasize the conceptual framework, the four major financial statements, footnotes, and present-value concepts. The class helps prepare the student for an entry-level position in professional accounting career. *Three hours lecture.*

ACCT 177   **3 Units**
Cost Accounting
Prerequisite: ACCT 002 with a grade of C or CR or better. A comprehensive study and analysis of manufacturing costs as they apply to planning, controlling, and determining unit costs, inventory valuation, and income. *Three hours lecture.*

ACCT 180   **3 Units**
Introduction to Accounting
Course Advisory: SCC minimum English and Math standards. A study and analysis of the accounting cycle for a merchandising business and professional enterprises, payroll accounting, accruals and deferrals, accounting systems, error correction, and financial reporting. *Three hours lecture.*

ACCT 183   **3 Units**
Principles of Income Tax
Course Advisory: SCC minimum English and Math standards. A comprehensive study and analysis of the principles of federal income tax applied to individual, partnership, informational, and corporate tax returns. *Three hours lecture.*

Aeronautics

Airframe Maintenance Technician

Program Description
Practical and theoretical knowledge in basic maintenance techniques, plus the special requirements of either airframe or powerplant work. Upon satisfactory completion of the required courses, the student is eligible to take the Federal Aviation Administration written oral and practical examination for airframe or powerplant license.

Certificate of Achievement and Associate in Science Degree
A Certificate of Achievement can be obtained upon completion of one of the 41-unit majors listed below. An Associate in Science Degree can be obtained upon completion of the units required for the major in either Airframe or Powerplant or Airframe and Powerplant and general education requirements.

The Federal Aviation Administration (FAA) requires 1900 hours (four full semesters and one four week summer session) of instruction to complete the combination airframe and powerplant curriculum. All courses in the major must be completed with a grade of C or better or a P if the course is taken on a Pass/No Pass basis.

Program Outcomes
Students who complete the Certificate of Achievement/Associate Degree will be able to:
1. Demonstrate proficient, entry-level aviation maintenance skills in airframe and powerplant with emphasis on aircraft engines, aircraft structures, and aircraft systems.
2. Have a working knowledge to inspect, maintain, service and repair aircraft electrical, engine (piston and turbine), airframe structure, flight control, hydraulic, pneumatic, fuel, navigation and instrument systems and other aircraft components specified by Federal Aviation Regulation Part 147.
3. Obtain an FAA, Airframe and Powerplant License upon completion of the Federal Aviation Administration (FAA) knowledge, oral, practical and written examination in general, airframe, and powerplant subjects.

REQUIRED COURSES . . . . **Units**
AERO 055 Aviation Maintenance
    Technician General I 10
AERO 102 Airframe Maintenance I 10
AERO 103 Aviation Maintenance
    Technician General II 10
AERO 105 Airframe Maintenance II 10
AERO 118 FAA Airframe Test Review &
    Qualification 1
    Total Units 41

To obtain the combination Airframe & Powerplant Maintenance Technician certificate or degree, also complete the three courses listed below: . . . . Units
AERO 106 Powerplant Maintenance I. 10
AERO 107 Powerplant Maintenance II 10
AERO 119 FAA Powerplant Test Review
    & Qualification 1
    Total Units 21

Recommended Electives:
AERO 150 FAA Special Projects-Airframe Enhancement
OCED 090 Occupational Work Experience
OCED 091 General Work Experience

Aeronautics

Powerplant Maintenance Technician

Program Description
Practical and theoretical knowledge in basic maintenance techniques, plus the special requirements of either airframe or powerplant work. Upon satisfactory completion of the required courses, the student is eligible to take the Federal Aviation Administration written, oral and practical examination for airframe or powerplant license.

Certificate of Achievement and Associate in Science Degree
A Certificate of Achievement can be obtained upon completion of one of the 41-unit majors listed below. An Associate in Science Degree can be obtained upon completion of the units required for the major in either Airframe or Powerplant or Airframe and Powerplant and general education requirements.

The Federal Aviation Administration (FAA) requires 1900 hours (four full semesters and one four week summer session) of instruction to complete the combination airframe and powerplant curriculum. All courses in the major must be completed with a grade of C or better or a P if the course is taken on a Pass/No Pass basis.

Program Outcomes
Students who complete the Certificate of Achievement/ Associate Degree will be able to:
1. Demonstrate proficient, entry-level aviation maintenance skills in airframe and powerplant with emphasis on aircraft engines, aircraft structures, and aircraft systems.
2. Have a working knowledge to inspect, maintain, service and repair aircraft electrical, engine (piston and turbine), airframe structure, flight control, hydraulic, pneumatic, fuel, navigation and instrument systems and other aircraft components specified by Federal Aviation Regulation Part 147.
3. Obtain an FAA, Airframe and Powerplant License upon completion of the Federal Aviation Administration (FAA) knowledge, oral, practical and written examination in general, airframe, and powerplant subjects.

REQUIRED COURSES . . . . **Units**
AERO 055 Aviation Maintenance Technician
    General I 10
AERO 103 Aviation Maintenance Technician
    General II 10
AERO 106 Powerplant Maintenance I. 10
AERO 107 Powerplant Maintenance II 10
AERO 119 FAA Powerplant Test Review
    & Qualification 1
    Total Units **41**

To obtain the combination Airframe & Powerplant Maintenance Technician certificate or degree, also complete the three courses listed below: . . . . **Units**
AERO 102 Airframe Maintenance I 10
AERO 105 Airframe Maintenance II 10
AERO 118 FAA Airframe Test Review
    & Qualification 1
    Total Units **21**

Recommended Electives :
AERO 150 FAA Special Projects-Airframe Enhancement
OCED 090 Occupational Work Experience
OCED 091 General Work Experience

Aeronautics courses numbered 200 and above are intended as refresher courses and may be used to prepare for FAA licensing. They are not applicable toward the certificate or A.S. Degree in Airframe Maintenance or Powerplant Maintenance and are not covered under Part 147 FAR's or the school FAA certification.

Students with prior experience or schooling must have Solano instructor verification for substitution or waivering. "Proof of Proficiency Exam" may be required prior to enrollment in any class other than 055.

Aeronautics

AERO 055   **10 Units**
Aviation Maintenance Technician
Course Advisory: SCC Minimum English and Math standards. Presents the fundamentals necessary for the advanced study in Aeronautics. It will define the history of aviation and powerplant operation, and the study of flight: aircraft weight and balance, ground operation and servicing, mathematics, maintenance forms and records, basic physics, maintenance publication, and mechanic privileges and limitation. Safety is stressed throughout the course. In addition, this course is a study of the methods and processes used in the production of an aircraft, including shop safety. Use of hand tools and power equipment, aircraft drawings, cleaning, corrosion control; and the processes used by the manufacturers for aircraft construction. *Five hours lecture, fifteen hours lab.*

AERO 060   **5 Units**
Basic Aeronautical Science
Course Advisory: SCC minimum English and Math standards. Presents the fundamentals necessary for the advanced study in Aeronautics. Along with an exposure to the history of aviation and powerplant operation, the student will learn ground operation and servicing, mechanic privileges and limitations, maintenance forms, records, and publications, technical mathematics and physics, and how to calculate the weight and balance of an aircraft. Safety is stressed throughout the course. Not available for credit to students who have completed AERO 055 with a C or better. *Two and one-half hours lecture, seven and one-half hours lab.*

AERO 062   **5 Units**
Aircraft Production Processes
Course Advisory: SCC minimum English and Math standards. Continues the study of the fundamentals of Aeronautics. The student will learn about the materials used in aircraft construction and maintenance, proper cleaning and corrosion control, and understand aircraft drawings. Safety is stressed throughout the course. Not available for credit to students who have completed AERO 055 with a C or better. *Two and one-half hours lecture, seven and one-half hours lab.*

AERO 064   **5 Units**
Basic Aircraft Hydraulic & Pneumatic Systems
Course Advisory: SCC minimum English and Math standards. Presents the study of the fundamentals of Aeronautics. The student will gain an understanding of fluid power systems and the components used to generate and transfer fluid power in aircraft. Safety is stressed throughout the course. Not available for credit to students who have completed AERO 103 with a C or better. *Two and one-half hours lecture, seven and one-half hours lab.*

AERO 066   **5 Units**
Basic Aircraft Electrical Systems
Course Advisory: SCC minimum English and Math standards. Presents the study of the fundamentals of Aeronautics. The student will gain an understanding of electricity, electronics, and the electrical systems used in aircraft. Though primarily oriented toward direct current systems, alternating current and modern electronic circuitry are also included. Safety is stressed throughout the course. Not available for credit to students who have completed AERO 103 with a C or better. *Two and one-half hours lecture, seven and one-half hours lab.*

AERO 102   **10 Units**
Airframe Maintenance II
Course Advisory: SCC minimum English standard; AERO 055. Presents the application of fundamental methods, techniques and practices used in aircraft inspection, maintenance and repair. Includes shop safety, wood structures, fabric covering, finishes, composite structures, plastics, sheet metal structures, welding, assembly and rigging, and airframe inspection. *Five hours lecture, fifteen hours lab.*

AERO 103   **10 Units**
Aviation Maintenance Technician General II
Course Advisory: SCC minimum English standard; AERO 055. A study of fluid control systems and components with emphasis on design, maintainability, testing and repair. Includes hydraulic fluids, lines and fittings, inspection, checking, servicing and testing of pneumatic and hydraulic systems. Presents theory and application of direct and alternating current as related to air electrical components and systems. *Five hours lecture, fifteen hours lab.*

AERO 105   **10 Units**
Airframe Maintenance II
Course Advisory: SCC minimum English standard. A detailed study of aircraft systems, their fabrication, maintenance, and repair. Includes landing gear, hydraulic, pneumatic, atmosphere control, instruments, communication, navigation, fuel, position, warning, rain and fire protection systems. *Five hours lecture, fifteen hours lab.*

AERO 106   **10 Units**
Powerplant Maintenance I
Course Advisory: SCC minimum English standard; AERO 055. Presents a study of the theory, operation, maintenance and repair of reciprocating engines and accessories. *Five hours lecture, fifteen hours lab.*

Aeronautics

AERO   107   10 Units
Powerplant Maintenance II
Course Advisory: SCC minimum English standard; AERO 055. Presents a study of the theory, operation, maintenance and repair of the turbine engine and accessories. *Five hours lecture, fifteen hours lab.*

AERO   118   0.50 to 1.50 Units
FAA Airframe Test Review & Qualification
Course Advisory: SCC minimum English and Math standards; AERO 055. To be taken during the final semester of a student's enrollment in the Aviation Program. Consists of a comprehensive oral, practical, and written examination of all material covered in the Airframe Program for the purpose of verifying the student's readiness to pass the Federal Aviation Administration Airframe Examinations. This is an open entry/open exit course. *Six to eighteen hours lab (4 week course).*

AERO   119   0.50 to 1.50 Units
FAA Powerplant Test Review & Qualification
Course Advisory: SCC minimum English and Math standards; AERO 055. To be taken during the final semester of a student's enrollment in the Aviation Program. Consists of a comprehensive oral, practical, and written examination of all material covered in the Powerplant Program for the purpose of verifying the student's readiness to pass the Federal Aviation Administration Powerplant Examinations. This is an open entry/open exit course. *Six to eighteen hours lab (4 week course).*

AERO   150   0.50 to 1.50 Units
FAA Special Projects-Airframe Enhancement
Course Advisory: SCC minimum English and Math Standard; Any Solano College Aeronautics course (AERO 055-119); or previous training/experience in aeronautics. This course is designed to give Aeronautics students a chance to make up time lost for FAA certificate and/or to work on special projects required by FAA to bring students in line with new FAA FAR Part 66 requirements. This is an open entry/open exit course. *One and one-half to four and one-half hours lab.*

AERO   151   0.50 to 1.50 Units
FAA Special Projects - Powerplant Enhancement
Course Advisory: SCC minimum English and Math standards; Any Solano College Aeronautics course (AERO 055-119; or previous training/experience in aeronautics. This course is designed to give Aeronautics students a chance to make up time lost for FAA certificate and/or to work on special projects required by FAA to bring students in line with new FAA FAR Part 66 requirements. Also allows mechanics to take recurrent training. This is an open entry/exit course. *One and one-half to four and one-half hours lab.*

AERO   175   2 Units
Working with Composite Materials
Course Advisory: SCC minimum English and Math standards. Introduces the student to the manufacturing and maintenance of composite materials in aeronautical and aerodynamic structures. Emphasis is placed on the safe handling of tools and chemicals used in composites. Does not qualify toward FAA licensing for airframe or powerplant mechanics. *One hour lecture, three hours activity.*

AERO   176   1 Unit
Composite Materials Workshop
Prerequisite: AERO 175 with a grade of C or better. Course Advisory: SCC minimum English and Math standards. Continues the study of the manufacturing and maintenance of composite materials in aeronautical and aerodynamic structures. Through laboratory practice the student is able to improve their skills to aeronautical quality. Emphasis is placed on the safe handling of tools and chemicals used in composites. Does not qualify toward FAA licensing for airframe or powerplant mechanics. *Three hours activity.*

Art

Art - Two-Dimensional

Program Description
Students may select from two art programs—Two-Dimensional or Three-Dimensional. These programs are designed to develop visual skills in a variety of art media.

Associate in Arts Degree
The Associate in Arts Degree can be obtained upon completion of 60 units, including the courses in the major for Art—Two-Dimensional or Art—Three-Dimensional, general education requirements, and electives. All courses in the major must be completed with a grade of C or better or a P if the course is taken on a pass-no pass basis.

Program Outcomes
Students who complete an Associate Degree will be able to:
1. Analyze, apply and integrate diverse visual experiences.
2. Develop and articulate with proficiency an understanding of visual and multi-cultural literacy.
3. Work independently and cooperatively to solve creative problems, applying critical thinking skills.

Students must complete courses in all of the following components according to the listed requirements in each.

REQUIRED COURSES . . . . **Units**
Foundation Component
All of the following:
ART 006 Design Principles in 2-Dimensions. 3.5
ART 007 Design-Color 3.5
ART 008 Design Principles in 3-Dimensions. 3.5

Drawing Component . . . . **Units**
All of the following:
ART 004 Life Drawing. . . . . 2 - 3.5
ART 014 Introduction to Drawing. . . . . 2 - 3.5

Painting Component. . . . . **Units**
One of the following:
ART 016 Beginning Painting . . . . 2 - 3.5
ART 017 Acrylic and Oil Painting . . . . 2 - 3.5
ART 021 Watercolor . . . . 2 - 3.5

2D Emphasis Component . . . . **Units**
One of the following:
ART 005 Life Drawing. . . . . 2 - 3.5
ART 015 Intermediate Drawing. . . . . 2 - 3.5
ART 018 Acrylic and Oil Painting . . . . 2 - 3.5
ART 019 Figure Painting. . . . . 2 - 3.5
ART 020 Landscape Drawing and Painting—
       Reflections of Nature. . . . . 2 - 3.5
ART 022 Watercolor . . . . 2 - 3.5
ART 038 Introduction to Printmaking 3.5
ART 058 Clothed Figure . . . . 2 - 3.5
ART 061 Collage & Assemblage. . . . . 2 - 3.5
ART 100 Color and Mixed Media Drawing . . . . 2 - 3.5
ART 145 Portrait Drawing and Painting. . . . . 2 - 3.5

Three-Dimensional Component. . . . . **Units**
One of the following:
ART 023 Introduction to Ceramics: Hand Building . 2 - 3.5
ART 026 Introduction to Ceramics:
       Wheel Throwing Techniques . . . . 2 - 3.5
ART 031 Sculpture   . . . . 2 - 3.5

Art History Component . . . . **Units**
All of the following:
ART 001 Art History 3
OR
ART 002 Art History 3
ART 011 Survey of Modern Art 3
    Total Units . . . . **26.5 – 34**

Recommended Electives
ART 003 World Art
ART 010 Art Appreciation
ART 012 Inside/Outside: The Cultures and Identities
       of Visual Artists in a Diverse America
ART 016 Beginning Painting
ART 018 Acrylic and Oil Painting
ART 019 Figure Painting
ART 020 Landscape Drawing and Painting—
       Reflections of Nature
ART 021 Watercolor
ART 022 Watercolor
ART 024 Intermediate Ceramics: Hand Building
ART 025 Ceramic Design And Decoration:
       Hand Building Methods
ART 027 Intermediate Ceramics: Wheel Throwing
       Techniques
ART 028 Ceramic Design: Wheel Throwing Techniques
ART 032 Sculpture: Human Figure
ART 033 Intermediate Sculpture
ART 034 Ceramic Sculpture
ART 035 Wood-Fired Ceramics
ART 037 Clay and Glazes for the Ceramic Artist
ART 039 Etching and Engraving: Line Techniques
ART 040 Etching and Engraving: Tone
ART 041 Etching and Engraving: Color
ART 043 Printmaking: Relief Printing, Including Woodcut
ART 044 Kiln Design and Operation
ART 058 Clothed Figure
ART 060 Exhibition Design
ART 061 Collage & Assemblage
ART 075 Art Studio Concepts
ART 100 Color and Mixed Media Drawing
ART 145 Portrait Drawing and Painting
PHOT 030 Beginning Photography

Art

Art - Three-Dimensional

Program Description
Students may select from two art programs—Two-Dimensional or Three-Dimensional. These programs are designed to develop visual skills in a variety of art media.

Associate in Arts
The Associate in Arts Degree can be obtained upon completion of 60 units, including the courses in the major for Art— Two-Dimensional or Art—Three-Dimensional, general education requirements, and electives. All courses in the major must be completed with a grade of C or better or a P if the course is taken on a pass-no pass basis.

Program Outcomes
Students who complete an Associate Degree will be able to:
1. Aanalyze, apply and integrate diverse visual experiences.
2. Develop and articulate with proficiency an understanding of visual and multi-cultural literacy.
3. Work independently and cooperatively to solve creative problems, applying critical thinking skills.

Students must complete courses in all of the following components according to the listed requirements in each.

REQUIRED COURSES . . . . **Units**
Foundation Component
All of the following:
ART 006 Design Principles in 2-Dimensions. 3.5
ART 007 Design-Color 3.5
ART 008 Design Principles in 3-Dimensions. 3.5

Sculpture Component. . . . . **Units**
All of the following:
ART 031 Sculpture . . . . 2 - 3.5
ART 032 Sculpture: Human Figure . . . . 2 - 3.5

Ceramics Component . . . . **Units**
One of the following:
ART 023 Introduction to Ceramics: Hand Building . 2 - 3.5
ART 024 Intermediate Ceramics: Hand Building . . . 2 - 3.5
ART 025 Ceramic Design And Decoration:
　　　　Hand Building Methods . . . . 2 - 3.5
ART 026 Introduction to Ceramics:
　　　　Wheel Throwing Techniques . . . . 2 - 3.5
ART 027 Intermediate Ceramics:
　　　　Wheel Throwing Techniques . . . . 2 - 3.5
ART 028 Ceramic Design:
　　　　Wheel Throwing Techniques. . . . . 2 - 3.5

Emphasis Component. . . . . **Units**
One of the following:
ART 029 Raku Pottery . . . . 2 - 3.5
ART 030 Architectural Ceramics, Murals and Tiles . 2 - 3.5
ART 033 Intermediate Sculpture . . . . 2 - 3.5
ART 034 Ceramic Sculpture . . . . 2 - 3.5
ART 035 Wood-Fired Ceramics . . . . 2 - 3.5
ART 036 Ceramic Surfaces -
　　　　Drawing and Painting on Clay . . . . 2 - 3.5
ART 037 Clay and Glazes for the Ceramic Artist . . . 2 - 3.5
ART 044 Kiln Design and Operation. . . . . 2 - 3.5

Drawing Component . . . . **Units**
One of the following:
ART 004 Life Drawing (3.5) . . . . 2 - 3.5
ART 015 Intermediate Drawing (2 or 3.5). . . . . 2 - 3.5

Art History Component . . . . **Units**
All of the following:
ART 001 Art History *OR* Art 002 Art History 3
ART 011 Survey of Modern Art 3

Professionalism Component. . . . . **Units**
One of the following:
ART 076A Portfolio Development – Artistic Inquiry . . 3.5
ART 076B Portfolio Development: Documentation 3.5
ART 077A Professional Practices for Artists. 3
ART 077B Art on Site 3
　　　Total Units . . . . **29.5 – 37.5**

Recommended Electives
ART 003 World Art
ART 010 Art Appreciation
ART 011 Survey of Modern Art
ART 012 Inside/Outside: The Cultures and Identities
　　　　of Visual Artists in a Diverse America
ART 015 Intermediate Drawing
ART 024 Intermediate Drawing
ART 025 Ceramic Design and Decoration:
　　　　Hand Building Methods
ART 027 Intermediate Ceramics: Wheel Throwing
Techniques
ART 028 Ceramic Design: Wheel Throwing Techniques
ART 034 Ceramic Sculpture
ART 035 Wood-Fired Ceramics
ART 037 Clay and Glazes for the Ceramic Artist
ART 039 Etching and Engraving: Line Techniques
ART 040 Etching and Engraving: Tone
ART 041 Etching and Engraving: Color
ART 042 Screen Printing
ART 043 Printmaking: Relief Printing, Including Woodcut
ART 060 Exhibition Design

Art

Art History

Program Description
This program provides the academic and practical experience to prepare students for a career, or further education at a four-year institution, in art history and related fields.

Associate in Arts Degree
The Associate in Arts Degree can be obtained by completing a total of 60 units, including the 28-32.5 units for the major, the general education requirements, and electives. All courses in the major must be completed with a grade of C or better, or a P if the course is taken on a pass-no pass basis.

Program Outcomes
Students who complete an Associate Degree will be able to:
1. Analyze, apply and integrate diverse visual experiences.
2. Develop and articulate with proficiency an understanding of visual and multi-cultural literacy.
3. Work independently and cooperatively to solve creative problems, applying critical thinking skills.

REQUIRED COURSES . . . . **Units**
ART 001 Art History 3
ART 002 Art History 3
ART 003 World Art 3
ART 011 Survey of Modern Art 3
ART 012 Inside/Outside: The Cultures and
      Identities of Visual Artists
      in a Diverse America 3
ART 014 Introduction to Drawing . . . . 2 – 3.5
ART 060 Exhibition Design 3.5
Choose two classes from Recommended List. 4-7

Principles of Design . . . . **Units**
Choose one class from the following list.
ART 006 Design Principles in 2-Dimensions. 3.5
ART 007 Design-Color 3.5
ART 008 Design Principles in 3-Dimensions. 3.5

Diverse Media . . . . **Units**
Choose one class from the following list.
ART 023 Introduction to Ceramics: Hand Building . . 2-3.5
ART 026 Introduction to Ceramics:
       Wheel Throwing Techniques 2-3.5
ART 038 Introduction to Printmaking 3.5
ART 056 Graphic Design I 3.5
PHOT 030 Beginning Photography 3
PHOT 070 Beginning Digital Photography 3
Choose two classes from Recommended Electives. . . . 4-7
    Total Units. . . . . 28 - 32.5

Recommended Electives -
Two courses from Recommended List
ART 004 Life Drawing
ART 005 Life Drawing
ART 006* Design Principles in 2-Dimensions
ART 007* Design-Color
ART 008* Design Principles in 3-Dimensions
ART 015 Intermediate Drawing
ART 016 Beginning Painting
ART 017 Intermediate Painting: Acrylic and Oil
ART 018 Advanced Intermediate Painting: Acrylic and Oil
ART 019 Figure Painting
ART 020 Landscape Drawing and Painting—
      Reflections of Nature

ART 021 Watercolor
ART 022 Watercolor
ART 023* Introduction to Ceramics: Hand Building
ART 024 Intermediate Ceramics: Hand Building
ART 025 Ceramic Design And Decoration:
      Hand Building Methods
ART 026* Introduction to Ceramics:
       Wheel Throwing Techniques
ART 027 Intermediate Ceramics:
      Wheel Throwing Techniques
ART 028 Ceramic Design: Wheel Throwing Techniques
ART 029 Raku Pottery
ART 030 Architectural Ceramics, Murals and Tiles
ART 030B Mural Painting: History, Community, Practice
ART 031 Sculpture
ART 032 Sculpture: Human Figure
ART 033 Intermediate Sculpture
ART 034 Ceramic Sculpture
ART 035 Wood-Fired Ceramics
ART 037 Clay and Glazes for the Ceramic Artist
ART 038* Introduction to Printmaking
ART 039 Etching and Engraving: Line Techniques
ART 040 Etching and Engraving: Tone
ART 041 Etching and Engraving: Color
ART 042 Screen Printing
ART 043 Printmaking: Relief Printing, Including Woodcut
ART 044 Kiln Design and Operation
ART 052 Lettering and Layout
ART 054 Illustration I
ART 055 Illustration II
ART 056 Graphic Design I
ART 057 Graphic Design II
ART 058 Clothed Figure
ART 061 Collage & Assemblage
ART 075 Art Studio Concepts
ART 076A Portfolio Development – Artistic Inquiry
ART 077B Lettering and Layout
ART 100 Color and Mixed Media Drawing
ART 145 Portrait Drawing and Painting
CINA 010 The Art of Cinema
CINA 015 Film Production
FREN 001 First Semester French
FREN 002 Second Semester French
FREN 003 Third Semester French

FREN 004 Fourth Semester French
FREN 031 First Semester French, Part 1
FREN 032 First Semester French, Part 2
GRMN 001 First Semester German
GRMN 002 Second Semester German
GRMN 003 Third Semester German
GRMN 004 Fourth Semester German
GRMN 031 First Semester German, Part 1
GRMN 032 First Semester German, Part 2
GRMN 033 Second Semester German, Part 1
GRMN 034 Second Semester German, Part 2
HIST 002 World History to 1600
HIST 003 Modern World History
HIST 004 History of Western Civilization to 1500
HIST 005 History of Western Civilization Since 1500
HUMN 002 Humans as Creators: The Media of Creativity
LATN 001 Latin Fundamentals
LATN 002 Latin Fundamentals
LATN 003 Latin Fundamentals
PHOT 030 Beginning Photography
PHOT 035 Art of Photography

*If not already taken as part of the major

Associate in Arts in Art History for Transfer

Program Description
The Associate in Arts in Art History for Transfer provides the academic and practical experience that will prepare students for a career in the Art History industry, or to transfer into the CSU system to complete a baccalaureate degree in Art History.

Associate in Arts in Art History for Transfer
The Associate in Arts in Art History for Transfer degree is especially designed for students who plan to complete a bachelor's degree in Art History at a CSU campus. Students completing an Associate in Arts in Art History for Transfer degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students transferring to a CSU campus that accepts the Associate in Arts in Art History for Transfer degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. Associate in Arts in Art History for Transfer degree also prepares students for art history degree programs at CSU institutions, but does not come with the same guarantees. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

To earn this AA-T degree, students must:
- complete the following major requirements with grades of C or better
- complete 60 CSU-transferable semester units with a minimum grade point average of 2.0
- complete either the California State University General Education Breadth pattern (CSU GE), which requires 41 units, or the Intersegmental General Education Transfer Curriculum (IGETC), which requires 41 units. Students are not required to complete Solano's Cross-Cultural Studies requirement.

Program Outcomes
Students who complete an Associate Degree for Transfer will be able to:
1. Analyze, apply and integrate diverse visual experiences. Students will be able to identify and articulate the relationship between form and function, applying aesthetic characteristics of art historical movements and styles to specific artwork; analyzing visual elements and their use in artwork; and extrapolating function using formal analysis.
2. Develop and articulate with proficiency an understanding of visual and multi-cultural literacy. Student achievement of visual literacy will be assessed through the quality of students' work, including researched papers and exams. Students will relate the artwork of disparate periods and cultures to historical events, cultural values, and belief systems. Students who successfully complete the AA-T degree will be able to express the relationship between various cultures and their art, and use scholarly sources to analyze artwork persuasively and thoroughly.
3. Work independently and cooperatively to solve creative problems, applying critical thinking skills. In written work and presentations, students will conduct independent research and will work collaboratively with others to fulfil the requirements of the assignment. Student work will meet the parameters of the assignment, demonstrating depth of

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understanding and thoroughness; accuracy; and creative problem-solving and ingenuity.

REQUIRED COURSES . . . . **Units**
ART 001 Art History 3
ART 002 Art History 3
ART 003 World Art. 3
ART 014 Introduction to Drawing 3.5

List B (3 units required) . . . . **Units**
ART 004 Life Drawing 3.5
ART 006 Design Principles in 2-Dimensions. 3.5
ART 007 Design-Color 3.5
ART 008 Design Principles in 3-Dimensions. 3.5
ART 016 Beginning Painting 3.5
ART 019 Figure Painting 3.5
ART 023 Introduction to Ceramics: Hand Building. . . . 3.5
ART 026 Introduction to Ceramics:
        Wheel Throwing Techniques. 3.5
ART 031 Sculpture. 3.5
ART 032 Sculpture: Human Figure. 3.5
ART 038 Introduction to Printmaking 3.5
ART 039 Etching and Engraving: Line Techniques 3.5
ART 043 Printmaking: Relief Printing,
        Including Woodcut 3.5
ART 056 Graphic Design I 3.5
PHOT 030 Beginning Photography 3

List C (Select one)
ART 011 Survey of Modern Art 3
ART 012 Inside/Outside: The Cultures and Identities
        of Visual Artists in a Diverse America 3
Total Units. 18.5-19

Graphic Design & Illustration

Program Description
This program provides the student with sufficient academic and practical experience for entrance into the job market as a graphic artist, or for study towards the B.A. in college or professional school.

Associate in Arts Degree
The Associate in Arts Degree can be obtained by completing a total of 60 units, including the 27-31.5 unit major, the general education requirements, and electives. All courses in the major must be completed with a grade of C or better or a P if the course is taken on a pass-no pass basis.

Program Outcomes
Students who complete an Associate Degree will be able to:
    1. Analyze, apply and integrate diverse visual experiences.
    2. Develop and articulate with proficiency an understanding of visual and multi-cultural literacy.

    3. Work independently and cooperatively to solve creative problems, applying critical thinking skills.

REQUIRED COURSES . . . . **Units**
ART 004 Life Drawing   . . . . 2 - 3.5
OR
ART 015 Intermediate Drawing. . . . . 2 - 3.5
ART 006 Design Principles in 2-Dimensions. 3.5
ART 007 Design-Color 3.5
ART 014 Introduction to Drawing. . . . . 2 - 3.5
ART 052 Lettering and Layout. . . . . 2 - 3.5
ART 054 Illustration I 3.5
ART 055 Illustration II 3.5
ART 056 Graphic Design I 3.5
ART 057 Graphic Design II 3.5

Total Units. . . . . 27 - 31.5

Recommended Electives
ART 001 Art History
ART 002 Art History
ART 003 World Art
ART 004 * Life Drawing
ART 005 Life Drawing
ART 010 Art Appreciation
ART 015 * Intermediate Drawing
ART 023 Introduction to Ceramics: Hand Building
ART 026 Introduction to Ceramics: Wheel Throwing
       Techniques
ART 031 Sculpture
ART 032 Sculpture: Human Figure
ART 038 Introduction to Printmaking
ART 041 Etching and Engraving: Color

BUS 181 Business Mathematics
CINA 010 The Art of Cinema
CINA 015 Film Production
DRFT 050 Basic Drafting
DRFT 070 Technical Illustration and Design
ENGL 051 Technical Writing
JOUR 060 Publications Laboratory
MKT 170 Advertising
MKT 171 Introduction to Marketing
MKT 172 Market Management and Planning
OCED 090 Occupational Work Experience
OCED 091 General Work Experience
PHOT 030 Beginning Photography
TV 050 Survey of Broadcasting
TV 055 Beginning Television Production
TV 056 Advanced Television Production

*If not already taken as part of the major

Associate in Arts in Studio Arts for Transfer

Program Description
This program provides the academic and practical experience to prepare students for a career, or further education at a four-year institution, in studio art. The program is designed for students to develop visual skills in a variety of art media.

Associate in Arts in Studio Arts for Transfer
The Associate in Arts for Transfer is especially designed for students who plan to complete a bachelor's degree in Studio Art at a CSU campus. Students completing and Associate in Arts for Transfer degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students transferring to a CSU campus that accepts to AA degree for Transfer will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree also prepares students for studio art programs at other four-year institutions, but does not come with the same guarantees. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

To earn this AA-T degree, students must:
- Complete the following major requirements with grades of C or better
- Complete 60 CSU-transferable semester units with a minimum grade point average of 2.0
- Complete either the California State University General Education Breadth pattern (CSU GE), which requires 39 units, or the Intersegmental General Education Transfer Curriculum (IGETC), which requires 34-39 units. Students are not required to complete Solano's Cross-Cultural Studies requirement.

Program Outcomes
Students who complete an Associate Degree for Transfer will be able to:
1. Analyze, apply and integrate diverse visual experiences.Students will be able to identify and articulate the relationship between form and function, applying aesthetic characteristics of art historical movements and styles to the creation of artwork; analyzing and applying visual elements and principles of design; and creating conceptually and compositionally complete works.
2. Develop and articulate with proficiency an understanding of visual and multi-cultural literacy. Student achievement of visual literacy will be assessed through the quality of students' work, including work completed in class and at home. Students will relate the artwork of disparate periods and global cultures to their own personal histories, cultural values, and belief systems. Students who successfully complete the Associate in Arts in Studio Arts for Transfer degree will be able to analyze and articulate their understanding of visual literacy through portfolios, critiques and self-evaluations (written and oral), and written work.
3. Work independently and cooperatively to solve creative problems, applying critical thinking skills. In class, students will demonstrate an understanding of proper studio practice, including maintenance of facilities and equipment; time management; etiquette in sharing workspace and materials; collegiality in collaborative work; safety protocols; etc. Students will complete assignments according to instructor specifications—demonstrating depth of conceptual understanding, mastery of technical skills; and unified and complete execution—in meeting assignment parameters.

Some courses may be unavailable. Please contact the Dean of Liberal Arts for alternate courses if necessary.

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REQUIRED CORE . . . . **Units**
ART 002 Art History 3
ART 006 Design Principles in 2-Dimensions. 3.5
ART 008 Design Principles in 3-Dimensions. 3.5
ART 014 Introduction to Drawing 3.5
3 units from List A
9 units from List B

List A . . . . **Units**
(choose three units)
ART 001 Art History 3
ART 003 World Art. 3

List B . . . . **Units**
(choose a minimum of 9 units)
ART 004 Life Drawing. . . . . 3 - 3.5
ART 005 Life Drawing. . . . . 3 - 3.5
ART 007 Design-Color 3.5

ART 015 Intermediate Drawing. . . . . 3 - 3.5
ART 016 Beginning Painting . . . . 3 - 3.5
ART 017 Acrylic and Oil Painting . . . . 3 - 3.5
ART 018 Acrylic and Oil Painting . . . . 3 - 3.5
ART 019 Figure Painting. . . . . 3 - 3.5
ART 021 Watercolor . . . . 3 - 3.5
ART 022 Watercolor . . . . 3 - 3.5
ART 023 Introduction to Ceramics: Hand Building . 3 - 3.5
ART 026 Introduction to Ceramics:
           Wheel Throwing Techniques . . . . 3 - 3.5
ART 031 Sculpture . . . . 3 - 3.5
ART 032 Sculpture: Human Figure . . . . 3 - 3.5
ART 034 Ceramic Sculpture . . . . 3 - 3.5
ART 038 Introduction to Printmaking 3.5
ART 039 Etching and Engraving: Line Techniques. . 3 - 3.5
ART 041 Etching and Engraving: Color . . . . 3 - 3.5
ART 043 Printmaking: Relief
           Printing, Including Woodcut . . . . 3 - 3.5
ART 052 Lettering and Layout. . . . . 3 - 3.5
ART 056 Graphic Design I 3.5
PHOT 030 Beginning Photography 3
       Total Units. . . . . 25.5-27 units

ART   001   3 Units
Art History
Course Advisory: Eligibility for ENGL 001. Explores the history of art in the Western World from the Paleolithic era through the Middle Ages. Focuses on the interrelation of art and culture, with a comparative study of select works of non-Western art. Field trip may be required. *Three hours lecture*.

ART   002   3 Units
Art History
Course Advisory: Eligibility for ENGL 001. Explores the history of Western Art through a critical analysis of Renaissance art through Post-Modern Art. Students will examine the connection between art and culture, and evaluate the historic, religious, and political influences on the artistic choices of diverse men and women of art history from the 15th century to today. Field trip may be required. *Three hours lecture*.

ART   003   3 Units
World Art
Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standard. A survey of the traditional arts of Asia, Africa, the Americas, and the Pacific Islands. Includes an exploration of recurrent themes in the art and architecture of non-Western cultures, as well as recurrent issues related to Western scholarship and exhibition of non-Western art. *Three hours lecture*.

ART   004   2 or 3.5 Units
Life Drawing
Course Advisory: SCC minimum English standard. A study of the human figure in action and repose using a variety of drawing materials and approaches. Students work directly from the live model to develop skills using assignments which include gesture, line drawings, tone studies and the use of color. The student submits a midterm and final portfolio for evaluation. Field trip may be required. *One to two hours lecture, three to four and one-half hours lab.*

ART   005   2 or 3.5 Units
Life Drawing
Prerequisite: ART 004 with a minimum grade of C. The continued study of the human figure with more advanced problems in drawing and composition. Following initial review, the student may choose an individual program of study with the approval of the instructor. Field trip may be required. *One to two hours lecture, three to four and one-half hours lab.*

ART   006   3.5 Units
Design Principles in 2-Dimensions
Course Advisory: SCC minimum English standard. A fundamental study of visual elements and principles of design for production of art images in 2-dimensions using various materials in black and white. Design formats developed from historic and esthetic precepts are employed to investigate the relationship of form and content. Field trip may be required. *Two hours lecture, four and one-half hours lab.*

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ART   007   **3.5 Units**
Design-Color
Course Advisory: SCC minimum English standard. A study of the principles of addictive and substractive color in two dimensions. Various theories of color will be studied including those of Albers and Ittens. Reference to the use of color in the dominant styles of art history will be made. Students will produce a portfolio of projects in applied color and the elements of design. Field trip may be required. *Two hours lecture, four and one-half hours lab.*

ART   008   **3.5 Units**
Design Principles in 3-Dimensions
Course Advisory: SCC minimum English standard. The fundamental study of visual elements and principles of design for production of art objects in three dimensions using various sculpture materials and methods. Design formats developed from historic and esthetic precepts are employed to investigate the relationships of form and content. Field trip may be required. *Two hours lecture, four and one-half hours lab.*

ART   010   **3 Units**
Art Appreciation
Course Advisory: Eligibility for ENGL 001. A study of the visual elements, materials and techniques used in the creation of art forms, including analysis of art from disparate cultures and periods of history. Includes audio-visual presentations and field trips that focus on the interrelationship of subject, composition, and concept — providing opportunities for deeper appreciation of art's meaning and value. Field trip may be required. *Three hours lecture.*

ART   011   **3 Units**
Survey of Modern Art
Course Advisory: Eligibility for ENGL 001. A study of the major art styles and artists from 1875 to the present. Analysis of subject, form and content of paintings, photography and sculpture in lecture and audio visual presentation. Classes supplemented by field trips to current exhibitions. Written examinations and term paper required. Field trip may be required. *Three hours lecture.*

ART   012   **3 Units**
Inside/Outside: The Cultures and Identities of Visual Artists in a Diverse America
Course Advisory: ENGL 001. An art survey course that examines and assesses three or more groups of culturally diverse artists, art organizations and support structures. Explores art issues related to social and historical trends in the U.S., including ways in which art may reflect and shape American attitudes towards ethnic identity, race, gender, culture and discrimination. Field trip may be required. *Three hours lecture.*

ART   014   **2.0 or 3.5 Units**
Introduction to Drawing
Course Advisory: SCC minimum English standard. A study of drawing as a means of expression with emphasis on the potential variety of forms and materials available to the artist. Students will create representational and abstract drawings from still life, the figure, nature and imagination. Observational drawing skills will be developed. Field trip may be required. *One to two hours lecture, three to four and one-half hours lab.*

ART   015   **2.0 or 3.5 Units**
Intermediate Drawing
Course Advisory: ART 014; SCC minimum English and Math standards. A basic drawing class which develops the concepts introduced in ART 014 on a more advanced level. Problems in observation and imagination and the translation of these experiences into graphic terms by exploration of line, shape, mass, space, texture, and light and shadow. Emphasis on composition and the development of a personal approach to drawing. Students will be required to submit a portfolio of assignments. Field trip may be required. *One to two hours lecture, three to four and one-half hours lab.*

ART   016   **2.0 or 3.5 Units**
Beginning Painting
Course Advisory: ART 014; SCC minimum English standard. Introduction to techniques and materials of painting in acrylic or oil. Designed for the student with limited experience in painting, this course includes color theory, composition, exposure to a variety of subject matters, and the development of skills for individual expression. Field trip may be required. *One to two hours lecture, three to four and one-half hours lab.*

ART   017   **2.0 or 3.5 Units**
Intermediate Painting: Acrylic and Oil
Course Advisory: SCC minimum English standard. A study of acrylic and oil painting techniques focusing on use of color, the medium and composition. A series of painting assignments designed to develop skills in both media. Field trip may be required. *One to two hours lecture, three to four and one-half hours lab.*

ART   018   **2.0 or 3.5 Units**
Advanced Intermediate Painting: Acrylic and Oil
Prerequisite: ART 017 with a minimum grade of C. Course Advisory: SCC minimum English and Math standards. A study of color, composition and technique in oil or acrylic painting on an intermediate level. The student may choose to repeat assignments from ART 017 or develop an outline of semester assignments appropriate to his interest and skill needs. Field trip may be required. *One to two hours lecture, three to four and one-half hours lab.*

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ART 019   **2.0 or 3.5 Units**
Figure Painting
Course Advisory: SCC minimum English standard. A study of figure painting techniques. Students work directly from the model to develop skills in rendering and expression. Field trip may be required. *One to two hours lecture, three to four and one-half hours lab.*

ART 020   **2.0 or 3.5 Units**
Landscape Drawing and Painting —
Reflections of Nature
Course Advisory: SCC minimum English and Math standards. Focuses on the outdoors as subject matter. Frequent field trips and class exercises will introduce and expand the student's awareness and observational skills of the environment, in the tradition of Natural History as well as plein air (outdoor) art making. The student will reflect and translate these experiences into graphic terms using various media while considering line, shape, mass, space, texture, light, color, and shadow. The student will focus on composition and content while developing an understanding of the environment. Keeping a written and visual journal will also be a component of this class. This course will examine the interrelationships of humans and their surroundings, and the esthetics choices available with which to communicate our responses. *One to two hours lecture, three to four and one-half hours lab.*

ART 021   **2.0 or 3.5 Units**
Watercolor
Course Advisory: SCC minimum English standard. An introduction to the materials and techniques of transparent watercolor. Course includes basic composition, color study and an exploration of materials. Lectures, demonstrations and field study will supplement class assignments. *One to two hours lecture, three to four and one-half hours lab.*

ART 022   **2.0 or 3.5 Units**
Watercolor
Prerequisite: ART 021 with a minimum grade of C. Course Advisory: SCC minimum English standard. A continuation of the study of basic watercolor techniques with emphasis on a more individual approach to the medium. The student and instructor develop a course of study that will focus on needs in the areas of skills and self-expression. Field trip may be required. *One to two hours lecture, three to four and one-half hours lab.*

ART 023   **2.0 or 3.5 Units**
Introduction to Ceramics: Hand Building
Course Advisory: SCC minimum English standard. Covers basic construction methods of hand building and finishing pottery. Emphasis on form, craftspersonship and creativity. Building methods include pinch technique, coil building, and slab construction. Surface techniques include texture, stencil, slip, relief, stain, and glaze. Non-traditional construction and surface techniques will also be covered. Field trip may be required. *One to two hours lecture, three to four and one-half hours lab.*

ART 024   **2.0 or 3.5 Units**
Intermediate Ceramics: Hand Building
Prerequisite: ART 023 wtih a minimum grade of C. Course Advisory: SCC minimum English standard. Continuation of ART 023 with emphasis on expanding skills, experimentation, design, craftspersonship, and creativity. Application of basic techniques to create finished art forms. Field trip may be required. *One to two hours lecture, three to four and one-half hours lab.*

ART 025   **2.0 or 3.5 Units**
Ceramic Design and Decoration:
Hand Building Methods
Prerequisite: ART 024 with a minimum grade of C. Course Advisory: SCC minimum English standard. Emphasizes ceramic design problem-solving. Emphasis on creativity, design, honing skills, craftspersonship and experimentation. Ceramic art of the past as well as contemporary art is discussed. Loading and firing kilns, formulating glazes and mixing clay bodies are also covered. Builds on fundamental skills covered in Art 023 and Art 024. Field trip may be required. *One to two hours lecture, three to four and one-half hours lab.*

ART 026   **2.0 or 3.5 Units**
Introduction to Ceramics:
Wheel Throwing Techniques
Course Advisory: SCC minimum English standard. Introduction to basic wheel throwing techniques. Emphasis on form, craftspersonship, and creativity. Surface techniques include texture, stencil, slip, relief, stain, and glaze. Non-traditional construction and surface techniques will also be covered. *One to two hours lecture, three to four and one-half hours lab.*

ART 027   **2.0 or 3.5 Units**
Intermediate Ceramics: Wheel Throwing Techniques
Prerequisite: ART 026 with a minimum grade of C. Course Advisory: SCC minimum English standard. Continuation of ART 026 with emphasis on expanding skills, experimentation, design, craftspersonship, and creativity. Application of basic techniques to create finished art forms. Field trip may be required. *One to two hours lecture, three to four and one-half hours lab.*

ART   028   2.0 or 3.5 Units
Ceramic Design: Wheel Throwing Techniques
Prerequisite: ART 027 with a minimum grade of C.
Course Advisory: SCC minimum English standard.
Emphasizes ceramic design problem-solving. Emphasis on creativity, design, honing skills, craftspersonship and experimentation. Ceramic art of the past as well as contemporary art is discussed. Loading and firing kilns, formulating glazes and mixing clay bodies are also covered. Builds on fundamental skills covered in ART 026 and ART 027. Field trip may be required. *One to two hours lecture, three to four and one-half hours lab.*

ART   029   2.0 or 3.5 Units
Raku Pottery
Course Advisory: SCC minimum English standard. ART 023 or ART 026 (one college level ceramics course).
Covers the ancient and contemporary art of Raku. Topics include techniques of forming clay, the formulation of clay bodies and glazes for Raku, kiln construction, firing, post firing, Eastern and Western aesthetics, and the history of Raku. The course will not cover basic ceramic construction techniques. Students should already be familiar with basic hand building or wheel throwing techniques. Field trip may be required. *One to two hours lecture, three to four and one-half hours lab.*

ART   030A   2.0 or 3.5 Units
Architectural Ceramics, Murals and Tiles
Course Advisory: SCC minimum English standard. ART 023 or ART 026 (one college level ceramics course). This course will investigate the history, contemporary examples, materials, techniques and the vast range of artistic expression possible in architectural ceramics, ceramic murals and tiles. The course will not cover basic ceramic construction techniques. Students should already be familiar with basic hand building or wheel throwing techniques. Student should expect to incur materials and equipment costs typical of a studio art course. Field trips may be required in this course. *One to two hours lecture, three to four and one-half hours lab.*

ART   030B   3.5 Units
Mural Painting: History, Community, Practice
This course explores the cultural history of mural painting as well as the social and political issues related to the creation and public reception of mural paintings. Students will apply aesthetic as well as conceptual analyses to the design and creation of a full-scale mural. Through both study and practice, students will consider the importance of the community in the mural-making process. Course requires field trips. Students will travel to view murals in the Bay Area. Murals may be painted at a site off-campus. *Four hours lecture, nine hours lab (8 week course).*

ART   031   2.0 or 3.5 Units
Sculpture
Course Advisory: SCC minimum English standard.
Introduction to sculpture methods and materials. Emphasis on principles of three dimensional design and the interrelationship of form, content and context. Sculpture methods to be covered include modeling, mold making, welding, assemblage, and construction with a variety of materials. Field trip may be required. *One to two hours lecture, three to four and one-half hours lab.*

ART   032   2.0 or 3.5 Units
Sculpture: Human Figure
Course Advisory: SCC minimum English standard. Study of the human form in sculpture. Students will create both realistic and abstract sculpture of the human form in a variety of materials. Field trip may be required. *One to two hours lecture, three to four and one-half hours lab.*

ART   033   2.0 or 3.5 Units
Intermediate Sculpture
Prerequisite: ART 031 or ART 032 or ART 034 with a minimum grade of C. Course Advisory: SCC minimum English standard. Further development of concepts and skills presented in ART 031 and 032. Emphasis is placed on individual expression. A variety of materials, methods, and sculptural concepts are explored. Field trip may be required. *One to two hours lecture, three to four and one-half hours lab.*

ART   034   2.0 or 3.5 Units
Ceramic Sculpture
Course Advisory: SCC minimum English standard.
Introduction to basic sculpture concepts, materials, and approaches with an emphasis on ceramics. Subjects to be covered include: Historic and contemporary approaches to ceramic sculpture, slab construction, coil building, mold making, extruded fabrication, modeling from the figure, introduction to ceramic color, characteristics and limitations of ceramic materials. Field trip may be required. *One to two hours lecture, three to four and one-half hours lab.*

ART   035A   2.0 or 3.5 Units
Introduction to Wood-Fired Ceramics
Course Advisory: SCC minimum English and Math standards. Covers the ancient and contemporary art of wood- fired ceramics. Topics include techniques of forming clay, the formulating of clay bodies and glazes for wood fire, kiln construction, wood firing techniques, Eastern and Western aesthetics and the history of wood-fired ceramics. The course will not cover basic ceramic construction techniques. Students should already be familiar with basic hand building or wheel throwing techniques. *One to two hours lecture, three to four and one-half hours lab.*

Art

ART 036 2.0 or 3.5 Units
Ceramic Surfaces -Drawing and Painting on Clay
Course Advisory: SCC minimum English and Math standards. This course in ceramic surface design will explore the vast range of artistic expression possible with ceramic slips, stains, glazes and firing techniques at low medium and high temperature ranges. The course will not cover basic ceramic construction techniques. Students should already be familiar with basic hand building or wheel throwing techniques. Field trip may be required. *One to two hours lecture, three to four and one-half hours lab.*

ART 037 2.0 or 3.5 Units
Clay and Glazes for the Ceramic Artist
Prerequisite: ART 023 or 026 with a minimum grade of C or equivalent. Course Advisory: SCC minimum English and Math standards. Covers and investigates the theoretical and practical aspects of clay and glaze formulation. Topics covered include: Clay/glaze fit, glaze calculation, testing strategies, the development of color, the development of texture, kiln types, kiln temperatures and kiln atmosphere. Field trip may be required. *One to two hours lecture, three to four and one-half hours lab.*

ART 038 3.5 Units
Introduction to Printmaking
Course Advisory: SCC minimum English and Math standards. Explores traditional and contemporary approaches to etching (Intaglio), lithography, and relief (woodcut and linoleum) printing. Digital and new methods of photographic printmaking are discussed and demonstrated. This course is project oriented to enable the student to develop a portfolio of completed works in various mediums. Field trip may be required. *Two hours lecture, four and one-half hours lab.*

ART 039 2.0 or 3.5 Units
Etching and Engraving: Line Techniques
Course Advisory: SCC minimum English standard. Covers history and techniques of line etching and engraving, including dry point, sugar lift line etching, and soft ground line variations. The student is expected to produce matted prints of completed projects. Field trip may be required. *One to two hours lecture, three to four and one-half hours lab.*

ART 040 2.0 or 3.5 Units
Etching and Engraving: Tone
Course Advisory: SCC minimum English standard. Includes etching and engraving techniques such as aquatint, featherbiting, spit bite, and soft ground which produce tones that have gray and black areas defining line etchings. The student will prepare a portfolio of completed projects. Field trip may be required. *One to two hours lecture, three to four and one-half hours lab.*

ART 041 2.0 or 3.5 Units
Etching and Engraving: Color
Course Advisory: SCC minimum English and Math standards. Includes etching and engraving techniques and their history, including the use of multiple plates for each color used on the key plate. Some color plate methods covered include a la poupee, monotype, chine colle, color rollings, and viscosity printing. The student will prepare a portfolio of completed projects. Field trip may be required. *One to two hours lecture, three to four and one-half hours lab.*

ART 042 2.0 or 3.5 Units
Screen Printing
Course Advisory: SCC minimum English and Math standards. Screen printing techniques from paper stencils and pochoir to photographic and digital processes. Students are expected to develop a portfolio of prints that emphasizes the exploration of personal content while employing advanced screen techniques and related digital processes. The course will consist of studio production, lectures on contemporary and historical screen printing, demonstrations and critiques. Field trip may be required. *One to two hours lecture, three to four and one-half hours lab.*

ART 043 2.0 or 3.5 Units
Printmaking: Relief Printing, Including Woodcut
Course Advisory: SCC minimum English and Math standards. A general introduction to printmaking - the history, development, techniques, and processes. Emphasis is on an in-depth study and application of various relief methods (embossing, collagraph, linoleum cut, woodcut, and non-traditional methods) along with an investigation of relevant image source and development. Field trip may be required. *One to two hours lecture, three to four and one-half hours lab.*

ART 049 1.0 to 3.0 Units
Honors
Prerequisite: Completion of 24 units of college credit with a minimum GPA of 3.3; a minimum of 5 units in the discipline with a grade of B or better; an ability to work independently; permission of the Division Dean based on instructor availability. An independent study course designed for sophomores or students who have taken many of the basic classes and wish to continue work with an instructor in a specialized area. The student works by arrangement with the instructor on an outlined program of study. *Three to nine hours weekly by arrangement.*

Art

ART   052   2.0 or 3.5 Units
Lettering and Layout
Course Advisory: SCC minimum English standard. Basic lettering skills in several media for reproduction and creative lettering. Study of layout and illustration in sign, poster, and advertising design. Recommended for commercial art students and art majors. ***One to two hours lecture, three to four and one-half hours lab.***

ART   054   3.5 Units
Illustration I
Course Advisory: SCC minimum English standard. Problems in design and rendering of illustration for print and film media. Projects may include illustrations for books, magazines, advertising and film. Field trip may be required. ***Two hours lecture, four and one-half hours lab.***

ART   055   3.5 Units
Illustration II
Prerequisite: ART 054 with a minimum grade of C, or equivalent as determined by portfolio review. Course Advisory: SCC minimum English standard. Studio illustration conception, production and finish. Students will execute illustration projects using professional procedures and equipment. Emphasis is on student creative and technical development. Written papers and portfolio review required. ***Two hours lecture, four and one-half hours lab.***

ART   056   3.5 Units
Graphic Design I
Provides fundamental background for terminal and transfer students planning to enter the graphic design field. Instruction in the professional use of design, lettering, and illustration through solution of visual communication problems. Field trip may be required. ***Two hours lecture, four and one-half hours lab.***

ART   057   3.5 Units
Graphic Design II
Prerequisite: ART 056 with a minimum grade of C. Course Advisory: SCC minimum English and Math standards. Computer design and production methods for print and digital mediums using Macintosh computers and Adobe and other software programs for layout, illustration, typography, and animation. Graphic design principles are stressed. ***Two hours lecture, four and one-half hours lab.***

ART   058   2.0 or 3.5 Units
Clothed Figure
Course Advisory: SCC minimum English standard. Course emphasis is on understanding the various properties of clothing and drapery, as used with the figure in painting and drawing. Gesture, proportion, form and color will be studied in relation to the clothed figure. Projects will include a variety of costume statements including fashion, sport, fantasy or science fiction and theatre costume. ***One to two hours lecture, three to four and one-half hours lab.***

ART   060   3.5 Units
Exhibition Design
Course Advisory: Eligibility for ENGL 001. Provides fundamentals of designing exhibitions in galleries, museum, and alternative spaces. Students will gain hands-on experience managing all aspects of the Solano Art Gallery. Topics covered include selection, design and installation of exhibitions; defining the mission of a gallery; public relations; and career opportunties. Field trip may be required. ***Two hours lecture, four and one-half hours lab.***

ART   061   2.0 or 3.5 Units
Collage & Assemblage
Course Advisory: SCC minimum English standard. Explores the making of 2D and 3D collages and assemblages in a variety of media. Addresses the history and prevalence of collage thinking as an approach to art making while integrating traditional drawing and painting skills. Field trip may be required. ***One to two hours lecture, three to four and one-half hours lab.***

ART   064   3.5 Units
Monotype/Monoprint
Course Advisory: SCC minimum English and Math standards. This course will focus on the unique print. Study will include history and development of this form in relation to print tradition. Development of press skills in single-drop and multi-drop printing is required. A portfolio of printing techniques including direct, indirect and combination prints will be required. Field trip may be required. ***Two hours lecture, four and one-half hours lab.***

Art

ART 065   **3.5 Units**
Book Making
Course Advisory: SCC minimum English and Math standards. Explores book making in a variety of formats. Discussion of the history and development of the book is included. Students will make several books: Classic signature book bound between boards, side bound books and a variety of artist's books including altered books, boxed books, and 3 dimensional book structures like accordion books and pop-up books. Field trip may be required. *Two hours lecture, four and one-half hours lab.*

ART 066A   **2 Units**
Travel Study - Topics in Studio Art
Course Advisory: Minimum standards: SCC minimum English standard. Designed to offer study in a wide range of topics related to the studio practice of 2-D art, allowing for concentrated exploration of a topic not normally treated in any depth in a survey class. The content will vary each semester and will be described in the Schedule of Classes. Course requires travel and additional expense; check with instructor for further information. *Eight hours lecture, twenty-four hours lab (2 week course).*

ART 066B   **1.0 to 3.0 Units**
Travel Study - Topics in Art History
Course Advisory: Minimum standards: Eligibility for English 001. This Travel Study course offers students the opportunity to study art in person. Lectures will be held at museums, archaeological sites, and other venues with art historical significance. The specific topic of art history study will vary from term to term, according to the featured travel destination and selection of sites. Studying art in context will allow a concentrated exploration of a topic not usually discussed in-depth in a survey class. The destination(s) and topic for each semester will be described in the Schedule of Classes. Course requires travel and additional expense; check with instructor for further information. *Minimum four hours lecture and maximum twelve hours lecture (4 week course).*

ART 074   **2.0 or 3.5 Units**
Kiln Design and Operation
Course Advisory: SCC minimum English and Math standards. ART 023 or ART 026 (one college level ceramics course). This course in kiln design and operation will investigate the vast range kiln designs, their operation and the opportunities each offers for artistic expression. Kiln designs covered will include natural gas, propane, electric, raku, salt, wood, and alternative kilns. Students will be able to determine which kilns and which firing strategies are best suited to their current artistic vision. The course will not cover basic ceramic construction techniques. Students should already be familiar with basic hand building or wheel throwing techniques. Field trip may be required. *One to two hours lecture, three to four and one-half hours lab.*

ART 075   **2.0 or 3.5 Units**
Art Studio Concepts
Course Advisory: SCC minimum English standard. Intensive study in visual arts studio. Exposure to contemporary art directions, trends and selected topics. Different studio problems will be investigated each semester. Field trip may be required. *One to two hours lecture, three to four and one-half hours lab.*

ART 076A   **3.5 Units**
Portfolio Development - Artistic Inquiry
Course Advisory: SCC minimum English standard. This is an advanced course designed to serve the student in the preparation of a professional fine art portfolio consisting of a body or series of work. Emphasis is placed on 1) individual expression of an artistic vision, 2) idea development 3) artistic inquiry 4) setting and meeting artistic goals and timelines for the production of a body or series of work. For this course the student should have the necessary skills, art making experience and motivation to work independently, with expert consultation by the instructor, on developing a coherent body of work. This course is the first in a two part course offering completed by Portfolio Development-Documentation. Student should expect to incur materials and equipment costs typical of a studio art course. Field trip may be required. *Two hours lecture, four and one-half hours lab.*

Art

ART 076B   **3.5 Units**
Portfolio Development: Documentation
Course Advisory: SCC minimum English standard. This is an advanced course designed to serve the student in the preparation of a professional fine art portfolio consisting of a body or series of work. Emphasis is placed on 1) individual expression of an artistic vision, 2) professional quality documentation and presentation of artwork and 3) capacity to communicate both verbally and in writing about artwork produced. For this course the student should have the necessary skills, art making experience and motivation to work independently, with expert consultation by the instructor, on developing a coherent body of work. This course is the second in a two part course offering following Portfolio Development-Artistic Inquiry. Student should expect to incur materials and equipment costs typical of a studio art course. Field trip may be required. *Two hours lecture, four and one-half hours lab.*

ART 077A   **3 Units**
Professional Practices for Artists
Course Advisory: SCC minimum English standard. This course is designed to provide the skills and information to serve the student in developing a professional art career. Topics include: How to approach galleries, institutions, universities, art schools, and potential employers. Techniques for promoting art for employment or transfer to four year schools, portfolio preparation, resume writing, artist statement and biography composition, sales and pricing of art, business basics, entrepreneurship, public relations, art on the internet, planning and goal setting, contracts, taxes, grant getting, display, shipping, sustaining creativity. Evaluation of marketing and promotional concepts. Recommended for all art and design majors seeking to become professionals. *Three hours lecture.*

ART 077B   **3 Units**
Art on Site
Course Advisory: SCC minimum English standard. Art on Site is a movable feast. We will visit artists, gallery owners, museum curators and art administrators on site, at their studios, galleries museums and offices. This will be a forum for students to hear first hand from artists, arts scholars and other art professionals discussing and contextualizing their work within the contemporary art field. Includes multiple lecturers by visitors and additional class lectures providing further context. Exposure to contemporary art directions, trends and job markets. *Three hours lecture.*

ART 100   **2.0 or 3.5 Units**
Color and Mixed Media Drawing
Course Advisory: SCC minimum English standard. Course focuses on the use of a variety of drawing materials and techniques with special attention to color theory. Lectures, demonstratons and field study will supplement class assignments. Field trip may be required. *One to two hours lecture, three to four and one-half hours lab.*

ART 145   **2.0 or 3.5 Units**
Portrait Drawing and Painting
Course Advisory: ART 014. A multi-faceted course addressing the representation of likeness portrait study. Includes anatomy and work with live models, self-portraits and portraits of others. Issues of gender, ethnic identity, youth and aging, stereotyping and caricature will be presented in historical and contemporary contexts. Portrait work will be explored in a variety of stylistic formats from observational likeness to expressionistic images to symbolic portraits. Work in a variety of media is required. Field trip may be required. *One to two hours lecture, three to four and one-half hours lab.*

Automotive

Automotive Body and Repair

Program Description
This program is designed to prepare the student for employment as a body repair and paint apprentice in privately owned repair shops or automotive dealerships. A student could be self-employed from the training after completing the program.

Certificate of Achievement and Associate Degree in Science
A Certificate of Achievement can be obtained by completing the 46-unit major below. The Associate in Science Degree can be obtained by completing 67 units, including the major and the general education requirements. All courses in the major must be completed with a grade of C or better or a P if the course is taken on a Pass/No Pass basis.

Program Outcomes
Students who complete the Certificate of Achievement/ Associate Degree will be able to:
1. Demonstrate knowledge of metal joining and straightening methods.
2. Inspect, remove, install, align panels, doors and trim to meet shop standards
3. Determine type of paint; plan refinishing system; remove, prepare, seal and mask; apply coatings to vehicle.
4. Demonstrate correct use of chemicals within the shop environment.
5. Work safely and responsibly within all safety and environmental guideline standards for a shop.
6. Identify and strategize career plans for employment in the auto collision field.

REQUIRED COURSES . . . . **Units**
AUTB 100 Fundamentals of Auto Body Repair 10
AUTB 101 Spray Paint Theory and Techniques 10
AUTB 102 Automotive Body Panels
　　　　　and Frame Straightening 10
AUTB 103 Advanced Auto Body Repair and Painting . . 10
IT 140 Industrial Materials 3
IT 150 Industrial Processes 3
　　Total Units **46**

Some courses may not be offered. Please contact the Dean of Career and Technical Education for alternate courses if necessary.

Recommended Electives
BUS 005 Introduction to Business
DRFT 079 Blueprint Reading
IT 110 Modern Welding
OCED 090 Occupational Work Experience
OCED 091 General Work Experience

Automotive

Automotive Technician

Program Description
This program is designed to prepare graduates for employment in the automotive industry as apprentice mechanics, parts people, service station attendants or specialists in one of the many areas in, or jobs related to, the automotive industry.

Certificate of Achievement and Associate of Science Degree
A Certificate of Achievement can be obtained by completing the 40-unit major below. The Associate in Science Degree can be obtained upon completion of 61 units, including the major, and the general education requirements. All courses in the major must be completed with a grade of C or better or a P if the course is taken on a Pass/No Pass basis.

Program Outcomes
Students who complete the Certificate of Achievement/Associate Degree will be technically proficient in entry level skills as defined by the National Automotive Technicians Education Foundation. (NATEF) by demonstrating:
    1. 85 percent of the tasks established by NATEF.
    2. Proper service and repair procedures of the following systems:
        • Engine Repair
        • Automatic Transaxles/Transmissions
        • Manual Drivetrain
        • Suspension, Steering and Alignment
        • Brakes
        • Electrical Systems
        • Heating and Air Conditioning
        • Engine Performance
    3. Proper safety procedures and techniques.
    4. Efficient oral and written communication.
    5. The ability to apply fundamental automotive technology principles.
    6. Skills for successful employment in the field of Automotive Mechanics Repair Technology.

REQUIRED COURSES . . . . **Units**
ATEC 130 Automotive Systems 10
ATEC 131 Automotive Electrical Systems 10
ATEC 132 Automotive Brakes and Suspension Systems 10
ATEC 133 Internal Combustion Engines
       and Power Transmission 10
   Total Units **40**

Recommended Electives
BUS 005 Introduction to Business
IT 110 Modern Welding
IT 140 Industrial Materials
OCED 090 Occupational Work Experience
OCED 091 General Work Experience

Automotive Technician
(For additional listings see "Industrial Education" section of this catalog.

ATEC 070 3 Units
Automotive Fundamentals
Course Advisory: SCC minimun English and Math standards. The study of automotive fundamentals including hazardous waste handling, automotive safety, automotive careers, automotive information systems, tools and eqipment, fasteners, automotive measurements and measuring devices, bearings and sealants, engine systems and operation, drivelines, suspension and steering, brakes, and auxiliary systems. *Two hours lecture, three hours lab.*

ATEC 130 10 Units
Automotive Systems
Course Advisory: SCC minimum English standard. A study of the theory and practice of automotive repair, maintenance and diagnosis including safety, hand and power tools, test equipment and service, and design principles of all automotive systems. A broad overview providing the knowledge and skills necessary to meet the specific requirements of ATEC 131, 132, and 133. Testing and manipulative skills based on industry standards. *Five hours lecture, fifteen hours lab.*

Automotive

ATEC   131   10 Units
Automotive Electrical Systems
Prerequisite: ATEC 130. Course Advisory: SCC minimum English standard. Presents the theory and repair of automotive electrical systems. Includes the study of electricity principles, conventional and electronic ignition systems, charging systems, starting systems and electrical accessories. Provides the student with knowledge and skills in systems diagnosis, repair and testing necessary for entry into the trade. Testing and manipulative skills based on industry standards. *Five hours lecture, fifteen hours lab.*

ATEC   132   10 Units
Automotive Brakes and Suspension
Prerequisite: ATEC 131. Course Advisory: SCC minimum English standard. Study of automotive brakes, suspension systems, and wheel alignment theory and service procedures. Includes skills development in the use of wheel alignment machines and brake reconditioning equipment. Provides the student with knowledge and skills in diagnosis repair and testing necessary for entry into the trade. Testing and manipulative skills based on industry standards. *Five hours lecture, fifteen hours lab.*

ATEC   133   10 Units
Internal Combustion Engines and
Power Transmission
Prerequisite: ATEC 132. Course Advisory: SCC minimum English standard. A study of internal combustion engines, transmissions, differentials, and support systems. Provides the student with the knowledge and skills in engine and power transmission theory and overhaul procedures necessary for entry into the trade. Testing and manipulative skills based on industry standards. *Five hours lecture, fifteen hours lab.*

Automotive Body and Repair
(For additional listings see "Industrial Education" section of this catalog).

AUTB   100   10 Units
Fundamentals of Auto Body Repair
Course Advisory: SCC minimum English standard. Acquaints the student with the basic skills and fundamental principles of auto body repair. Learned skills are verified through manipulative and written tests. *Five hours lecture, fifteen hours lab.*

AUTB   101   10 Units
Spray Paint Theory and Techniques
Prerequisite: AUTB 100. Course Advisory: SCC minimum English standard. Acquaints the student with the basic principles and techniques of automotive refinishing. Skills acquired are verified through manipulative projects and written tests. *Five hours lecture, fifteen hours lab.*

AUTB   102   10 Units
Automotive Body Panels and Frame Straightening
Prerequisite: AUTB 100. Students will learn to repair and replace body panels. Includes unibody and frame straightening. Learned skills are verified through manipulative projects and written exams. *Five hours lecture, fifteen hours lab.*

AUTB   103   10 Units
Advanced Auto Body Repair and Painting
Prerequisite: AUTB 101, 102. Students are exposed to the fine details of automotive body repair. Excellence and precision of skills are refined and quality work is emphasized. Students demonstrate their achievements through manipulative projects and written tests. *Five hours lecture, fifteen hours lab.*

AUTB   110   3 Units
Special Projects
Prerequisite: AUTB 103. Advanced projects undertaken by students in their field of specialization, under supervision of the instructor. *Two hours lecture, three hours lab.*

Banking and Finance

Bank Operations

Program Description

"Banking is more people than figures. It's helping people with their problems. People tell us everything because we are in a position of trust." (Jean Adamson, U. S. Assistant Treasurer) The banking and finance program is offered by the College in cooperation with the American Institute of Banking.

Certificate of Achievement and Associate in Science Degree

A Certificate of Achievement can be obtained upon completion of the 21-unit major. The Associate in Science Degree can be obtained upon completion of 60 units, including the major, general education requirements, and electives. All courses in the major must be completed with a grade of C or better or a P if the course is taken on a Pass/No Pass basis.

Program Outcomes

Students who complete the Certificate of Achievement/Associate Degree will be able to:

1. Identify accounting concepts that enable them to interpret financial data and use it to make informed decisions about the operating performance and financial position of a company.
2. Describe personal financial investment concepts that enable them to provide customers with advice on investments, insurance, and estate planning.
3. Use communication skills that will enable them to assume supervisory positions.
4. Demonstrate an understanding of the monetary and banking issues that are pervasive in all aspects of financial services.

REQUIRED COURSES . . . . **Units**
BIF 150 Principles of Bank Operations 3
BUS 018 Legal Environment of Business 3
BUS 181 Business Mathematics 3
CIS 050 Microcomputer Applications 3
COMM 001 Introduction to Public Speaking 3
OR
COMM 060 Business and Professional Communication . 3
MGMT 191 Human Relations 3
Elective(s) selected from the recommended electives 3
    Total Units **21**

Some courses may not be offered. Please contact the Dean of Career and Technical Education for alternate courses if necessary.

Recommended Electives
CIS 055 MS Windows Operating Systems
CIS 073 Microsoft Excel
CIS 060 Introduction to the Internet
OCED 090 Occupational Work Experience
OCED 091 General Work Experience
OT 054A Beginning Keyboarding A
OT 054B Beginning Keyboarding B
OT 055A Intermediate Keyboarding/Word Processing A
OT 055B Intermediate Keyboarding/Word Processing B
OT 100 Skill Building on the Computer Keyboard
OT 162 Ten-Key

BIF   150   3 Units
Principles of Bank Operations
Course Advisory: SCC minimum English standard. A comprehensive study and analysis of the economic functions of banks and the services they render to society. *Three hours lecture.*

Biology

Biology A.S.

Program Description
The biology program emphasizes the relationship between structure and function of living systems and the concept that biological processes can be studied at different levels of organization. The program provides a balanced blend of mathematics, chemistry, physics and traditional and modern biology including the advanced topics essential to students continuing their studies at the university. Life is explored at the molecular, cellular, organismal and ecological levels.

Associate in Science Degree
The Associate in Science Degree can be obtained by completing the 46-50-unit major, the general education requirements, and electives for a total of 64-66 units. All courses in the major must be completed with a grade of C or better or a P if the course is taken on a Pass/No Pass basis.

Program Outcomes
1. Students will be able to design and/or interpret an investigation, including data collection and/or analysis.
2. Describe the molecular basis of genetics and energetics.
3. Explain the principles and mechanisms of microevolution and macroevolution.

REQUIRED COURSES . . . . **Units**
BIO 002 Principles of Cell and Molecular Biology 5
BIO 003 Evolution, Ecology & Biodiversity 5
CHEM 001 General Chemistry 5
AND
CHEM 002 General Chemistry 5
CHEM 003 Organic Chemistry I 5
AND
CHEM 004 Organic Chemistry II 5
MATH 030 Analytic Geometry and Calculus 3
AND
MATH 031 Analytic Geometry and Calculus 3
OR

MATH 020 Analytic Geometry and Calculus I 5
AND
MATH 021 Analytic Geometry and Calculus II 5
PHYS 002 General Physics (Non-Calculus) 5
AND
PHYS 004 General Physics (Non-Calculus) 5
OR
PHYS 006 Physics for Science and Engineering 5
AND
PHYS 007 Physics for Science and Engineering 5
    Total Units . . . . **46 – 50**

BIO   002   5 Units
Principles of Cell and Molecular Biology
Prerequisite: CHEM 001. Course Advisory: Eligibility for ENGL 001. This course introduces biology majors to the basic concepts of cell and molecular biology and to the laboratory techniques used to study cells and biological molecules. Subjects include the structure and function of biological molecules, prokaryotic and eukaryotic cell structure and function, cell physiology and metabolism, Mendelian and molecular genetics, and the techniques used in biotechnology to manipulate DNA. *Three hours lecture, six hours lab.*

BIO   003   5 Units
Evolution, Ecology & Biodiversity
Prerequisite: MATH 104, BIO 002. Course Advisory: Eligibility for ENGL 001. This course for biology majors covers evolution, ecology, and the diversity of life. The laboratory component includes invertebrate and vertebrate dissection and several weekend and all day field trips. Students must successfully complete both the lecture and the laboratory portions of the course. Fiel trips may be required. Some field trips may involve a fee. Formerly BIO 001. *Three hours lecture, six hours lab.*

Biology

BIO   004   5 Units
Human Anatomy
Course Advisory: SCC minimum Math standard, Eligibility for ENGL 001, BIO 016 is strongly recommended. BIO 004 is a study of the structural organization of the human body, from cellular to organismal level. Throughout the course, various types of instruction are used, including microscopic investigation of prepared slides of tissues and organs, gross (macroscopic) anatomical dissection, and examination of prosected human material. Formerly BIO 006. *Three hours lecture, six hours lab.*

BIO   005   5 Units
Introductory Physiology
Prerequisite: A grade of C or better in BIO 004 and CHEM 001 or CHEM 010 or CHEM 051 Course Advisory: SCC minimum Math standard and Eligibility for ENGL 001. This course describes physiological and homeostatic mechanisms of the body systems in health and dysfunctional states. The laboratory relates structure to function, uses instrumentation to measure physiological variables, and enables students to critically evaluate functional status. *Three hours lecture, six hours lab.*

BIO   012   3 Units
Environmental Science
Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standard. This course examines the basic concepts of biology (especially ecology), chemistry, and physics to study: (1) human population growth, (2) short and long-term use of resources (such as soil, food, land, renewable and nonrenewable energy, water, and air), and (3) the production of pollution and other wastes. Field trips may be required. *Three hours lecture.*

BIO   012L   1.5 Units
Environmental Science Laboratory
Prerequisite: BIO 012 (may be taken concurrently) Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standard. A course that uses laboratory and mandatory field trip techniques to examine the ecological roles of organisms, resource use, and pollution/waste. Field trips may be required. *Three hours lab.*

BIO   014   4 Units
Principles of Microbiology
Prerequisite: A grade of C or better in Chem 51, Chem 10, or Chem 1 and a grade of C or better in Math 104 or Math 114 or two years of high school alegbra. Course Advisory: SCC minimum English and Math standards. The study of the morphology, physiology, genetics, taxonomy, and ecology of microorganisms. The course also includes principles of immunology, the control of microbes, and their relationship to disease. Laboratory exercises cover microscopy, staining, aseptic techniques, identification, and microbial growth among others. *Three hours lecture, three hours lab.*

BIO   015   4 Units
Introduction to Biology
Course Advisory: Eligibility for ENGL 001; SCC minimum Math standard. A non-majors biology course that introduces basic concepts of living organisms including aspects of biological chemistry, cell structure and function, physiology, genetics, evolution, and ecology. Students must successfully complete both the lecture AND lab portions of the course. Off-campus field trips may be required and may involve a fee. **NOTE: Not open for credit to students who have completed BIO 001, 002 or 012. Three hours lecture, three hours lab weekly.**

BIO   016   3 Units
Introduction to Human Biology
NOTE: Not open for credit to students who have completed BIO 001, 002, 005, 010 or 015. Course Advisory: SCC minimum English and Math standards. An introduction to general biology with emphasis on the human model. Topics include cell structure and function, human evolution, anatomy and physiology, genetics, and the human impact on the environment. This is a course for non-majors. *Three hours lecture.*

BIO   016L   1.5 Units
Human Biology Laboratory
Prerequisite: BIO 016 with a minimum grade of C. May be taken concurrently. Course Advisory: Minimum standards: Eligibility for English 001 and SCC minimum Math standard. A non-majors laboratory course providing an introduction to general biology with an emphasis on the human model. Topics include microscopy, cell structure and function, human anatomy and physiology, genetics and the human impact on the environment. *One half-hour lecture, three hours lab.*

Biology

BIO   018   3 Units
Biology Of Sex
Course Advisory: SCC minimum Math standard, Eligibility for ENGL 001. The biological bases of human sex and sexuality will be discussed. Emphasis will be placed on the normal and diseased state of the male and female reproductive system. Essay and objective exams as well as written assignments will be used for student evaluations; the final exam will be comprehensive. *Three hours lecture*.

BIO   019   4 Units
Marine Biology
Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standard. A non-majors course that studies the diversity and natural history of life in the marine environment with an emphasis on the adaptations of organisms to their environment. Students must successfully complete both the lecture and laboratory portions of the course. Field trips may be required. Some field trips may involve a fee. This course is not open for credit to students who have completed BIO 001 or 002. *Three hours lecture, three hours lab.*

BIO   047   0.50 to 3.00 Units
Independent Study
Prerequisite: A grade of C or better in 12 units of credit, including 4 units from within the discipline. Course Advisory: Eligibility for ENGL 001; statistics may be useful for data analysis. Designed for students who intend to major in biological sciences or pre-professional programs. *One and one-half to nine hours weekly by arrangement.*

BIO   049   1.00 to 3.00 Units
Biology Honors
Prerequisite: Eligibility for Honors Program; BIO 001, BIO 002, BIO 005, BIO 014, or BIO 015 (any of these courses may be taken concurrently). Requires approval of a faculty member sponsor and the Dean of the Math-Science Division. Course Advisory: Eligibility for ENGL 001. Requires students to complete an independent student project under the supervision of a member of the faculty. The project may be a laboratory or field study or a library study that leads to a thesis. In all cases, the final written product should show integration and synthesis of ideas. *Three to nine hours weekly by arrangement.*

BIO   099   0.50 to 2.00 Units
Honors: Dissection
Prerequisite: Completion of 24 units of college credit with a minimum GPA of 3.3; a minimum of 5 units in the discipline with a grade of B or better; an ability to work independently; permission of the Division Dean based on instructor availability. An independent study project designed to increase understanding of human anatomy through detailed dissection and other projects assigned by the supervising instructor. The student will be evaluated through oral examination and evaluation of dissections. *This course is an open entry/open exit course. Students may continue BIO 099 over multiple semesters not to exceed 2 units. One and one-half to six hours weekly by arrangement.*

BIO   160   2 Units
Review of Scientific Principles of Pre-Nursing
Prerequisite: CONDITION OF ENROLLMENT: Current acceptance or on the waiting list of an RN Program. This course focuses on science and mathematics topics that are critical to success for students entering an RN program. This course provides a review of select anatomy, physiology, chemistry, nutrition, microbiology, and mathematics topics for students entering nursing school. This course is especially designed for students that have had an extended time period between finishing their pre-nursing requirements and entering nursing school. (Same as MATH 160) Pass/No Pass Class. *Eight hours lecture (4 week course).*

BIO Special Topics
These courses, numbered 048, 098, or 148 depending upon their transferability, are courses of contemporary interest centered on changing knowledge and important issues in the field. Announcements of Special Topics courses appear in the Schedule of Classes.

Biotechnology

Industrial Biotechnology

Program Description

This program prepares graduates to work in the biotechnology industry as production technicians. A production technician operates and maintains the equipment used to manufacture protein pharmaceutical products. Students will grow bacterial, yeast, and mammalian cells and recover the proteins that they produce. They will follow good manufacturing practices by maintaining records in order to comply with quality assurance procedures and government regulations. Students in the program must be able to adjust their time to a flexible schedule.

Certificate of Achievement and Associate in Science Degree

The Certificate of Achievement can be obtained upon completion of the 22-24-unit major with a grade of C (2.0) or better in each course. The Associate in Science Degree can be obtained upon completion of 60 units, including the major, general education requirements and electives. All courses in the major must be completed with a grade of C or better or a P if the course is taken on a Pass/No Pass basis.

Program Outcomes

Students who complete the Certificate of Achievement/Associate Degree will be able to:
1. A successful student should understand the structure and function of protein pharmaceuticals and evaluate which protein properties a production facility can exploit to purify a particular protein from other cellular components.
2. In preparation for working at a biotechnology company, a successful student should be able to construct a pathway analyzing how a drug or biologic is produced by genetically engineered cells and subsequently purified.

REQUIRED COURSES . . . . **Units**
BIOT 051 Principles of Biotechnology. 3
BIOT 052 Business and Regulatory
        Practices in Biotechnology 3
BIOT 062 Cell Culture and Protein Recovery. 4
BIOT 063 Biotechnology Instrumentation:
        Quality Control & Genetic Engineering 4
BIO 014 Principles of Microbiology 4
OR
BIO 002 Principles of Cell and Molecular Biology 5
CHEM 010 Intermediate Chemistry 4
OR
CHEM 001 General Chemistry 5
    Total Units . . . . 22 – 24

NOTE: Prior knowledge and use of computers is advised, including word processing, spreadsheets, and databases.

Biotechnology

Applied Biotechnology

Certificate of Achievement
A Certificate of Achievement can be obtained by completion of the 18-unit major with a grade of C or better or a P if the course is taken on a Pass/No Pass basis in each course.

Program Outcomes
Students who complete the Certificate of Achievement will be able to:
1. A successful student should understand the structure and function of protein pharmaceuticals and evaluate which protein properties a production facility can exploit to purify a particular protein from other cellular components.
2. In preparation for working at a biotechnology company, a successful student should be able to construct a pathway analyzing how a drug or biologic is produced by genetically engineered cells and subsequently purified.

REQUIRED COURSES . . . . **Units**
BIOT 051 Principles of Biotechnology 3
BIOT 052 Business and Regulatory
     Practices in Biotechnology 3
BIOT 062 Cell Culture and Protein Recovery 4
BIOT 063 Biotechnology Instrumentation:
     Quality Control & Genetic Engineering 4
BIOT 160 Basic Concepts/Methods in Biotechnology . . . 4
  Total Units **18**

Note: Prior knowledge and use of computers is advised, including word processing, spreadsheets, and databases.

Industrial & Applied Biotechnology

BIOT   051   3 Units
Principles of Biotechnology
Prerequisite: BIO 014 or BIO 002 or BIOT 160. Course Advisory: SCC minimum Math standard and Eligibility for ENGL 001. This course covers topics important in the development, production, recovery, and analysis of products produced by biotechnology. The course traces the path of a drug or biologic from the cell through the production facility, the final processing, and into the human body. It discusses the growth characteristics of the organisms used to produce pharmaceutical proteins, the techniques used in product recovery, and the techniques used in product analysis. *Three hours lecture*.

BIOT   052   3 Units
Business and Regulatory Practices in Biotechnology
Course Advisory: Eligibility for ENGL 001; SCC minimum Math standard. Examines how basic business principles and sound manufacturing procedures assure the quality and safety of a product as the manufacturing team moves a product down the biotechnology production pipeline. It explores the role of governmental oversight and regulation during the discovery, development, and manufacturing of new products produced by biotechnology. *Three hours lecture*.

BIOT   062   4 Units
Cell Culture and Protein Recovery
Prerequisite: BIOSC 014 or BIOSC 002 or BIOTCH 160. Course Advisory: Eligibility for ENGL 001. This laboratory course teaches the skills needed to serve as a technician in biotechnology production. Students grow and monitor bacterial, yeast, and mammalian cells on a laboratory scale that emulates the large-scale production used in industry. Students will become familiar with the cleaning, sterilization, aseptic inoculation, operation, and monitoring of fermenters and bioreactors. Students then recover and purify proteins produced by those cell cultures. They recover and purify proteins using centrifugation, ultrafiltration, and chromatography techniques. The course emphasizes the use of current Good Manufacturing Practices (cGMP), and students gain experience following Standard Operating Procedures (SOP). *Two hours lecture, six hours lab.*

Biotechnology

BIOT   063   4 Units
Biotechnology Instrumentation:
Quality Control & Genetic Engineering
Prerequisite: BIO 014 or BIO 002 or BIOT 160. Course Advisory: Eligibility for ENGL 001. Familiarizes students with small scale laboratory practices, both those used in a research laboratory and those used by a quality control department in industry, to analyze the quality of a cell culture process and the purity of protein products produced by cells in culture. The course emphasizes the use of Good Laboratory Practices (GLP) in these analyses. Students will gain experience in techniques used to analyze nucleic acids and in the genetic engineering of cells. They will also gain experience with the common assays used in Quality Control including electrophoresis, High Performance Liquid Chromatography (HPLC), Enzyme Linked Immunosorbant Assay (ELISA), and Polymerase Chain Reaction (PCR) to test products generated using cell culture. *Two hours lecture and six hours lab.*

BIOT   160   4 Units
Basic Concepts/Methods in Biotechnology
Prerequisite: MATH 104 or MATH 114 or equivalent. Course Advisory: SCC minimum English and Math standards. **NOTE: Not open to students who have completed CHEM 001, CHEM 010, BIO 002, BIO 014, or equivalent.** This course is not designed for students intending to transfer. This course is not designed for students intending to transfer. This course serves as a prerequisite to Solano College's biotechnology courses by giving students knowledge of the basic concepts in biology and chemistry used in biotechnology while also developing the basic laboratory skills required to succeed in the field. *Two hours lecture, six hours lab.*

Business

Business, General (Transfer)

Program Description
This program is designed for business students planning to transfer to the University of California and/or the California State University systems.

Certificate of Achievement and Associate in Science Degree
A Certificate of Achievement can be obtained by completing the 26-unit major with a grade of C or better in each course. The Associate in Science Degree can be obtained by completing a total of 60 units, including the major, general education requirements, and electives. All courses in the major must be completed with a grade of C or better or a P if the course is taken on a Pass/No Pass basis.

Program Outcomes
Students who complete the Certificate of Achievement/Associate Degree will be able to:
1. Recognize the importance marketing, legal, economics, accounting, business forms, financing, risk, and personnel management is in business and formulate hypotheses based on these concepts.

REQUIRED COURSES . . . . **Units**
ACCT 001 Principles of Accounting - Financial. 4
ACCT 002 Principles of Accounting - Managerial. 4
BUS 005 Introduction to Business 3
BUS 018 Legal Environment of Business 3
CIS 001 Introduction to Computer Science. 3
OR
CIS 050 Microcomputer Applications 3
ECON 001 Principles of Economics (Macroeconomics) . . 3
ECON 002 Principles of Economics (Microeconomics) . . 3
Elective(s) selected from the recommended electives. . . . 3
    Total Units **26**

Recommended Electives
(Select three units). . . . . **Units**
BUS 092 Business Communication 3
CIS 020 Assembly Programming 3
CIS 022 Introduction to Programming 3
CIS 023 Data Structures and Algorithms 4
MATH 011 Elementary Statistics 4
MATH 020 Analytic Geometry and Calculus I 5
MATH 021 Analytic Geometry and Calculus II. 5
MATH 030 Analytic Geometry and Calculus. 3
MATH 031 Analytic Geometry and Calculus 3
OCED 090 Occupational Work Experience 1-8
OCED 091 General Work Experience. 1-6

*Suggested general education math courses for the Business, General (Transfer) major are MATH 011 (Statistics) and MATH 015 (Finite Math) OR MATH 030 (Analytical Geometry and Calculus). Students should consult a counselor regarding Business Articulation Agreements.

Business

Business-Insurance: Property & Casualty

Program Description
This program provides essential background information needed by those wishing to work in an insurance office. Extensive employment opportunities are available in a variety of job areas from sales to accounting to database or project management.

Certificate of Achievement and Associate in Science Degree
A Certificate of Achievement can be obtained by completing the 31-unit major below. The Associate in Science Degree can be obtained upon completion of 60 units, including the major, and the general education requirements and electives. All courses in the major must be completed with a grade of C or better or a P if the course is taken on a Pass/No Pass basis.

Program Outcomes
Students who complete the Certificate of Achievement/Associate Degree will be able to:

   1. Understand the insurance process, the segments of insurance, and the consequences of insurance contracts in mitigating loss.

   2. What are the risk management techniques available to handle exposure to loss and the use of risk modification.

   3. Understand the financial and human consequences of loss. Proper and casualty exposures.

   4. Apply the insurance principles in potential and real business and personal loss exposures.

   5. Understand the exposures to loss faced by an individual and/or corporation.

REQUIRED COURSES . . . . **Units**
ACCT 001 Principles of Accounting - Financial. 4
BUS 005 Introduction to Business 3
BUS 018 Legal Environment of Business 3
BUS 070 Introduction to Insurance 1
BUS 071 Principles of Property and Liability Insurance. . 3
BUS 072 Personal Insurance 3
BUS 073 Commercial Insurance 3
BUS 074 Insurance—Code & Ethics. 1
BUS 092 Business Communication 3
CIS 050 Microcomputer Applications 3
CIS 073 Microsoft Excel 3
OCED 090 Occupational Work Experience. 1
   Total Units 31

Recommended Electives
MKT 171 Introduction to Marketing
MKT 173 Principles of Selling

Insurance Specialist Job-Direct Certificate
All courses must be completed with a C or better

Required Courses . . . . **Units**
BUS 070 Introduction to Insurance 1
BUS 071 Principles of Property and Liability Insurance. . 3
BUS 072 Personal Insurance 3
BUS 073 Commercial Insurance 3
BUS 074 Insurance—Code & Ethics. 1
   Total Units 11

Business

Business, General (Transfer)

Many courses formerly listed under the Business discipline appear under the disciplines "Accounting," "Management," "Marketing," or "Office Technology."

BUS 005   **3 Units**
Introduction to Business
Course Advisory: Eligibility for ENGL 001, SCC minimum Math standard. A comprehensive study and analysis of the principles of business. The course introduces students to contemporary business principles, practices, and terminology. Students will gain an understanding and appreciation of the private enterprise system, and how the functional areas of business work and interrelate. The course explores business career opportunities, provides the prerequisite knowledge needed for success in other business courses, and prepares students for transfer to upper-division business degree programs. Assigned readings, class participation, written homework, and written examinations are required. *Three hours lecture.*

BUS 018   **3 Units**
Legal Environment of Business
Course Advisory: Eligibility for ENGL 001, SCC minimum Math standard. A comprehensive introduction to the study of the law, with specific emphasis on the legal environment of business. Includes the legal process, legal institutions, contracts, agency, the Uniform Commercial Code (UCC), torts, employment, property, computer law, consumer protection, government regulation and Alternative Dispute Resolution (ADR), along with ethical concerns and current public policy issues. Written examinations required. *Three hours lecture.*

BUS 060   **3 Units**
Introduction to International Business
Course Advisory: Eligibility for English 001, SCC minimum Math standard. A comprehensive overview designed to provide a global perspective in a continuously emerging international marketplace, including topics such as foreign investing, impact of financial markets, international marketing, cultural understanding, and operation of multinational and small companies. *Three hours lecture.*

BUS 070   **1 Unit**
Introduction to Insurance
Course Advisory: Eligibility for English 001, SCC minimum Math standard. Provides students with the background needed prior to taking the other insurance courses. Included are topics such as property/casualty insurance, distribution of insurance products and services to the consumer, how insurance company departments function, civil laws or tort and contract, basic commercial and personal Insurance Services Office (ISO) contracts, and the risk management process. *Three hours lecture (6 week course).*

BUS 071   **3 Units**
Principles of Property and Liability
Course Advisory: Eligibility for English 001, SCC minimum Math standard. One of five insurance courses that are designed to prepare students for employment in the insurance industry, which consists of many different types of employment opportunities, from selling insurance to working in a variety of positions in an insurance company. *Three hours lecture.*

BUS 072   **3 Units**
Personal Insurance
Course Advisory: Eligibility for English 001, SCC minimum Math standard. Assists individuals in learning basic information regarding personal insurance. It includes information about automobile insurance; homeowners' insurance; other residential insurance, such as fire and earthquake insurance; marine insurance; and other personal property. *Three hours lecture.*

BUS 073   **3 Units**
Commercial Ins.
Course Advisory: Eligibility for English 001, SCC minimum Math standard. One of five insurance courses designed to prepare students for employment in the insurance industry. Emphasis for this course is on commerical insurance. The insurance industry offers many different types of employment opportunities, from selling insurance to working in an insurance office. *Three hours lecture.*

BUS 074   **1 Unit**
Insurance — Code & Ethics
Course Advisory: Eligibility for English 001, SCC minimum Math standard. Designed to enable students to understand and apply proper ethical business behavior and obligations, especially as they relate to those working in the field of insurance. *Three hours lecture (6 week course).*

Business

BUS   092   3 Units
Business Communication
Course Advisory: Eligibility for ENGL 001; SCC minimum Math standard. A study of communication theory in the planning and preparation of various types of letters, reports, resumes, and oral presentations along with analysis of group dynamics, symbolic communication, interview techniques and listening skills. Stresses audience analysis, style, appearance, and the importance of grammar, punctuation and vocabulary. Strong focus on gender and cultural communication issues and strategies in the workplace. Critical thinking encouraged through written and oral assignments and case studies on business communication and ethical issues. *Three hours lecture*.

BUS   099   1.00 to 3.00 Units
Business Honors
Prerequisite: Completion of 24 units of college credit with a minimum GPA of 3.3; a minimum of 5 units in the discipline with a grade of B or better; an ability to work independently; permission of the Division Dean based on instructor availability. A comprehensive study and analysis of a topic of student scholarship which is centered on important topics or issues within the business field. *Three to nine hours weekly by arrangement.*

BUS   100   1.5 Units
Work Readiness
Course Advisory: SCC minimum English and Math standards. Covers the process of assessing the job market and completing a resume and application. Topics include how to be successful on the job and to gain satisfaction and rewards from work. The skills needed in the workplace are emphasized along with the social and communication skills, personal characteristics and habits, and expectations of the employer. *Three hours lecture (8 week course).*

BUS   119   3 Units
Project Management
Prerequisite: CIS 001 or CIS 050 and BUS 005. Course Advisory: ECON 002, ACCT 002, CIS 091, BUS 092; SCC minimum English and Math standards. Integrates business concepts used in managing a development or business project such as the project's scope and goals, management of communication, cost and time management, and human resources together with using project management computer software designed for these tasks. Students will manage case studies using their understanding of business and using the software. (Same as CIS 119) *Three hours lecture, one hour lab weekly by arrangement.*

BUS   148A   3 Units
Small Business Project-Based Path for Entrepreneurs
Course Advisory: SCC minimum English and Math standards. This course emphasizes activities and techniques through project management that develops competencies needed to become a successful leader. Students receive instruction and project-based activities in the areas of entrepreneurship, project management, personal and workplace skill, oral and written techniques, and networking. *Three hours lecture*.

BUS   181   1.00 to 3.00 Units
Business Mathematics
Course Advisory: SCC minimum English standard. This course requires students to apply essential mathematical skills necessary for success in business. Includes a review of fractions, decimals, percents, ratios, the percentage formula, and general business applications; covers advanced business applications such as interest, discount, markup, payroll, pricing policies, cash and trade discounts, and financial statements. This is a self-paced, programmed learning class. Open Entry/Open Exit, Variable unit course, Online course is not Open Entry/Open Exit. *One to three hour(s) lecture.*

BUS   182   1 Unit
Small Business Mathematics
Course Advisory: SCC minimum English and Math standards. This course requires students to apply essential mathematical skills necessary for persons operating a successful business. It includes asset and inventory management; ratio analysis, depreciation, taxation applied to sales, excise, and real property; investments and insurance, and basic statistics. This is a self-paced, programmed learning class. Open Entry/Open Exit Course, Online Course is not Open Entry/Open Exit. *One hour lecture.*

BUS   191   3 Units
Investment Fundamentals
Course Advisory: SCC minimum English standard. A comprehensive study and analysis of investment strategies available to investors. Topics covered include the stock and bond market, gold, money markets and options. *Three hours lecture*.

BUS   201   0.5 Unit
Starting and Managing a Small Business
Presents an overview of the process and steps involved in establishing a small business. Topics include entrepreneurial characteristics, success and failure factors, financing, management and business concerns, and developing a check list for planning a start-up. This is a credit/no-credit only course. *Eight hours lecture (2 week course).*

Business

BUS   202   0.5 Unit
Financing a Small Business
Examines various sources of money to start, buy, or expand a small business, including the many ways to start, buy, or expand a business with little or no money. This is a credit/no-credit only course. *Eight hours lecture (2 week course).*

BUS   203   0.5 Unit
Business Financial Management
Examines the preparation and analysis of financial statements and basic small business accounting techniques, using manual and/or computer systems. This is a credit/no-credit only course. *Eight hours lecture (2 week course).*

BUS   204   0.5 Unit
Managing Credit and Collections
Examines the functions of credit and collections, how to establish a credit policy and collections procedures, and how to avoid legal problems. This is a credit/no-credit only course. *Eight hours lecture (2 week course).*

BUS   205   0.5 Unit
Business Budgeting
Examines the use of budgeting techniques as an aid to making informed business decisions. Budgeting enables small business owners to reduce risk and increase the probability of success. This is a credit/no-credit only course. *Eight hours lecture (2 week course).*

BUS   206   0.5 Unit
Planning for Sales and Profit
Examines various business strategies that enable a small business to grow rapidly in size and profitability. This is a credit/no-credit only course. *Eight hours lecture (2 week course).*

BUS   207   0.5 Unit
Recruiting and Selecting Employees
Explores the process of identifying human resource needs and the process of recruiting and selecting the right person. This is a credit/no-credit only course. *Eight hours lecture (2 week course).*

BUS   208   0.5 Unit
Employee Relations and Personnel Policies
Good employees are made through effective training, development, and relations. This course explores techniques used in training and developing good employees. The elements that comprise a sound employee relations program are presented. This is a credit/no-credit only course. *Eight hours lecture (2 week course).*

BUS   209   0.5 Unit
Establishing a Home-Based Business
Presents the basic fundamentals and considerations involving the use of a private residence as the primary location of a small business. Topics include the advantages and disadvantages of home-based operations; licensing, zoning and use permits; legal and liability considerations, specific state and federal tax compliance; employing family members; and the business use of personal assets. This is a credit/no-credit only course. *Eight hours lecture (2 week course).*

BUS   210   0.5 Unit
Record Keeping for Small Business
Examines the legal, tax, and other reasons for keeping business documents, what kinds should be kept, and how to create them. The use of various manual and computer systems is explored. This is a credit/no-credit only course. *Eight hours lecture (2 week course).*

BUS   211   0.5 Unit
Marketing and Advertising
Covers the process of determining what customers want to buy and how to sell products and services to them. This is a credit/no-credit only course. *Eight hours lecture (2 week course).*

BUS   212   0.5 Unit
Risk Management and Insurance
Focuses on the risks associated with owning a small business and how to reduce them. Explores the different types of insurance available. This is a credit/no-credit only course. *Eight hours lecture (2 week course).*

Chemistry

Program Description
This program is designed to foster an understanding of the fundamental principles of chemistry in a variety of applications. Students will learn how chemical knowledge is derived, theorized, and applied in solving problems in everyday life.

Associate in Science Degree
The Associate in Science Degree can be obtained by completing 60 units, including the 26-30-unit major listed below, general education requirements, and electives. All courses in the major must be completed with a grade of C or better or a P if the course is taken on a Pass/No Pass basis.

Program Outcomes
Students who complete an Associate Degree will be able to:
1. Complete lower division chemistry requirements for many majors.
2. Have experience with laboratory equipment comparable to or better than other California Community Colleges and transfer institutions.
3. Succeed in subsequent classes at Solano Community College, at transfer institutions, and in employment.
4. Obtain transition classes for students with non-science backgrounds or goals.
5. Determine the value of the scientific information they encounter in everyday life.

REQUIRED COURSES . . . . Units
CHEM 001 General Chemistry 5
AND
CHEM 002 General Chemistry 5
CHEM 003 Organic Chemistry I 5
AND
CHEM 004 Organic Chemistry II 5
BIO (any course except 048 or 098) . . . . 3 - 5
PHYS 002 General Physics (Non-calculus) 5
OR
PHYS 006 Physics for Science and Engineering 5
OR
PHYS 010 Descriptive Physics 3
    Total Units . . . . 26 – 30

CHEM 001   5 Units
General Chemistry
Prerequisite: A grade of C or better in any of the following: MATH 104 or two years of high school algebra AND a grade of C or better in one of the following: CHEM 160 OR one year of high school chemistry. Course Advisory: Eligibility for ENGL 00 and CHEM 10 is strongly recommended for students who need additional preparation in problem solving. Presents principles of general chemistry for students in science, engineering, medical and related professions. Topics include atomic structure and theory, the periodic table, bonding, gas laws, stoichiometry, solutions, ionization, thermochemistry and equilibrium. Field trips may be required. Some online work may be required. *Three hours lecture, six hours lab.*

CHEM 002   5 Units
General Chemistry
Prerequisite: CHEM 001 with a grade of C or better. Course Advisory: Eligibility for ENGL 001. A continuation of chemical principles and theory covered in CHEM 001 with emphasis on electrochemistry, chemical equilibrium, and quantitative and qualitative analysis. Field trips may be required. Online work may be required. *Three hours lecture, six hours lab.*

Chemistry

CHEM 003   **5 Units**
Organic Chemistry I
Prerequisite: CHEM 002 with a grade of C or better.
Course Advisory: ENGL 001 is strongly recommended.
First half of a two semester course (CHEM 003 and CHEM 004) that begins a survey of organic chemistry for students in chemical, biological, health science, and related professions. Topics include analysis of structure and nomenclature, bonding, isomerism, and basic reaction mechanisms of organic chemicals. Functional groups considered include alkanes, alkenes, alkynes, alcohols, and alkyl halides. Basic organic laboratory procedures are introduced along with spectral analysis, simple syntheses, and reactions described in lecture. Field trip may be required. Online homework may be required. *Four hours lecture, four hours lab.*

CHEM 004   **5 Units**
Organic Chemistry II
Prerequisite: CHEM 003 with a grade of C or better.
Course Advisory: Eligibility for ENGL 001. A continuation of CHEM 003, topics include analysis of structure, nomenclature, and reaction mechanisms of conjugated systems, aromatics, organometallics, various functional groups, carbohydrates, lipids, amino acids, proteins, and nucleic acids. The laboratory will emphasize more advanced work and the application of instrumentation in organic chemistry .Field trip may be required. Online homework may be required. *Four hours lecture, four hours lab.*

CHEM 010   **4 Units**
Intermediate Chemistry
Prerequisite: A grade of C or better in CHEM 160 or two semesters of high school chemistry, and a grade of C or better in MATH 104 or MATH 114 or two years of high school algebra. **NOTE: Not open for credit to students who have completed CHEM 001.** *Course Advisory: Eligibility for ENGL 001.* A general chemistry course often required for nursing students and for students majoring in physical therapy, occupational therapy, industrial technology and home economics, it emphasizes the chemistry of inorganic compounds and covers selected topics such as atomic theory, bonding, equations, gas laws, solutions, acid-base theory, and oxidation-reduction. Field trip may be required. Online homework may be required. *Three hours lecture, three hours lab.*

CHEM 011   **4 Units**
Basic Organic Chemistry and Biochemistry
Prerequisite: CHEM 010 or CHEM 001 with a grade of C or better. Course Advisory: Eligibility for ENGL 001. Presents an overview of organic chemistry and biochemistry for majors in nursing, home economics, liberal arts and technical fields. Field trip may be required. Online work may be required. *Three hours lecture, three hours lab.*

CHEM 051   **5 Units**
Chemistry for the Health Sciences
Prerequisite: A grade of C or better in Chem 160 or two semesters of high school chemistry, and a grade of C or better in MATH 104 or MATH 114 or the equivalent or two years of high school algebra. Course Advisory: Eligibility for ENGL 001. This course presents an overview of general, organic chemistry, and biochemistry for majors in nursing and other allied health occupations. Topics covered include chemical bonding, chemical equations, gas laws, solutions, acid-base theory, oxidation-reduction, functial groups and properties of organic compounds, and the structure and function of carbohydrates, lipids, proteins, and nucleic acids. These topics are discussed in the context of cellular metabolism and human health. **NOTE: Not open for credit to students who have completed CHEM 011.** This course is not a prerequiste for any chemistry course. Field trip may be required. Online homework may be required. *Three hours lecture, three hours lab.*

CHEM 097   **1.00 to 3.00 Units**
Special Projects
Prerequisite: CHEM 002 with a grade of C or better. An independent laboratory project designed to increase a student's laboratory and reporting skills. Completion of chemical analyses and a written report are required. *Three to nine hours weekly by arrangement.*

CHEM 160   **4 Units**
Introductory Chemistry
Prerequisite: A grade of C or better in any of the following: MATH 104 or MATH 114 or two years of high school algebra. **NOTE: Not open to students who have completed CHEM 001, CHEM 010, or equivalent.** *Course Advisory: SCC minimum English standard.* An introductory course covering the fundamental principles of inorganic chemistry .Field trips may be required. Online work may be required. *Three hours lecture, three hours lab.*

CHEM Special Topics
These courses, numbered 048, 098, or 148 depending upon their transferability, are courses of contemporary interest centered on changing knowledge and important issues in the field. Announcement of Special Topics courses appears in the Schedule of Classes.

Child Development and Family Studies

(Formerly Early Childhood Education and Human Development)

Early Childhood Education

Program Description
This program offers comprehensive study of child development, strategies for child guidance, techniques for effective classroom interaction with emphasis on the child in the context of family and culture, and curriculum that enhances the development of the whole child. The Child Development and Family Studies Department is a participant in the Curriculum Alignment Project (CAP). A key effort of the Curriculum Alignment Project is to facilitate the transfer of the courses below as an integrated course of study promoting access to ongoing education and degree attainment. These courses will ease transfer between many California State Universities. The CAP courses include: CDFS 038, CDFS 050, CDFS 053, CDFS 054 (or NUTR 054), CDFS 062, CDFS 063, CDFS 064, and CDFS 065.

Certificate of Achievement and Associate in Science Degree
A Certificate of Achievement can be obtained upon successful completion of the 35-unit major with a grade of C (2.0) or better in each course. The Associate in Science degree can be obtained by completing the 35-unit major, the general education requirements (Solano College, CSU or IGETC), and electives.

Program Outcomes
Students who complete the Certificate of Achievement/Associate Degree will be able to:
1. Demonstrate an understanding of child development theory, current research, and trends in the field, and their application to responsive practice in early care setting.
2. Demonstrate an understanding of the context of individual development including the centrality of family, culture, and community. Students will develop specific techniques for creating meaningful relationships between home and school.
3. Develop curriculum and early care environments that are derived from unbiased observation and assessment of children's interests and developmental levels.
4. Demonstrate reflective practice in their work with young children by building awareness of self as teacher, child as learner, and early childhood pedagogy.

REQUIRED COURSES
Full time students are advised to enroll in CDFS 038, CDFS 050, CDFS 062, and a required curriculum course (CDFS 071, 072, or 073) during their first semester. Second semester students should take CDFS 054, CDFS 063, and CDFS 064. In the third and fourth semesters, students should take practicum (CDFS 065 and CDFS 066), CDFS 053, and a required curriculum course (CDFS 071, 072, 073, or 074). Students will spend their first semester of ECE Practicum I (CDFS 065) assigned to the Solano College Children's Program. A second semester may be spent either on campus (CDFS 066) or off campus (CDFS 066 or 067). Off campus placements will be made with an approved teacher from the Early Childhood Mentor Project. Prior to the first week of enrollment in CDFS 065 or 066, students will be required to pass a criminal record check and be fingerprinted at District expense.

	Units
CDFS 038 Child Growth and Development	3
CDFS 050 Child, Family and Community	3
CDFS 053 Teaching in a Diverse Society	3
CDFS 054 Child Health, Safety, and Nutrition	3
OR	
NUTR 054 Child Health, Safety, and Nutrition	3
CDFS 062 Introduction to Early Childhood Education: Principles and Practices	3
CDFS 063 Introduction to Curriculum	3
CDFS 064 Observation and Assessment	3
CDFS 065 Early Childhood Education Practicum I	4
CDFS 066 Early Childhood Education Practicum II	
OR	
CDFS 067 Early Childhood Education Field Practice	3
Two courses from the required list	6
Total Units	**34-35**

Child Development and Family Studies

Two courses (6 units) from the following list are required:

	Units
CDFS 071 Language and Literature for ECE	3
CDFS 072 Art and Creative Development for ECE	3
CDFS 073 Music and Movement for ECE	3
CDFS 074 Science and Math for ECE	3

Recommended Electives
CDFS 040 Family Relationships
CDFS 052 Children with Special Needs
CDFS 055 Impact of Violence on Children and their
       Families
CDFS 056 Intervention and Strategies for Working with
       Children with Challenging Behaviors

CDFS 071 Language and Literature for ECE
CDFS 072 Art and Creative Development for ECE
CDFS 073 Music and Movement for ECE
CDFS 074 Science and Math for ECE
CDFS 075 Care of Infants and Toddlers: Social-Emotional
       Foundation
CDFS 076 Care of Infants and Toddlers: Curriculum and
       Environments
CDFS 080 Early Childhood Administration
CDFS 081 Early Childhood Staff Supervision
CDFS 082 Adult Supervision: The Mentor Teacher
HS 051 Introduction to Human Services
HS 053 Serving Special Populations
NUTR 010 Nutrition
SOC 001 Introduction to Sociology

Associate in Science in Early Childhood Education for Transfer

Program Description
Successful completion of this major prepares students to work in the field of early childhood education. Students will learn about child development, health and safety, observation and assessment, and techniques for effective classroom teaching including child guidance, curriculum development, and educating in a culturally respectful manner. One semester of practicum is required. This program aligns with the statewide Early Childhood Education Curriculum Alignment Project (CAP) which is designed to aid in student transfer. The CAP courses include: CDFS 038, CDFS 050, CDFS 053, CDFS 054 (or NUTR 054), CDFS 062, CDFS 063, CDFS 064, and CDFS 065.

Associate in Science in Early Childhood Education for Transfer
The Associate in Science in Early Childhood Education for Transfer is especially appropriate for students who plan to complete a bachelor's degree in Early Childhood Education or Child Development at a CSU campus. Students completing an Associate in Science in Early Childhood Education for Transfer degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students transferring to a CSU campus that does accept the Associate in Science in Early Childhood Education for Transfer will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree also prepares students for Early Childhood Education degree programs at other four-year institutions, but does not come with the same guarantees. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

To earn this AS-T degree, students must:
- Complete the following major requirements with grades of C or better
- Complete a minimum of 60 CSU-transferable semester units with a minimum grade point average of 2.0
- Complete either the California State University General Education Breadth pattern (CSU GE), which requires 39 units, or the Intersegmental General Education Transfer Curriculum (IGETC) which requires 34-39 units. Students are not required to complete Solano's Cross-Cultural Studies requirement.

Program Outcomes
Students who complete an Associate Degree for Transfer will be able to:
1. Demonstrate an understanding of child development theory, current research, and trends in the field, and their application to responsive practice in early care settings.
2. Demonstrate an understanding of the context of individual development including the centrality of family, culture, and community through developing techniques for creating meaningful relationships between home and school.
3. Develop curriculum and early care environments that are derived from unbiased observation and assessment of children's interests and developmental levels.
4. Demonstrate reflective practice in their work with young children by building awareness of self as teacher, child as learner, and early childhood pedagogy.

Child Development and Family Studies

REQUIRED COURSES

The following 25 CDFS units are required for the Early Childhood Education for transfer degree. Some may double count for general education and the major (CDFS 038, CDFS 050). It is recommended that full time students enroll in CDFS 038, CDFS 050, and CDFS 062 in their first semester. Second semester students should take CDFS 054, CDFS 063, and CDFS 064. In the second year students should take CDFS 065, CDFS 053, and complete their other general education requirements. Practicum placements (CDFS 065) will be made at the Solano College Children's Program. Prior to the first week of enrollment in practicum student will be required to pass a criminal record check and be fingerprinted at the District's expense.

                                                                                        Units

CDFS 038 Child Growth and Development 3
CDFS 050 Child, Family and Community 3
CDFS 053 Teaching in a Diverse Society 3
CDFS 054 Child Health, Safety, and Nutrition. 3
CDFS 062 Introduction to Early Childhood
            Education: Principles and Practices. 3
CDFS 063 Introduction to Curriculum 3
CDFS 064 Observation and Assessment 3
CDFS 065 Early Childhood Education Practicum I. 4
    Total Units **25**

**(Formerly Early Childhood Education
and Human Development)**
**Students enrolling in the following courses are
strongly urged to see an instructor in the department
prior to registration.**

**CDFS   038   3 Units
Child Growth and Development**
Course Advisory: Eligibility for ENGL 001. This course examines the major physical, cognitive, and psychosocial developmental milestones (typical and atypical) and theories from conception through adolescence. Enphasis is placed on the interaction bewtween maturational processes and environmental factors. Current research and methodologies are examined. Child observations and analysis are included. Field trip may be required. Field trip may be required. Formerly HUDV 038. *Three hours lecture*.

**CDFS   039   3 Units
School Years and Adolescent Development**
Course Advisory: Eligibility for ENGL 001.
Development and maturation of the school-age child and the adolescent; the interrelationship of physical, mental, social, and emotional factors will be discussed along with a survey of community resources. Formerly HUDV 039. *Three hours lecture*.

**CDFS   040   3 Units
Family Relationships**
Course Advisory: Eligibility for ENGL 001. A study of sociological and psychological factors influencing relationships, particularly dating, family, and marital relationships, as well as alternative lifestyles in contemporary society, including factors that affect communication and interpersonal interactions within relationships. Formerly HUDV 040. *Three hours lecture*.

**CDFS   050   3 Units
Child, Family and Community**
Course Advisory: Eligibility for ENGL 001. An examination of the devloping child in a societal context focusing on the interrelationships of family, school and community, including historical and socio-cultural influences. Socialization and identity development are emphasized, as are teacher startegies for building respectful, reciprocal relationships that support and empower children and families. Formerly HUDV 050. *Three hours lecture*.

**CDFS   052   3 Units
Children with Special Needs**
Prerequisite: CDFS 038. Course Advisory: Eligibility for ENGL 001. An introductory study of children with special needs, including causes of disabilities, their incidence, care, management, and general remedial procedures. Emphasis is on the child with disabilities in the home and community settings. Formerly HUDV 075. *Three hours lecture*.

Child Development and Family Studies

CDFS   053   3 Units
Teaching in a Diverse Society
Course Advisory: Eligibility for ENGL 001. Examination of teaching young children in a diverse society in an effort to support optimal identity development, competency, and inclusion. Theoretical and practical implications of oppression and privilege will be explored as they apply to children, families, programs, classrooms, and teaching. Various classroom strategies will emphasize culturally and linguistically appropriate anti-bias approaches. Course includes self-examination and reflection on issues related to social identity, stereotypes and bias, social and educational access, media, and schooling. Formerly HUDV 053. *Three hours lecture.*

CDFS   054   3 Units
Child Health, Safety, and Nutrition
Course Advisory: Eligibility for ENGL 001, CDFS 038 and CDFS 062. Introduction to the laws, regulations, standards, policies and procedures and early childhood curriculum related to child health safety and nutrition. The key components that ensure physical health, mental health and safety for both children and staff will be identified along with the importance of collaboration with families and health professionals. Focus on integrating the concepts into everyday planning and program development for all children. This course is the same course as NUTR 054. *Three hours lecture.*

CDFS   055   3 Units
Impact of Violence on Children and their Families
Course Advisory: SCC minimum English standards. Exploration of violence in America and its impact on the physical and psychological well-being of children, their families and early childhood teachers. Emphasis on critical factors in understanding appropriate early childhood violence prevention and intervention strategies. Formerly ECE 050. *Three hours lecture.*

CDFS   056   3 Units
Intervention and Strategies for Working with Children with Challenging Behaviors
Course Advisory: SCC minimum English standards. Provides early childhood teachers knowledge and skills to respond to the needs of children and families who experience stress and chronic violence through exploration of the power of play in helping children resolve conflicts and methods for teaching alternative to violence. Formerly ECE 051. *Three hours lecture.*

CDFS   062   3 Units
Introduction to Early Childhood Education: Principles and Practices
Prerequisite: CDFS 038 (may be taken concurrently). Course Advisory: Eligibility for English 001. An examination of the underlying theoretical principles of developmentally appropiate practices applied to programs, environments, emphasizing the key role of relationships, constructive adult-child interactions, and teaching strategies in supporting physical, social, creative and intellectual development for all young children. This course includes a review of the historical roots of early childhood programs and the evolution of the professional practices promoting advocacy, ethics and professional indentity. Formerly ECE 062. *Three hours lecture.*

CDFS   063   3 Units
Introduction to Curriculum
Prerequisite: Minimum grade of C in CDFS 038 and CDFS 062. Course Advisory: Eligibility for English 001. This course presents an overview of knowledge and skills related to providing appropiate curriculum and environments for young children from birth to age 6. Students will examine a teacher's role in supporting development and fostering children's curiosity and learning. Through observation and assessment strategies students will develop appropiate play-based curriculum. An overview of content areas will include but not be limited to: Language and literacy, social and emotional learning, sensory learning, art and creativity, music, math, and science. Formerly ECE 063. *Three hours lecture.*

CDFS   064   3 Units
Observation and Assessment
Course Advisory: CDFS 038; Eligibility for ENGL 001. This course focuses on the appropriate use of assessment and observation strategies to document development, growth, play and learning to join with families and professionals in promoting children's success. Recording strategies, rating systems, portfolios, and multiple assessments tools are explored. Formerly ECE 064. *Three hours lecture.*

Child Development and Family Studies

CDFS   065   **4 Units**
Early Childhood Education Practicum I
Prerequisite: Minimum grade of C in CDFS 062 and CDFS 063 (CDFS 063 may be taken concurrently). Course Advisory: Eligibility for ENGL 001. Supervised laboratory experience with infants through preschool children in the Solano College Children's Programs. Students will spend 8 hours in practicum, 1 hour in a teacher meeting, and 1 hour in seminar for a total of 10 hours per week. Students will utilize practical classroom experiences to make connections between theory and practice, develop professional behaviors, and build a comphrehensive understanding of children and families. Child centered, play-oriented approaches to teaching, learning, and assessment; and knowledge of curriculum content areas will be emphasized as students teachers desgin, implement and evalute experiences that promote positive development and learning for all young children. During the first week of enrollment, students will be required to be fingerprinted and cleared through Department of Justice and have a negative TB skin test at the District's expense. Formerly ECE 065. *One hour lecture, nine hours by arrangement.*

CDFS   066   **4 Units**
Early Childhood Education Practicum II
Prerequisite: Minimum grade of C in CDFS 065. Course Advisory: Eligibility for English 001. Laboratory practicum emphasizing curriculum activities, comphrehensive case studies, methods of child observation, and relationships of theories to practices. Students may be placed in the Solano College Children's Programs on campus or with a Mentor teacher (selected by the SCC/ECE Mentor teacher selection committee) off campus. Students will spend 8 hours in practicum, 1 hour in a teacher meeting, and 1 hour in seminar for a total of 10 hours per week. During the first week of enrollment, students will be required to be fingerprinted and cleared through Department of Justice and have a negative TB skin test at the District's expense. Formerly ECE 066. *One hour lecture, nine hours by arrangement.*

CDFS   067   **4 Units**
Early Childhood Education Field Practice
Prerequisite: Minimum grade of C in CDFS 065. Course Advisory: Eligibility for English 001. Twenty hours per week of work experience at an approved early childhood job site under the direct supervision of a fully qualififed ECE teacher (preferably under the supervision of one of the SCC selected Mentor teachers), and attendance at a one-hour weekly seminar on campus which empahsizes child observation, curriculum planning, and relationships of theories to practices. Formerly ECE 067. *One hour lecture (related seminar), twenty hours weekly by arrangement (work experience).*

CDFS   070   **3 Units**
Lifespan Human Development
Course Advisory: Eligibility for ENGL 001. **Note: Not open for credit to students who have successfully completed HUDV 038/039 or CDFS 038/039.** A survey of human development throughout the life cycle, including physical, social, intellectual, and emotional development from conception to death. Includes direct observation. Formerly HUDV 070. *Three hours lecture.*

CDFS   071   **3 Units**
Language and Literature for ECE
Course Advisory: Eligibility for English 001 and CDFS 038. An introduction to children's literature and to the development of speech and language during early childhood. Students will explore teaching techniques which promote language acquisition including teacher-child interaction, story telling, puppetry, language games, flannel board stories, journaling, and the development of dramatic play materials. Culturally inclusive practices will be emphasized. Formerly ECE 071. *Three hours lecture.*

CDFS   072   **3 Units**
Art and Creative Development for ECE
Course Advisory: SCC minimum English and Math standards; CDFS 038. A study of art activities appropriate to the developmental needs of the young child. Emphasis is on children's use of art as a way to express their individuality and communicate their ideas about themselves and their world. Formerly ECE 072. *Three hours lecture.*

CDFS   073   **3 Units**
Music and Movement for ECE
Course Advisory: CDFS 038; Eligibility for English 001. Presents a curriculum of music appropriate for teachers of young children from infancy through the primary grades. Fundamentals of music and simple chording techniques will be introduced. Field trip may be required. Formerly ECE 073. *Three hours lecture.*

CDFS   074   **3 Units**
Science and Math for ECE
Prerequisite: CDFS 062 and CDFS 038 (may be taken concurrently). Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standards. An exploration of scientific principles, materials, and information from the biological and physical sciences appropriate for young children. Through an emphasis on the choice and presentation of appropriate concepts and processes, students acquire basic science knowledge relevant to the intellectual development of the young child. Field trip may be required. Formerly ECE 070. *Three hours lecture.*

Child Development and Family Studies

CDFS   075   3 Units
Care of Infants and Toddlers:
Social-Emotional Foundations
Course Advisory: Minimum standards: Eligibility for English 001. This course examines relationship-based infant/toddler group care, with an emphasis on social-emotional development. Theoretical foundations of quality care are addressed including the importance of home-family connections, cultural continuity, and responsive practice. Skills for individualizing care, routines, and working with children with special needs are explored. Formerly ECE 075. *Three hours lecture*.

CDFS   076   3 Units
Care of Infants and Toddlers:
Curriculum and Environments
Course Advisory: Eligibility for English 001. Based on theory and an holistic approach to development, this course explores quality environments and curriculum for infants and toddlers. Through observation and assessment, students develop skills for creating meaningful cognitive, physical, literacy, and social/emotional experiences in group care. Formerly ECE 076. *Three hours lecture*.

CDFS   080   3 Units
Early Childhood Administration
Prerequisite: C or better in CDFS 038 and CDFS 062. Course Advisory: Eligibility for ENGL 001. An overview of the fundamental duties and responsibilities of Early Childhood Administration, including preparation, implementation and evaluation of the program goals and budget controls. Meets requirements set by the California Commission on Teacher Credentialing for Site Supervisor and Program Director permit and State of California Community Care Licensing. Formerly ECE 080. *Three hours lecture*.

CDFS   081   3 Units
Early Childhood Staff Supervision
Prerequisite: C or better in CDFS 038, CDFS 050, and CDFS 062. Course Advisory: Eligibility for ENGL 001. A presentation of the fundamentals involved in becoming a more effective supervisor and methods and procedures in dealing with selection, supervision and evaluation of staff in an early childhood setting. Meets the requirements set by the California Commission on Teacher Credentialing for the Site Supervisor and Program Director Permit and State of California Community Care Licensing. Formerly ECE 081. *Three hours lecture*.

CDFS   082   2 Units
Adult Supervision: The Mentor Teacher
Prerequisite: C or better in CDFS 038, CDFS 050, and CDFS 062. Course Advisory: Eligibility for ENGL 001. Methods and principles of supervising student 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. Required for the Master Teacher, Site Supervisor, and Program Director Permits issued by the California Commission on Teaching Credentialing. Formerly ECE 079. *Two and three-quarters hours (12 week course).*

CDFS   099   1.00 to 3.00 Units
Early Childhood Education Honors
Prerequisite: Completion of 24 units of college credit with a minimum GPA of 3.3; a minimum of 5 units in the discipline with a grade of B or better; an ability to work independently; permission of the Division Dean based on instructor availability. Course Advisory: Eligibility for ENGL 001. An independent study and research class in the areas of infant, toddler, and preschool early education programs. The student and instructor design an outlined program of study. May be repeated to a maximum of 6 units, including initial enrollment. Formerly ECE 099. *Three to nine hours weekly by arrangement.*

CDFS   101   0.5 Unit
Sensitive & Critical Topics in ECE
Course Advisory: SCC minimum English standard. A short course designed to include current topics in Child Development or Family Studies that are particularly sensitive in nature and/or subject to critical timing. It is designed especially as an update for teachers currently working in the field. Formerly ECE 101. *Eight hours lecture total for semester.*

CDFS   102   0.5 Unit
Curriculum Development
Course Advisory: SCC minimum English standards. Curriculum development techniques for young children in early childhood education programs in the areas of speech development, pre-reading skills, math concepts, science activities, music, art, cooking and nutrition. Emphasis in the above curriculum areas will be placed on the specialized needs of disadvantaged children. Formerly ECE 102. *Eight hours lecture.*

Child Development and Family Studies

CDFS   105   0.5 Unit
Parenting in a Stressful World
Course Advisory: SCC minimum English and Math standards. This course is primarily designed for parents of young children (birth-five years). The course includes an overview of child development principles and an exploration of the role of parents in supporting the development of their children. The course will provide opportunities to explore and reflect on parenting in a stressful world and create a parent community. Discussions and assignments will relate directly to the participants interactions with young children. Formerly ECE 105. *Eight hours lecture.*

CDFS   200   0.5 Unit
ECE Mentor Teacher Seminar
Prerequisite: Selection as a Mentor Teacher with the California Mentor Teacher Program. Course Advisory: SCC English and math standards. A monthly seminar for Early Childhood Mentor Teachers to explore issues related to their roles as supervisors or early childhood student teachers. Seminar content will be individualized to meet the needs of each mentor. Participation and attendance in the monthly meeting is mandatory. Formerly ECE 200. *Eight hours lecture.*

CDFS   501   Non-Credit
Early Childhood Education Children's Programs
Course Advisory: SCC minimum English standard. Provides the opportunity for parents to become more involved with their child(ren)'s education, to gain the positive interaction skills appropriate for this age group, and to gain information about the normal behavior of preschool aged children. Expected of parents whose children are enrolled in the Solano Community College Children's Programs. Formerly ECE 501. *Sixteen hours by arrangement.*

CDFS   550   Non-Credit
Positive Parenting Practices
Course Advisoy: SCC minimum English standards. Focuses on those aspects of young children's normal behavior and needs which have the greatest significance for parents and others interested in behavior of young children. Formerly ECE 550. *Three hours lecture (8 week course).*

Communication Studies

(Formerly Speech)

Associate in Arts in Communication Studies for Transfer

Program Description
The Communication Studies Program is broad-based and concerned with the preparation and delivery of messages in interpersonal, public and business situations. This program focuses on understanding the communication process and improving communication skills. The program prepares the students to pursue professional goals in a variety of career possibilities including: Community College Teacher, Speech Writer, Communication Consultant, Lawyer, Minister, Personnel Director, Sports Broadcast Journalist, Public Relations, Political Campaign Aide, Sales, Counselor.

Associate in Arts Degree for Transfer
The Associate in Arts for Transfer (AA-T) in Communication Studies is especially appropriate for students who plan to complete a bachelor's degree in Communication Studies at a CSU campus. Students completing this degree (AA-T in Communication Studies) are guaranteed admission to the CSU system, but not to a particular campus or major. Students transferring to a CSU campus that does accept the AA-T in Communication Studies will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree also prepares students for communication studies degree programs at other four-year institutions, but does not come with the same guarantees. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

To earn this AA-T degree, a student must:
- Complete the following 18-unit major requirements with grades of C or better
- Complete a minimum of 60 CSU-transferable semester units with a minimum grade point average of 2.0
- Complete either the California State University General Education Breadth pattern (CSU, GE), which requires 39 units, or the Intersegmental General Education Transfer Curriculum (IGETC), which requires 34-39 units. Students are not required to complete Solano Cross-Cultural Studies requirement.

Program Outcomes
Students who complete an Associate Degree for Transfer will be able to:
1. Apply the process of communication and communication methods in multiple contexts.
2. Demonstrate the skills and techniques necessary to be organized and confident communications in a variety of settings.

REQUIRED COURSES . . . . **Units**
COMM 001 Introduction to Public Speaking 3
Choose two (2) courses (6 units) from List A 6
Choose two (2) courses (6 units) from List B 6
Choose one (1) course (3 units) from List C 3
    Total Units **18**

List A – Choose any two (2) of the following courses (6 units):
COMM 006 Argumentation and Debate 3
COMM 010 Interpersonal Communication 3
COMM 008 Group Communication 3

List B – Choose any two (2) of the following (6 units):
COMM 002 Fundamentals of Persuasive Speaking 3
COMM 012 Intercultural Communication 3
COMM 015 Oral Interpretation of Literature 3
COMM 050 Forensics/Speech Workshop 1-4
COMM 060 Business and Professional Communication . 3
Any List A course not used above 3

List C – Choose one (1) of the following (3 units):
COMM 075 Sports Broadcasting 3
ANTH 002 Cultural Anthropology 3
PSYC 001 Introduction to Psychology 3
SOC 001 Introduction to Sociology 3
Any List A or List B course not used above 3

Recommended Electives
ENGL 002 Critical Thinking and Writing About Literature
ENGL 004 Critical Thinking and Composition: Language
      in Context
JOUR 001 Newswriting and Reporting
JOUR 011 Introduction to Mass Communication
PHIL 001 Introduction to Critical Thinking and Reasoning
THEA 001 Principles and Theory of Acting

Communication Studies

COMM 001   **3 Units**
Introduction to Public Speaking
Course Advisory: Eligibility for ENGL 001. A public speaking course which includes instruction and practice in the various forms of public address and the techniques for orally presenting ideas clearly, concisely, and coherently. Students are required to outline speeches frequently and/or complete a detailed manuscript of the speech; to read a college-level public speaking textbook and apply its principles in the preparation of their speeches; to critically analyze public speeches of various types. Formerly SPCH 001. *Three hours lecture*.

COMM 002   **3 Units**
Fundamentals of Persuasive Speaking
Course Advisory: Eligibility for ENGL 001. A persuasive speaking course which includes instruction and practice in the various forms of persuasive speaking including, but not limited to, sales presentations, speeches of praise/blame, propaganda, and opposing viewpoints. Students are required to outline persuasive speeches frequently; to read a college-level persuasive speaking textbook and apply its principles in the preparation of their persuasive speeches; to critically analyze persuasive speeches; and to deliver persuasive speeches of various types. Formerly SPCH 002. *Three hours lecture*.

COMM 006   **3 Units**
Argumentation and Debate
Course Advisory: Eligibility for ENGL 001. A public speaking course which includes instruction and practice in the principles of argumentation and in the various forms of debate including the analysis of propositions, research, evidence and reasoning. Students are required to practice various forensic debating techniques through the presentation of their outlined advocate/government and opposition cases after investigating major contemporary issues; to read a college level argumentation and debate textbook and apply its principles in the preparation of their cases/and to critically analyze debate cases. Formerly SPCH 006. *Three hours lecture*.

COMM 008   **3 Units**
Group Communication
Course Advisory: SCC minimum English standard. This course is designed to increase students' understanding of group communication behaviors related to problem-solving, decision-making, leadership, group roles, norms and conformity and to prepare students to function more effectively in groups. This course is designed for students majoring in speech communication, business, international business, education, nursing, and all fields of study and certifications that require group and team-building skills. Formerly SPCH 008. *Three hours lecture*.

COMM 010   **3 Units**
Interpersonal Communication
Course Advisory: Eligibility for ENGL 001. Communication principles as applied to different interpersonal communication situations including verbal and non-verbal communication, listening, overcoming barriers to communication, and conflict resolution. Formerly SPCH 010. *Three hours lecture*.

COMM 012   **3 Units**
Intercultural Communication
Course Advisory: SCC minimum English standard. This course introduces students to the challenges and promises of intercultural communication with application to American culture, subcultures, and different cultures of the world. Specific focus will be development of the ability to acknowledge and understand the unique voice of people from the African, Asian, Latina, Middle Eastern, and Pacific Island cultures as well as co-cultures within the United States. Through lectures, readings, films, group discussions, written and oral assignments, students will learn the skills necessary to achieve positive outcomes when communicating with others that are perceived as different. Formerly SPCH 012. *Three hours lab.*

COMM 015   **3 Units**
Oral Interpretation of Literature
Course Advisory: Minimum standards: Eligibility for English 001. Study of literature through oral performance that includes development of skills in the analysis and interpretation of prose, poetry, and dramatic literature. Emphasis on vocal and physical techniques to orally communicate understanding of the literature performed. Formerly SPCH 015. *Three hours lecture*.

COMM 049   **1.00 to 3.00 Units**
Speech Honors
Prerequisite: Completion of 30 or more units of transferable college credit including 6 units of transferable speech; ENGL 001 with a grade of B or better; an ability to work independently; and permission of the Division Dean based on instructor availability. An independent study program designed for students who have completed the available Speech offerings and wish to continue work in one of these areas, or work with an instructor in a specialized area of oral communication. The student and instructor design an outlined program of study. Formerly SPCH 049. *Three to nine hours weekly by arrangement.*

Communication Studies

COMM 050   **1.00 to 4.00 Units**
Forensics/Speech Workshop
Course Advisory: Eligibility for ENGL 001. Provides training in the principles of all forms of competitive speaking, oral interpretation and debate, including participation in intercollegiate competition and appearances before campus and community groups. Students attend intercollegiate forensic tournaments and festivals or speak before campus or community audiences. Participation may include weekends and off campus travel. Open entry/exit. Formerly SPCH 050. Repeatable 3 times. *One hour lecture, zero to nine hours lab.*

COMM 060   **3 Units**
Business and Professional Communication
Course Advisory: Eligibility for ENGL 001. Presents practical communication skills to allow students to achieve effective verbal communication in business situations, community activities and other areas of daily life. Areas of discussion include giving and receiving the basic practical communication skills. Assignments and exercises are employed to allow students to achieve effective verbal communication in business situations, community activities, and other areas of daily life, including giving and receiving instructions, interviewing, verbal and non-verbal communication. Formerly SPCH 060. *Three hours lecture.*

COMM 075   **3 Units**
Sports Broadcasting
Course Advisory: SCC minimum Math standard; eligibility for ENGL 001; Speech 001. A professional approach to the basics of on-air and internet sports broadcasting. Areas of concentration include performance training for play-by-play description, color commentary, compiling and organizing statistical data for a variety of sporting events. The course includes an in-depth approach to careers in broadcast communication with concentration on all aspects of research preparation and delivery presentation to adequately and effectively establish and sustain a career in sports broadcasting. Formerly SPCH 075. *One hour lecture, two hours activity, three hours by arrangement weekly.*

Computer Information Science

Computer Programming

Program Description
This program is designed to prepare the student for employment as a computer programmer trainee.

Certificate of Achievement and Associate in Science Degree
A Certificate of Achievement can be obtained upon completion of the 33-unit major listed below. The Associate in Science Degree may be obtained by completing a total of 60 units, including the major, general education requirements, and electives. All courses in the major must be completed with a grade of C or better or a P if the course is taken on a Pass/No Pass basis.

Program Outcomes
Students who complete the Certificate Achievement/Associate Degree will be able to:
1. Construct applications that use GUI (graphical user interface) components and access databases for data permanence.
2. Develop a programming solution to a data structure problem using object-oriented methodologies and appropriate data structures and algorithms.
3. Implement a well-designed, properly normalized relational database after analyzing user requirements and business rules.

Not all courses are offered every semester, and the sequence of courses listed below is recommended, not required.

REQUIRED COURSES . . . . Units
CIS 001 Introduction to Computer Science. 3
BUS 092 Business Communication 3
CIS 022 Introduction to Programming 3
CIS 055 MS Windows Operating Systems 3
CIS 023 Data Structures and Algorithms 3
CIS 015 Programming in Visual Basic.NET 3
CIS 089 Essential Networking Technologies 3
CIS 078 Access -Database Management System 3
CIS 052 UNIX Operating System
      (UNIX OPERATING SYST). 3
CIS 020 Assembly Programming 3
Elective(s) selected from the Recommended Electives. . . 3
    Total Units 33

Select three (3) units from the following Recommended Electives: . . . . Units
ACCT 001 Principles of Accounting - Financial. 4
ACCT 002 Principles of Accounting – Managerial 4
BUS 005 Introduction to Business. 3
CIS 035 Introduction to Java Programming 3
CIS 060 Introduction to the Internet 1.5
CIS 061 Creating Web Pages 3
CIS 066 Microsoft Word 3
CIS 068 Object Oriented Game Programming with Flash 3
CIS 073 Microsoft Excel 3
CIS 080 SQL Database Management Systems 3
OCED 090 Occupational Work Experience . . . . 1 - 8
OCED 091 General Work Experience. . . . . 1 - 6

Note: Students planning to transfer to a four-year college and major in Management Information Systems/Computer Science should see a counselor regarding Business Articulation Agreements for a particular university campus.

Computer Information Science

Microcomputer Applications

Program Description
This option is designed to prepare the student for employment as a microcomputer applications specialist.

Certificate of Achievement and Associate of Science Degree
A Certificate of Achievement can be obtained upon completion of the 30-unit major listed below. The Associate in Science Degree may be obtained by completing a total of 60 units, including the major, general education requirements, and electives. All courses in the major must be completed with a grade of C or better or a P if the course is taken on a Pass/No Pass basis.

Program Outcomes
Students who complete a Certificate of Achievement/Associate Degree will be able to:
1. Demonstrate knowledge of application software such as word processing, spread sheets, personal information management, database, operating systems, and networking, presentation and html editors.
2. Understand Visual Basic programming.
3. Effective oral and written communication.

REQUIRED COURSES . . . . **Units**
BUS 092 Business Communication 3
CIS 001 Introduction to Computer Science. 3
CIS 015 Programming in Visual Basic.NET 3
CIS 055 MS Windows Operating Systems 3
CIS 061 Creating Web Pages 3
CIS 066 Microsoft Word 3
CIS 073 Microsoft Excel 3
CIS 078 Access -Database Management System 3
CIS 089 Essential Networking Technologies 3
CIS 090 Introduction to PowerPoint 1.5
CIS 091 Microsoft Outlook 1.5
    Total Units **30**

Recommended Electives
ACCT 001 Principles of Accounting – Financial
ACCT 002 Principles of Accounting - Managerial
BUS 005 Introduction to Business
CIS 020 Assembly Programming
CIS 022 Introduction to Programming
CIS 035 Introduction to Java Programming
CIS 060 Introduction to the Internet
CIS 066 Microsoft Word
CIS 080 SQL Database Management Systems
CIS 093 MS Publisher
OCED 090 Occupational Work Experience
OCED 091 General Work Experience

Computer Information Science

Web Development and Administration

Program Description
This specialty is designed to prepare the student for employment as a web site administrator and developer.

Certificate of Achievement and Associate in Science Degree
A Certificate of Achievement can be obtained upon completion of the 33-unit major listed below. The Associate in Science Degree may be obtained by completing a total of 60 units, including the major, general education requirements, and electives.

Program Outcomes
Students who complete the Certificate of Achievement/Associate Degree will be able to:
1. Properly use design elements and an html editor in creating web pages.
2. Describe and explain the use of a database in a website utilizing input forms, queries, and data base results.
3. Develop a project incorporating CSS, search forms, tables, photo galleries, shared borders, themes, interactive components, dynamic web pages and publish to a web site

REQUIRED COURSES . . . . Units
CIS 001 Introduction to Computer Science. 3
CIS 061 Creating Web Pages 3
CIS 062 Creating Web Interactivity with Flash 3
CIS 069 Multimedia for the Web 3
CIS 072 Extensible Markup Language (XML). 1.5
CIS 075 Client-Side Web Programming 3
CIS 080 SQL Database Management Systems 3
CIS 081 Server-Side Web Programming 3
CIS 083 Web Server Administration 3
CIS 089 Essential Networking Technologies 3
CIS 111 Web Design with Cascading Style Sheets 1.5
Elective(s) selected from the Recommended Electives . . . 3
    Total Units 33

Recommended Electives (Select three units)
CIS 015 Programming in Visual Basic.NET 3
CIS 022 Introduction to Programming 3
CIS 023 Data Structures and Algorithms 3
CIS 035 Introduction to Java Programming 3
CIS 068 Object Oriented Game
       Programming with Flash 3
CIS 078 Access -Database Management System 3
CIS 120 Developing XML Web Services. 1.5
CIS 121 PHP Programming with MySQL. 3

Microsoft Office Master Job-Direct Certificate

The required courses must be completed with a grade of C or better.

REQUIRED COURSES . . . . Units
CIS 066 Microsoft Word. 3
CIS 073 Microsoft Excel 3
CIS 090 Introduction to PowerPoint. 1.5
CIS 093 MS Publisher 1.5
    Total Units 9

Microsoft Office Specialist Job-Direct Certificate

The required courses must be completed with a grade of C or better.

REQUIRED COURSES . . . . Units
CIS 066 Microsoft Word. 3
CIS 073 Microsoft Excel 3
CIS 078 Access -Database Management System 3
CIS 090 Introduction to PowerPoint. 1.5
CIS 091 Microsoft Outlook. 1.5
CIS 093 MS Publisher 1.5
    Total Units 13.5

Computer Information Science

Database Specialist
Job-Direct Certificate

The required courses must be completed with a grade C or better.

REQUIRED COURSES . . . . Units
CIS 072 Extensible Markup Language (XML). 1.5
CIS 078 Access -Database Management System 3
CIS 080 SQL Database Management Systems 3
   Total Units 7.5

Home-Based Computer Processor
Job-Direct Certificate

The required courses must be completed with a grade of C or better.

REQUIRED COURSES . . . . Units
BUS 100 Work Readiness 1.5
BUS 201 Starting and Managing a Small Business. 0.5
BUS 209 Establishing a Home-Based Business 0.5
BUS 210 Record Keeping for Small Business 0.5
CIS 066 Microsoft Word. 3
CIS 073 Microsoft Excel 3
OT 100 Skill Building on the Computer Keyboard 1
     Total Units 10

Computer Applications Specialist
Job-Direct Certificate

The required courses must be completed with a grade of C or better.

REQUIRED COURSES . . . . Units
BUS 100 Work Readiness 1.5
CIS 066 Microsoft Word. 3
CIS 073 Microsoft Excel 3
CIS 078 Access -Database Management System 3
   Total Units 10.5

Web Developer
Job-Direct Certificate

The required courses must be completed with a grade of C or better.

REQUIRED COURSES . . . . Units
CIS 001 Introduction to Computer Science. 3
CIS 061 Creating Web Pages. 3
CIS 069 Multimedia for the Web 3
CIS 072 Extensible Markup Language (XML). 1.5
CIS 075 Client-Side Web Programming 3
CIS 081 Server-Side Web Programming 3
     Total Units 16.5

Web Programmer Job-Direct Certificate

The required courses must be completed with a grade of C or better.

Program Outcomes
Students who complete the Job Direct Certificate will be able to:
   1. Use design elements and an html editor in creating web pages.
   2. Use visual basic to develop forms, tables, database, database queries, and reports.
   3. Develop and publish to a web site a project incorporating Java programming for popups and client sided programming, dynamic web pages.

REQUIRED COURSES . . . . Units
CIS 015 Programming in Visual Basic.NET 3
CIS 035 Introduction to Java Programming 3
CIS 068 Object Oriented Game Programming with Flash 3
CIS 075 Client-Side Web Programming 3
CIS 081 Server-Side Web Programming 3
   Total Units 15

Computer Information Science

CIS 001   **3 Units**
Introduction to Computer Science
Course Advisory: SCC minimum English and Math standards; keyboarding 30 wpm. An introduction to the hardware and software components of basic computer systems. A review of historical, social and cultural implications of computer technology in today's society. Course content will include 'hands-on' familiarization with a computer operating system and common application software. Additionally, the course includes an introduction to computer programming using the Visual Basic .Net language. Students will learn to develop problem specifications, detailed analysis, design algorithms, and construct structured computer programs. Lab hours may be scheduled or TBA depending on the section. Students are expected to complete both the lecture and lab portion of the class. *Three hours lecture, one hour lab weekly by arrangement.*

CIS 015   **3 Units**
Programming in Visual Basic.NET
Course Advisory: CIS 001 with a grade of C or CR or better; SCC minimum English and Math standards. An introductory course in Object Oriented Programming (OOP) using Visual Basic.NET, emphasizing problem-solving techniques using structured design and development. An extensive coverage of the Visual Basic computer language will be conducted using the Microsoft.Net environment. Students will construct forms and define procedures, events, properties, methods and objects to solve a variety of business-oriented problems. Lab hours may be scheduled or TBA depending on the section. Students are expected to complete both the lecture and lab portions of the course. *Three hours lecture, one hour lab weekly by arrangement.*

CIS 020   **3 Units**
Assembly Programming
Prerequisite: CIS 010 or 015 or 022 or 035 with a grade of C or CR or better. Course Advisory: SCC minimum English and Math standards. A hardware-oriented programming course dealing with programming a computer at the assembler language level. Emphasis will be on the assembly language of computers. Lab hours may be scheduled or TBA depending on the section. Students are expected to complete both the lecture and lab portions of the course. *Three hours lecture, one hour lab weekly by arrangement.*

CIS 022   **3 Units**
Introduction to Programming
Prerequisite: CIS 001 with a grade of C or CR or better. Course Advisory: SCC minimum English and Math standards. An introduction to computer programming. The course's content will include 'hands-on' development of structured algorithms and programs through top-down design, modular and object oriented programming, and standardized control structures. (Taught using an object-oriented computer programming language such as C++, C#, Java, etc.). Lab hours may be scheduled or TBA depending on the section. Students are expected to complete both the lecture and lab portions of the course. *Three hours lecture, one hour lab weekly by arrangement.*

CIS 023   **3 Units**
Data Structures and Algorithms
Prerequisite: CIS 22 with a grade of C or CR or better. Course Advisory: SCC minimum English and Math standards. A study of the basic concepts associated with the creation and manipulation of data structures and their related processing algorithms. Topics include software engineering principles, the selection, design, and implementation of data structures including arrays, sequential and random access files, strings, stacks, queues, linked lists, and binary trees, and the development of efficient algorithms for sorting, searching, and manipulating these data structures. (Taught using an object-oriented computer programming language such as C++, C#, Java, etc.) Students are expected to complete both the lecture and lab portions of the course. *Three hours lecture, one hour lab weekly by arrangement.*

CIS 035   **3 Units**
Introduction to Java Programming
Prerequisite: CIS 022 or CIS 023 or 015 wih a grade of C or better. Course Advisory: SCC minimum English and Math standards. The course introduces Object Oriented Programming (OOP) using the Java programming language. It includes 'hands-on' development of Java applets and Java applications using objects, classes, interfaces and Graphical User Interface (GUI) components. Lab Assignments: Lab hours may be scheduled or TBA depending on the section. Students are expected to complete both the lecture and lab portions of the class. *Three hours lecture, one hour lab weekly by arrangement.*

CIS 049   **1.00 to 3.00 Units**
Computer and Information Science Honors
Prerequisite: Completion of 24 units of college credit with a minimum GPA of 3.3; a minimum of 5 units in the discipline with a grade of B or better; an ability to work independently; permission of the Division Dean based on instructor availability. Course Advisory: SCC minimum English and Math standards. Designed for honor students who intend to major in one of the Computer and Information Science options. Students are expected to design their own projects and must submit them to the instructor for approval. *Three to nine hours weekly by arrangement.*

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CIS   050   3 Units
Microcomputer Applications
Course Advisory: Basic keyboarding skills at 30 wpm; SCC minimum English and Math standards. This course will serve as an introduction to microcomputers and the more frequently used applications software. The course is designed for the microcomputer user who is not a computer science major. The purpose of this course is to help students to understand the concepts and fundamentals of working with: an operating system with its associated graphical user interface, word processing, spreadsheets, databases and presentation software. *Three hours lecture*.

CIS   052   3 Units
UNIX Operating System (UNIX OPERATING SYST)
Course Advisory: CIS 055 with a grade of C or CR or better; SCC minimum English and Math standards. This course will analyze the UNIX operating system, its terminology, user utilities, file structure, file security, commands, shells, shell programming, system architecture, and system administration. Emphasis will be placed on the shell environment, shell programming and utilities. The course will include hands-on exercises for the students to complete using the UNIX operating system (Currently taught using LINUX). *Three hours lecture*.

CIS   055   3 Units
MS Windows Operating System
Course Advisory: CIS 001 with a grade of C or CR or better; basic keyboarding skills. Students will learn how to use the Graphical User Interface (GUI) and the command line interface in carrying out system tasks in the MS Windows operating systems. Topics include file management, hard disk management, system tools, batch files, connectivity, and the registry. *Three hours lecture*.

CIS   060   1.5 Units
Introduction to the Internet
Course Advisory: SCC minimum English and Math standards. Designed to prepare students to use the Internet, a world wide computer network. Emphasis is on introducing features of the Internet, including electronic mail, the World Wide Web, Gopher, FTP (file transfer protocol), Telnet, and Usenet, as well as other Internet services and utilities. Students will explore hands-on the vast resources of the Internet, learn to access information using a variety of methods, and will construct a simple Web page. *Three hours lecture (8 week course).*

CIS   061   3 Units
Creating Web Pages
Course Advisor: CIS 001; SCC minimum English and Math standards. This course is designed to prepare students to develop web sites that interact with databases. Emphasis is on the creation of Web sites with interactive Web pages, data access Web pages, and web pages with interactive components. Students will explore hands-on access to the Internet and an HTML editor to create and maintain Web sites. *Three hours lecture*.

CIS   062   3 Units
Creating Web Interactivity with Flash
Course Advisory: CIS 001 with a grade of C or CR or better; CIS 061 with a grade of C or CR or better ; SCC minimum English and Math standards. This course covers the creation of vector-based graphics, animation, and interactivity within the Web environment. Emphasis will be placed on applying design principles to the elements of motion and interactivity. The basic operating principles of Macromedia Flash will be applied in order to create Web sites with animation, interactive buttons, and sound. Issues of optimal delivery and web accessibility will also be covered. A portfolio-quality professional level capstone project will be developed and presented. *Three hours lecture*.

CIS   066   3 Units
Microsoft Word
Course Advisory: CIS 001 or CIS 050 with a grade of C or CR or better; ability to keyboard at 30 wpm. Provides an in-depth study of the functions of the word processing program. Students will learn how to use basic and advanced program features to create and design business documents. *Three hours lecture*.

CIS   068   3 Units
Object Oriented Game Programming with Flash
Prerequisite: CIS 062 with a grade of C or better. Course Advisory: CIS 001 with a grade of C or CR or better; SCC minimum English and Math standards. Using solid programming techniques and the fundamental concepts of Object Oriented Programming, students will use Macromedia Flash ActionScript to create multimedia games. This process includes designing, coding, testing, debugging and documenting Flash ActionScript programs. Additionally, students will apply these concepts to the creation of game programs that utilize digital media including images, animation, audio, video, and text. *Three hours lecture*.

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CIS 069   **3 Units**
Multimedia for the Web
Course Advisory: CIS 001 with a grade of C or better; CIS 061 with a grade of C or better; SCC minimum English and Math standards. Takes an in-depth look at designing multimedia for the Web. Topics include developing graphic elements such as buttons, background textures and images for a Web site, using Cascading Style Sheets to position graphics, using Dynamic HTML to create web site interactivity, adding audio and/or video to a Web site, and manipulating Web multimedia file formats. *Three hours lecture*.

CIS 070   **3 Units**
Adobe Photoshop for the Web
Course Advisory: SCC minimum English and Math standards; keyboarding 30 wpm. This course emphasizes the use of computer technology to create and manipulate raster and vector digital images. Students use Photoshop techniques to produce digital creations for the web. Layers, filter effects, blending modes, and other editing tools will be used to produce digital images appropriate for print and electronic reproduction. The elements of Photoshop for use in industry-standard web and print production will be explored in this course. Repeatability: None. The course may be taken up to three times for credit if the software version has changed. *Three hours lecture*.

CIS 072   **1.5 Units**
Extensible Markup Language (XML)
Course Advisory: CIS 001 with a grade of C or better; CIS 061 with a grade of C or better; SCC minimum English and Math standards. Introduces Extensible Markup Language. Students will learn how to create XML documents and use XML-based markup languages. *Three hours lecture (8 week course).*

CIS 073   **3 Units**
Microsoft Excel
Course Advisory: CIS 001 with a grade of C or CR or better; ability to keyboard at 30wpm. Provides a thorough study of spreadsheet operation and enables the student to use the spreadsheet to perform mathematical computations and analysis. Students will create graphic representations of the information contained in a spreadsheet, perform list management routines, use functions, perform 'what if' analysis, customize toolbars and menus, and create macros using Visual Basic for Applications. *Three hours lecture*.

CIS 075   **3 Units**
Client-Side Web Programming
Course Advisory: CIS 001 with a grade of C or better; CIS 061 with a grade of C or better; SCC minimum English and Math standards. Focuses on the enhancement of Web pages by adding interactivity and functionality through the use of client-side programming. *Three hours lecture*.

CIS 078   **3 Units**
Access-Database Management System
Course Advisory: CIS 001 with a grade of C or CR or better. An introduction to relational database management using microcomputers. Micosoft's Access database management program is used. Students will learn how to create and maintain relational database structures, organize and manipulate data, ask questions of the data, create custom forms for entering data and custom reports for printing the data. How to publish objects on the Internet's World Wide Web is presented. The student will learn how to construct a complete application combining previously created tables, queries, forms, and reports. Visual BASIC Applications (VBA) and Structured Query Language (SQL) are introduced. Advanced database design is explored and the student learns how to 'normalize' a database structure. *Three hours lecture*.

CIS 080   **3 Units**
SQL Database Management Systems
Prerequisite: A grade of C or better in CIS 078 or equivalent. Course Advisory: SCC minimum English and Math standards. Designed for the student who needs knowledge and skills about advanced database systems that use the SQL language such as IBM's DB2, Oracle, Sybase and Microsoft's SQL Server. This course is designed for the end user, the database designer and the database administrator. Microsoft SQL Server 2008 is the database system currently used for this course. *Three hours lecture*.

CIS 081   **3 Units**
Server-Side Web Programming
Course Advisory: CIS 001 with a grade of C or better; CIS 061 with a grade of C or better; SCC minimum English and Math standards. Emphasizes the creation of interactive web sites using a server-sided scripting language such as ASP.Net, CGI, or Perl. Topics include core features of the server-side scripting language, control structures, functions, arrays, form validations, regular expressions, environmental variables, and database-driven web applications. *Three hours lecture*.

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CIS 083   **3 Units**
Web Server Administration
Course Advisory: CIS 001 with a grade of C or better; CIS 061 with a grade of C or better; SCC minimum English and Math standards. This course covers web server installation and administration for the internet and intranet. Topics covered include the installation, configuration, management and tuning of web services, security, online transaction processing, and FTP services. *Three hours lecture.*

CIS 085   **3 Units**
Digital Publishing with InDesign
Course Advisory: SCC minimum English and Math standards CIS 001 or CIS 050 with a grade of Pass/No Pass or better or equivalent. An introduction to the graphics software program, Adobe InDesign. Students will learn to produce and publish publications, employing vector graphics, and typography as well as color and print management. This course will establish an understanding of the basic features in Adobe InDesign for use in both print and digital media. The course may be taken up to three times for credit if the software version has changed. *Three hours lecture.*

CIS 087   **3 Units**
Adobe Illustrator for the Web
Course Advisory: SCC minimum English and Math standards CIS 001 or CIS 050 with a grade of Pass/No Pass or better or equivalent. An introduction to the graphics software program, Adobe Illustrator. Students will learn to create vector shapes, import, export and modify graphics, and use Illustrator tools. This course will establish an understanding of the basic features in Adobe Illustrator for use in digital media. The course may be taken up to three times for credit if the software version has changed. *Three hours lecture.*

CIS 089   **3 Units**
Essential Networking Technologies
Course Advisory: CIS 001 with a grade of C or CR or better; SCC minimum English and Math standards. An introductory course starting with a general overview of networking. Network design, media, protocols, architectures, operations, and administration will be discussed. Local area networks, wide area networks, and network connectivity (including Internet) are covered. This course is the foundation of all other network classes and helps prepare the student to be successful when taking various certified examinations. *Three hours lecture.*

CIS 090   **1.5 Units**
Introduction to PowerPoint
Course Advisory: CIS 001 or CIS 050 with a grade of C or CR or better; ability to keyboard. This course introduces features and design concepts utilized in developing powerful presentations using a package software such as Microsoft PowerPoint. *Three hours lecture (8 week course).*

CIS 091   **1.5 Units**
Microsoft Outlook
Course Advisory: SCC minimum English standard, CIS 001 or CIS 050 with a grade of C or better; basic keyboarding skills. Students get started using Outlook's features; working with the Contact address book; Inbox and e-mail; Journal; Notes; Tasks; use Calendar to track and schedule appointments, events and meetings; work with forms and templates; use Outlook with other applications. *Three hours lecture (8 week course).*

CIS 093   **1.5 Units**
MS Publisher
Course Advisory: CIS 001 or CIS 050 with a grade of C or CR or better; SCC minimum English and Math standards. Provides 'hand-on' experience in the Microsoft Publisher desktop publishing computer program. Students will learn to produce camera ready, near-typeset quality reports, brochures, newsletters, labels, cards, and business forms. *Three hours lecture (8 week course).*

CIS 100   **0.5 Unit**
Fast Track Introduction to Computers
Course Advisory: SCC minimum English and Math standards. A brief introduction to the microcomputer for novices. Includes an overview of computer components and functions, as well as its uses. This is a credit/no credit only course. *Eight hours lecture (1 week course).*

CIS 101   **0.5 Unit**
Fast Track Windows
Course Advisory: SCC minimum English and Math standards; previous computer experience; keyboarding at 30wpm. Designed to introduce the student to the most elementary functions of Windows. This is a credit/no credit only course. *Eight hours lecture (1 week course).*

CIS 102   **0.5 Unit**
Fast Track Microsoft Word
Course Advisory: SCC minimum English and Math standards; previous computer experience; keyboarding at 30wpm. Designed to introduce to students the most elementary functions of Microsoft Word. This is a credit/no credit only course. *Eight hours lecture (1 week course).*

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CIS   103   0.5 Unit
Fast Track Internet
Course Advisory: SCC minimum English and Math standards; previous computer experience; keyboarding at 30wpm. Designed to introduce the student to the most elementary features of working on the Internet. This is a credit/no credit only course. *Eight hours lecture (1 week course).*

CIS   104   0.5 Unit
Fast Track Powerpoint
Course Advisory: SCC minimum English and Math standards; previous computer experience; keyboarding at 30wpm. Designed to introduce the student to the most elementary functions of Microsoft PowerPoint. This is a credit/no credit only course. *Eight hours lecture (1 week course).*

CIS   105   0.5 Unit
Fast Track Excel
Course Advisory: SCC minimum English and Math standards; previous computer experience; keyboarding at 30wpm. Designed to introduce the student to the most elementary functions of Excel. This is a credit/no credit only course. *Eight hours lecture (1 week course).*

CIS   106   1 Unit
Fast Track Computer Literacy
Course Advisory: SCC minimum English and Math standards. Designed to provide a brief introduction to microcomputers for novices. It includes an introduction to computer components, and also includes hands-on activities utlizing the Windows operating system, word processing and spreadsheet software and the internet. This is a credit/no credit only course. *Two hour lecture, one hour weekly by arrangement (8 week course).*

CIS   107   0.5 Unit
Fast Track Outlook
Course Advisory: SCC minimum English and Math standards. Designed to introduce to students to a desktop information management program using Microsoft Outlook for email, calendaring, contacts, tasks, files, and to track activities. This is a credit/no credit only course. *Eight hours lecture (1 week course).*

CIS   109   0.5 Unit
Fast Track Quicken for Windows
Course Advisory: SCC minimum English and Math standards; previous computer experience; keyboarding at 30wpm. Designed to introduce the student to the most elementary functions of Quicken for Windows 2005. This is a credit/no credit only course. *Eight hours lecture (1 week course).*

CIS   110   1.5 Units
Wireless LANs
Course Advisory: CIS 001 with a grade of C or CR or better; SCC minimum English and Math standards. This course is designed to instruct students on planning, designing, installing and configuring wireless LANs. The course offers in-depth coverage of wireless networks with extensive step-by-step coverage of IEEE 802.11b/a/g/pre-n implementation, design, security, and troubleshooting. *Three hours lecture, one hour lab weekly (8 week course).*

CIS   111   1.5 Units
Web Design with Cascading Style Sheets
Course Advisory: CIS 061 with a grade of C or CR or better; SCC minimum English and Math standards. This course is intended for students and Web Professionals who have a working knowledge of Web design and HTML and want to use cascading style sheets to control the display and formatting on a Web site or any other application that uses CSS. *Three hours lecture (8 week course).*

CIS   112   3 Units
Introduction to Robotics Programming
Prerequisite: CIS 001. Course Advisory: SCC minimum English and Math standards. The student will be introduced to Programming a 360-degree, 5-axis articulating arm via the Industry Standard Smart Terminal hand held computer and the PC interface. The student will learn all the basic physical parts of the system. Additionally, the student will learn to utilize many of the 150 programming language commands to maniuplate the robot to do work in three dimensional work spaces over time. Furthermore, the student will learn and implement Industry Standard Robotic Safety standards in the work place. *Three hours lecture.*

CIS   113   3 Units
Introduction to Programmable Logic Controllers
Prerequisite: CIS 001. Course Advisory: SCC minimum English and Math standards. The student will be introduced to how to design, program and operate the Programmable Logic Controller (PLC) to control a number of process applications used by industries all over the world. The Programmable Logic Controller (PLC) is a microprocessor-based controller designed to provide easily programmed control of almost any type of process. The student will learn to program Input Modules, Output Modules, Processor Module, Power Supply, Programming device, and I/O chassis. *Three lecture hours.*

Computer Information Science

CIS   120   1.5 Units
Developing XML Web Services
Prerequisite: CIS 072. Course Advisory: SCC minimum English and Math standards and CIS 001. This course introduces the fundamental Web services architecture and its core technologies, including XML, XML Schema, SOAP, WSDL, and UDDI with the focus on writing, testing, and debugging a Web service such as a credit card validation Web service. *Three hours lecture, one hour lab weekly by arrangement (8 week course).*

CIS   121   3 Units
PHP Programming with MySQL
Course Advisory: SCC minimum English and Math standards CIS 061; CIS 001. This course teaches Web development with PHP and MySQL. It presents the basics of PHP and MySQL along with advanced topics including object-oriented programming and how to build Web sites that incorporate authentication and security. Upon completion of this course, students should be able to use PHP and MySQL to build professional quality, database-driven Web sites. Additionally, students will become proficient with the administration and maintenance of a MySQL database. *Three hours lecture, one hour lab weekly by arrangement.*

CIS   162   4 Units
A+ Computer Hardware Technology
Course Advisory: SCC minimum English and Math standards. Presents the structure of modern personal computer architecture including the names, purpose, and characteristics of components; such as motherboards, CPUs, RAM, disk drive storage, printers and networks. This course also addresses upgrading computer components, optimizing computer performance, preventative maintenance, safety, and computer hardware troubleshooting. Prepares the student for CompTIA A+ Hardware Service Technician Certification. Formerly ECTN 126. *Three hours lecture, three hours lab.*

CIS   164   4 Units
A+ Computer Operating Systems
Course Advisory: ECTN 126, SCC minimum English and Math standards. Presents the purpose and capabilities of computer operating systems, operating system components and utilities. The course emphasizes initial investigation of personal computer operating systems and demonstrates the uses of the operating system and other software for isolating troubles and completing the repair of personal computers. Prepares the student for CompTIA A+ Operating Systems Technologies certification. Formerly ECTN 128. *Three hours lecture, three hours lab.*

CIS   166   4 Units
Computer Network+Technology
Course Advisory: SCC minimum English and Math standards. Presents the architecture of computer networks, including the names, purpose, and characteristics of network components; such as network interface card (NIC), hubs, routers, cabling and connectors; as well as topologies, protocols and standards. This course also addresses network implementation, network support and troubleshooting. Prepares the student for CompTIA Network+ Computer Network Certification. As a team, in a laboratory environment, the class will assemble and implement a complete network, with a server running a Microsoft server network operation system (NOS) and several computers running the Microsoft Windows XP Professional Operating System. All of the required cabling will be assembled in the lab by the students under the supervision of the instructor. Formerly ECTN 122. *Three hours lecture, three hours lab.*

CIS   168   4 Units
Computer Security+Technology
Prerequisite: CIS 166 with a grade of C or better, or ECTN 122 with a grade of C or better. Course Advisory: SCC minimum English and Math standards. Presents the vulnerability, threats, and risks to data and other computer assets from spyware, Trojan horses, viruses, worms, and other security attacks. This course also addresses the fundamental policies and procedures for maintaining the security of a computer network. Prepares the student for the Computing Technology Industry Association's (CompTIA) Security+ Certification. Formerly ECTN 124. *Three hours lecture, three hours lab.*

CIS   172   1.5 Units
Computer Forensics: Evidence Recovery
Course Advisory: SCC minimum English and Math standards. Introduces the student to the physical aspects of data collection from computer systems and computer networks. The student is introduced to the hardware and software used to collect data, the techniques used to ensure integrity and preserve data, and the requirements of preparing collected data for later forensic investigation. Students will learn to process a digital crime scene as well as the corporate environment for both criminal/civil cases and incident response. Formerly ECTN 172. *One hour lecture, one and one-half hours lab.*

Computer Information Science

CIS 173 3 Units
Computer Forensics Investigations
Prerequisite: CIS 001. Course Advisory: SCC minimum Math standard and Eligibility for ENGL 001. Introduces the student to the tools and techniques of preserving and investigating digital evidence in a systematic and scientifically reliable manner using modern computer forensic software applications. The student is introduced to the interpretation and analysis of recovered data for the purpose of collecting legal evidence. Student is exposed to data in an array of formats and applications from several computer types and operating systems as well as deleted, encrypted, and damaged information. Evidence reporting practices are also introduced. Formerly ECTRN 173. *Two hours lecture, three hours lab.*

CIS 174 3 Units
Computer Forensics: Operating Systems Internals
Prerequisite: CIS 173 with a grade of C or better or ECTRN 173 with a Grade of C or better. Course Advisory: SCC minimum English and Math standards. Students will explore the internal workings of computer operating systems and perform forensic examinations of various operating systems. Students will analyze FAT, NTFS, Ext2, Ext3, UFS1, and UFS2 file systems and data structures. Students will learn to recognize systems that have been compromised by viruses or other intrusive programs, and will be able to locate corrupt, hidden or deleted data. Formerly ECTRN 174. *Two lecture hours, three hours lab.*

CIS 178 0.5 Unit
Fast Track Access
Advisory: Minimum standards: SCC minimum English and Math standards; Previous computer experience, keyboarding at 30wpm. Designed to introduce to students the most elementary functions of database management using Access. *Eight hours lecture (1 week course).*

Cosmetology

Program Description

The program consists of sixteen hundred (1600) hours of intensive training and study designed to prepare the student to take the California State Board of Cosmetology examination for licensure. Units include theory and practice in fundamental skills in all phases of beauty culture. Assignment of units is based on hours in attendance. See the Course Description portion of the Catalog for prerequisite requirements for admission to the program.

Transfer students will be accepted on a space-available basis providing they have not achieved more than 500 certified hours of training.

Certificate of Achievement and Associate in Science Degree

A Certificate can be obtained by completing the 49.5-unit major listed below. The Associate in Science Degree can be obtained by completing a minimum of 66 units, including the major of at least 49.5 units and the general education requirements. All courses in the major must be completed with a grade of C or better or a P if the course is taken on a Pass/No Pass basis.

Program Outcomes

Students who complete the Certificate of Achievement/Associate Degree will be able to:
1. Translate and identify the differences between chemical and non-chemical changes as related to Cosmetology.
2. Employ and demonstrate the theories as related to sanitation, sterilization and rules and regulations as mandated by the Cosmetology Act and the Rules and Regulations - State approved textbooks.
3. Interpret and apply cosmetological theories as required for theoretical and practical applications.
4. Contrast and compare the skills and concepts as required by the California State Board of Barbering and Cosmetology.
5. Mandated Clinic Laboratory hours completed - Desk and Reception Training - Business and Communication skills developed - Sales and retail product knowledge.

REQUIRED COURSES . . . . **Units**
COSM 100 Cosmetology I 12.5
COSM 101 Cosmetology II 12.5
COSM 102 Cosmetology III 12.5
COSM 103A Cosmetology IV 6
COSM 103B Cosmetology V 6
OR
COSM 175 Cosmetology Education Practicum 6
   Total Units **49.5**

Recommended Electives:
COSM 103A Cosmetology IV
COSM 103B Cosmetology V
COSM 104A Esthetics of Skin Care I
COSM 104B Esthetics of Skin Care II
COSM 111 Special Hair Processes
COSM 112 Basic Hairstyling
COSM 113 Advanced Hairstyling
COSM 114 Brush-Up and/or Supplemental Training
COSM 115 Cosmetology Instructor Training I
COSM 116 Cosmetology Instructor Training II
COSM 117 Special Manicurist
COSM 175 Cosmetology Education Practicum
OCED 090 Occupational Work Experience
OCED 091 General Work Experience

NOTE: First time students to the Cosmetology Program will be required to attend an orientation meeting and purchase a materials card at registration in addition to the registration fees. The cost of the materials card and start-up materials exceeds $2,000. For more information see the schedule of classes or call the Cosmetology Department at (707) 864-7000 ext. 4389.

Cosmetology

COSM   100   12.5 Units
Cosmetology I
Course Advisory: SCC minimum English standard. The first course in a three semester series to provide the training towards the state mandated 1600 hours of intensive training and study designed to prepare the student for the California State Board of Cosmetology examination for licensure. Introduces theories, concepts, principles and practice in the beauty culture. The student will focus on the fundamental techniques and application skills for cosmetology processes. Critical thinking skills are developed in the application of the concepts of client consultation, communication, hair care, nail care, skin care and cosmetology processes. **NOTE: Students are required to attend the cosmetology orientation meeting and purchase a materials card at registration in addition to the registrations fees.** Students are required to purchase an equipment kit and materials card from the SCC College Bookstore. The cost of the materials card and start-up materials varies. To qualify for the State examination for license, students must have completed the following: designated license hours and requirements; 10th grade or equivalent; be at least 18 years of age. Not open to students who have received credit for COSME 150 or 151. *Five hours lecture, twenty-two and one-half hours lab.*

COSM   101   12.5 Units
Cosmetology II
Prerequisite: COSM 100 with a minimum grade of C. The second of a four semester course series in Cosmetology to provide the training towards the state mandated 1600 hours of intensive training and study designed to prepare the student for the California State Board of Cosmetology examination for licensure. Focus is on the continued study of beauty culture. This course provides the students with the opportunity to synthesize and utilize cosmetology knowledge and skills in providing multiple clients with hair care, nail care and skin care service in the Patron Laboratory. All students enrolling in COSM 101 must pay a Materials Fee with enrollment fees to the Admissions and Records office prior to the first class meeting. *Five hours lecture, twenty-two and one-half hours lab.*

COSM   102   12.5 Units
Cosmetology III
Prerequisite: COSM 101 with a minimum grade of C. The third in a series of a four semester course series in Cosmetology to provide the training towards the state mandated 1600 hours of intensive training and study designed to prepare the student for the California State Board of Cosmetology examination for licensure. Includes principles and practices of cosmetology with emphasis on the essential knowledge and skills for licensure and working within the cosmetology industry.

Students are able to increase practical application skills and processes by providing multiple clients with hair care, skin care and nail care services in the patron laboratory. All students enrolling in COSM 102 must pay a Materials Fee with enrollment fees to the Admissions and Records office prior to the first class meeting. *Five hours lecture, twenty-two and one-half hours lab.*

COSM   103A   6 Units
Cosmetology IV
Prerequisite: COSM 100, COSM 101, COSM 102 all with a minimum grade of C. Designed to meet the needs of students who are preparing to go to the state exam. Review over the basic skills that are required to pass the tests by practice and study. Reinforce the entry level skills expected from the industry. All students enrolling in COSM 103A must pay a Materials Fee with enrollment fees to the Admissions and Records office prior to the first class meeting. Formerly COSM 103. *Five hours lecture, twenty-one hours lab (8 week course).*

COSM   103B   6 Units
CosmetologyV
Prerequisite: COSM 103A OR COSM 175. Provides the application of theoretical skills to increase performance proficiencies and accrue the hours as mandated by the State Board of Barbering and Cosmetology. Students are required to have the mandatory books and equipment kit as required in the concurrent course by the first class meeting. Students are required to pay a materials fee at the time of registration. The cost of the materials fee varies. For current costs, please refer to the schedule of classes for each semester. *Five hours lecture, twenty-one hours lab (8 week course).*

COSM   104A   15 Units
Esthetics of Skin Care I
Prerequisite: Tenth grade completion or equivalent and 18 years of age as required by the State Board of Barbering and Cosmetology. Course Advisory: SCC minimum English standard. A two semester course series in skin care consisting of 600 hours. Designed to prepare the student for the California State Board of Barbering and Cosmetology examination for Esthetician licensure. An intensive study of basic and advanced technological concepts in European facialing techniques. The curriculum framework provides the theoretical, manual, and mechanical skills needed for a profession in esthetics. **NOTE: Students are required to purchase a mandatory equipment kit and materials card at the SCC bookstore.** The cost of the materials card and start-up materials varies. For current costs, please refer to the Schedule of Classes for each semester. Additionally, students are required to attend the Cosmetology orientation (see Schedule of Classes for the date and time). *Five hours lecture, thirty hours lab.*

Cosmetology

COSM 104B   **1 Unit**
Esthetics of Skin Care II
Prerequisite: COSM 104A. A continuation of COSME 104A providing additional in depth training for more advanced skin care techniques and methodologies. Designed to prepare the student for the California State Board of Barbering and Cosmetology examination for Esthetician licensure. Students will be required to purchase a mandatory materials card from the SCC bookstore. The cost of the materials card and start-up materials varies. For current costs, please refer to the schedule of classes. *Five hours lecture, twenty-one hours lab (8 week course).*

COSM 105A   **9.5 Units**
Fundamentals of Esthetics
Prerequisite: Tenth grade completion or equivalent; and 18 years of age as required by the State Board of Barbering and Cosmetology. Course Advisory: SCC minimum English and Math standards. The first of a two-part class designed to introduce students to the basic knowledge and skills to qualify them to take the state licensing exam in esthetics. Topics include the treatments, facials, makeup, and hair removal processes as well as a thorough understanding of the business aspects, general facial procedures, the human anatomy, chemistry, ingredients, electricity, sanitation and health and safety associated with this field. **Note: Students are required to purchase a mandatory equipment kit and materials card at the college bookstore.** Additionally, students are required to attend the Cosmetology Orientation (see schedule of Classes for the Orientation date and time). This class is not open to students enrolled in 104A. *Four and one-half hours lecture, fifteen hours lab.*

COSM 105B   **9.5 Units**
Advanced Fundamentals of Esthetics
Prerequisite:Tenth grade completion or equivalent and 18 years of age as required by the State Board of Barbering and Cosmetology; completion of COSM 105A. Course Advisory: SCC minimum English and Math standards. This course continues the basic skills practice and technical training from COSM 105A to qualify students for state licensure. It expands the knowledge of the practices, techniques, products, chemicals, laws and advanced procedures used in the current field of Esthetics. NOTE: Students will be required to purchase a mandatory materials card from the SCC bookstore. The cost of the materials card and start-up materials varies. For current costs, please refer to the schedule of classes for each semester. This class is not open to students who have completed COSM 104A or students enrolled in COSM 104B. *Four and one-half hours lecture, fifteen hours lab.*

COSM 110   **1 Unit**
Introduction to Cosmetology
Course Advisory: SCC minimum English standard. This course acquaints the student with cosmetology career opportunities and the industry options available along with a survey of the concepts and processes utilized in the beauty industry.NOTE: Students are required to purchase a materials card from the SCC Bookstore. The cost of the materials card and start-up materials varies. For current costs, please refer to the Schedule of Classes for each semester. *Five hours lecture, twenty hours activity (6 week course).*

COSM 111   **2 Units**
Special Hair Processes
Prerequisite: Current California State Cosmetology License or COSM 100 (COSM 100 may be taken concurrently). Course Advisory: SCC minimum English standard. This course is designed to teach theory and practice in the thermal and chemical processes used in the curling, straightening and waving of hair. NOTE: Students are required to purchase a materials card from the SCC bookstore. The cost of the materials card and start-up materials varies. For current costs, please refer to the Schedule of Classes for each semester. *One hour lecture, three hours lab.*

COSM 112   **2 Units**
Basic Hairstyling
Prerequisite: Current California State Cosmetology License or completion of COSM 100. Course Advisory: SCC minimum English standard. This course is designed to provide licensed operators and students enrolled in the Solano College Cosmetology day program with a fundamental knowledge of basic styling and hair cutting skills. NOTE: Students are required to buy a materials card from the SCC bookstore. The cost of the materials card and start-up materials varies. For current costs, please refer to the Schedule of Classes for each semester. *One hour lecture, three hours lab.*

COSM 113   **2 Units**
Advanced Hairstyling
Prerequisite: Current California State Cosmetology License. Course Advisory: SCC minimum English standard. Designed to provide licensed cosmetologist with advanced techniques in haircutting, hairstyling and make-up. Provides hands-on knowledge of the current trends released by the National Hairdresser's Association. Presents concepts and principles of newly established in the cosmetology industry. NOTE: Students are required to purchase a materials card from the SCC bookstore. The cost of the materials card and start-up materials varies. For current costs, please refer to the Schedule of Classes for each semester. *One hour lecture, three hours lab.*

Cosmetology

COSM 114   **15 Units**
Brush-Up and/or Supplemental Training
Prerequisite: Completion of COSM 102 or its equivalent or current license number or expired California State license number, or a letter from the California State Board of Cosmetology identifying specific requirements of training for cosmetology licensure. Course Advisory: SCC minimum English standard. Designed to meet the needs of cosmetologist who have deficiencies in theory or practice in the field of cosmetology. Assists cosmetologist who require additional training to qualify for better positions by upgrading skills. Preparatory training for cosmetologist who wish to renew their cosmetology license. **NOTE: Students are required to purchase a materials card from the SCC bookstore.** The cost of the materials card and start-up materials varies. For current costs, please refer to the Schedule of Classes for each semester. *Five hours lecture, thirty hours lab.*

COSM 115   **13 Units**
Cosmetology Instructor Training I
Prerequisite: Current California Cosmetologist's license and completion of COSM 102 or 114. Course Advisory: SCC minimum English standard. Presents cosmetology principles and techniques applied to instruction teaching methods. Designed for currently licensed cosmetologist who want to pursue a cosmetology instructor license through the California State Board of Barbering and Cosmetology. Focus is on the lesson planning, presentation methods, application techniques, evaluation processes and instruction materials. Provides the utilization of cosmetology processes to develop instruction performance criteria. State Board of Barbering and Cosmetology requires one experience within the last three years and completion of COSM 102 or 114 within the last five years to be eligible for instructors licensing test. **NOTE: Students are required to purchase a materials card from the SCC bookstore.** The cost of the materials card and start-up materials varies. For current costs, please refer to the Schedule of Classes for each semester. *Five hours lecture, twenty-four hours lab.*

COSM 116   **8 Units**
Cosmetology Instructor Training II
Prerequisite: COSM 115. Course Advisory: SCC minimum English standard. Continuation of Cosmetology 115 to give the student more sophistication in the development, implementation and evaluation of teaching methods. Focus is on laboratory practicum emphasizing curriculum activities utilizing lesson planning and teaching techniques. Provide the students with the opportunity to synthesize and utilize instructional knowledge and skills through classroom instruction presentations. Designed to prepare the student for the cosmetology instructor licensure examination for the California State Board of Barbering and Cosmetology. **NOTE: Students are required to purchase a materials card from the SCC bookstore.** The cost of the materials card and start-up materials varies. For current costs, please refer to the Schedule of Classes for each semester. *Five hours lecture, fifteen hours activity.*

COSM 117   **15 Units**
Special Manicurist
Prerequisite: None. NOTE: Not open to students who have completed COSM 171, 172, 173, or 174. Course Advisory: SCC minimum English standard. Consists of four hundred (400) hours of intensive training and study. Designed to prepare the student for the California State Board Examination in Manicuring. Focus is on the essential knowledge and skills in all area of manicuring technology. Provide the opportunity for students to develop technical skills in providing nail care and artificial nail service to multiple clients in the patron laboratory. **NOTE: Students are required to purchase an equipment kit and materials card from the SCC Bookstore.** The cost of the materials card and start-up materials varies. For current costs, please refer to the Schedule of Classes for each semester. Students are required to attend the cosmetology orientation (see orientation statement in Schedule of Classes). Students must have completed the designated hours of practical training and technical instruction, the tenth (10th) grade, or its equivalent, and be 18 years of age to qualify for the manicurist license examination by the State Board of Barbering and Cosmetology. *Five hours lecture, thirty hours lab.*

Cosmetology

COSM 150   **7.5 Units**
Basic Concepts in Cosmetology
Prerequisite: Completion of the tenth grade or equivalent required by state law. Course Advisory: SCC minimum English standard. Provides a format for students to study basic cosmetology issues of the industry and basic style trend changes. The first course in a two-course sequence which is equivalent to COSM 100. **NOTE: First-time students will be required to attend the cosmetology orientation meeting and purchase a materials card from the SCC bookstore at registration, in addition to the registration fees.** The cost of the materials card and start-up material is in addition to the registration fees and varies. For current costs, please refer to the Schedule of Classes for each semester. To qualify for the cosmetology licensure examination as required by California State Board of Barbering and Cosmetology, students must have completed the designated license hours and requirements, completed the designated license hours and requirements, completed the tenth grade or equivalent and be at least 18 years of age. Not open to students who have received credit for COSM 100. *Five hours lecture, thirty hours lab (9 week course).*

COSM 151   **7.5 Units**
Basic Concepts in Cosmetology
Prerequisite: COSM 150. Course Advisory: SCC minimum English standard. Provides a format for student to study more in depth issues of the industry and to examine theoretical and practical trend changes. The second course in a two-course sequence which is equivalent to COSM 100. Completion of the tenth grade or equivalent and 18 years of age to be eligible for cosmetology licensure examination as required by California State Board of Barbering and Cosmetology. Students are required to purchase a materials card from the SCC bookstore. The cost of the materials card and start-up materials varies. For current costs, please refer to the schedule of classes for each semester. Not open to students who have received credit for COSM 100. *Five hours lecture, thirty hours lab (9 week course).*

COSM 175   **6 Units**
Cosmetology Education Practicum
Prerequisite: COSM 100, or 101, or 102, or 104A, or 104B, or 115, or 117 with a minimum grade of C. Course Advisory: SCC minimum English standard. Provides the application of theoretical skills to increase performance proficiencies and accrue the hours as mandated by the State Board of Barbering and Cosmetology. All students enrolling in COSM 175 must pay a Materials Fee with enrollment fees to the Admissions and Records office prior to the first class meeting. *Five hours lecture, twenty-one hours lab (8 week course).*

Counseling

Program Description

These courses are designed to assist students in making successful adjustment to college, develop academic and career plans and goals, acquire learning skills, obtain job-seeking skills and employment, and develop interpersonal skills for life and work.

Associate Degree

Not offered in this discipline.

COUN   007   3 Units
College Study Techniques
Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standard. This course provides an exploration of the intellectual, psychological, physiological and sociological factors that impact lifelong learning, well-being and success. Topics include: value of education and student responsibility; psychology of student attitudes, motivation, behaviors and self efficacy; critical thinking and effective study strategies; health issues and lifestyle choices; relying on others in a diverse world; effective written and oral communication; time management, campus and community resources; transfer and educational planning. Students will be required to purchase a current Solano College catalog. *Three hours lecture*.

COUN   050   3 Units
Career-Life Planning
Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standard. This course is designed to help students demonstrate an understanding and appreciation of the impact and significance of career choices on the social, psychological and physiological experiences throughout the life span. This course is also designed to help students identify their interests, skills, values and personality traits (self-assessment profile), conduct career research and exploration, and learn current job seeking skills. Students will analyze the relationship between themselves, their life choices and the ongoing process of career planning and self-development throughout the life span. *Three hours lecture*.

COUN   055   3 Units
Valuing Diversity
Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standard. An examination of the complexities of interpersonal relationships among several cultures in our society including self-concept, values, beliefs, communication and lifestyle. This course will invite exploration of individual cultural perception in order to promote respect for differences and to develop a sense of community. Examination requirements include written essays and critical papers. *Three hours lecture*.

COUN   058   3 Units
Life Management
Course Advisory: SCC minimum English standard. A survey of the areas of life which influence decision-making. Students are introduced to areas of human development (emotional, intellectual, physical, and social) which influence decision making. They will analyze and evaluate differences in values, motivation, and goals. Includes introduction to financial, time and stress management, and communication skills. Requires written papers and problem-solving exercises. *Three hours lecture*.

COUN   060   2 Units
Strategies for Re-Entry Success
Course Advisory: SCC minimum English standard. Designed to give students who are returning to school after an absence an introduction to and practice in skills to successfully complete college level studies. This course is intended to facilitate students' confidence in their abilities to succeed through: an introduction to academic skills and effective communication;and exploration of college goal choices. Also included are techniques to help students discover and overcome common barriers such as: fears, time constraints, family resistance and personal stressors. *Two hours lecture.*

COUN   061   2 Units
Math Without Fear
Course Advisory: SCC minimum English standard. A counseling course to help math-anxious students evaluate the causes of math anxiety, to develop interventions to reduce math fear, to review math skills and to explore a variety of mathematical concepts. *Two hours lecture.*

Counseling

COUN 062   **3 Units**
**Helping Skills: Creating Alliances
& Facilitating Change**
Course Advisory: COUN 083, Eligibility for ENGL 001 and SCC minimum Math standard. An introduction to the basic helping skills that enable the student to build an alliance, effect change and empower others within a multicultural society. A helping model is introduced and helping skills such as attending, active listening, demonstrating empathy, assessment and referral are discussed, role played and applied in an experiential manner to a number of common challenges. In addition, the pertinent legal and ethical guidelines of the professional helping relationship are presented, discussed and applied throughout the course. *Three hours lecture*.

COUN 064A   **4 Units**
Practicum I
Prerequisite: COUN 062, HS 051, HS 053. Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standard. The first of a two-course sequence in a supervised Human Services practicum experience at an approved agency or educational setting. In order to develop and apply culturally sensitive and ethically sound helping skills, students will work a minimum of 100 hours and participate actively in a two hour weekly seminar. Placement at most sites will involve a criminal background check. *Two hours lecture, six hours by arrangement.*

COUN 064B   **4 Units**
Practicum II
Prerequisite: COUN 064A. Course Advisory: Eligibility for ENGL 001, SCC minimum Math standard and HS 055. The second semester of a two course sequence in a supervised Human Services Practicum, required for Human Services majors. Students will further develop culturally and ethically competent helping skills as they continue to work in their approved site or work in a new approved site. Students will continue to hone and apply more advanced and educationally informed helping skills. This additional 100 hours in an approved site and its supporting 2 hour weekly seminar, will meet the Human Services certificate and Associates degree requirement and will help students further clarify their potential for a longer range educational and career parth in Human Services, Social Work or Counseling. Practicum Sites often require students to pass a criminal background check. *Two hours lecture, six hours by arrangement.*

COUN 068   **1 Unit**
University Transfer Success
Course Advisory: SCC minimum English and Math standards. This course provides students with a concrete plan for understanding and succeeding in transferring to a four-year college or university. Topics include the following: Major selection; college options; application processes; academic preparation and individual education plans. *Four hours lecture (4 week course).*

COUN 083   **3 Units**
Applied Psychology
Course Advisory: Eligibility for ENGL 001. This course is an applied approach to understanding the fundamental concepts of psychology as they relate to daily life. Topics include examining methods of psychology, stages of personality development, personal learning, relationships, values, communication, motivation, emotions, lifestyle, and attitudes. Concepts will be introduced to foster the student's understanding of his/her own personal development and life endeavors. Students will learn problem solving techniques by addressing real life concerns and developing solutions. Theories and applications will be applied across a diversity of settings. *Three hours lecture*.

COUN 088   **1 Unit**
**Math, Engineering and Science Achievement
(MESA) Enrichment**
Course Advisory: SCC minimum English and Math standards. This course assists students in acquiring the knowledge and skills necessary to reach their educational goals in mathematics, engineering and science-related fields. Topics to be covered include: strengths assessment; math and science study skills; transfer preparation and career strategies. Students will synthesize and compare and contrast information to draw conclusions on course topics. *One hour lecture.*

COUN 098   **3 Units**
Performance Enhancement
Course Advisory: SCC minimum English and Math standards. Performance enhancement explores the psychological, social and physiological factors influencing optimal performance in life's endeavors including academics, performing arts, sports, interpersonal and business relationships. Performance enhancement topics include self care, life balance, confidence, arousal management, motivation, goal attainment, concentration, positive self talk, commitment, uses of imagery and visualization, active listening and demonstrating empathy. Students will design and apply their own Personal Performance Plan to a variety of performance arenas. *Three hours lecture* .

Counseling

COUN 101   0.5 Unit
Orientation for College Success
Course Advisoy: SCC minimum English and Math standards. This short-term course provides an in-depth orientation to college by introducing students to Solano Community College's student support services, describing certificate, associate degree and transfer preparation and requirements, and by reviewing the college's academic expectations. Educational goal setting will also be introduced. Students will be required to purchase a current Solano College catalog. *Two hours lecture (4 week course).*

COUN 102A   0.5 Unit
Time Management & Goal Setting
Course Advisory: SCC minimum English and Math standards. This course introduces goal setting and time management techniques such as analyzing time usage, prioritizing and developing a schedule to assist students to achieve their educational and career goals. Other COUN 102 courses may be taken concurrently. Note: Not open for credit to students who have completed COUN 007 with a minimum grade of C.

COUN 102B   0.5 Unit
Test Taking, Test Anxiety & Memory
Course Advisory: SCC minimum English and Math standards. This course introduces test taking, test anxiety and memory concepts and techniques to assist students to achieve their educational and career goals. Other COUN 102 courses may be taken concurrently. **NOTE: Not open for credit to students who have completed COUN 7 with a grade of C or better.** *Four hours lecture (2 week course).*

COUN 102C   0.5 Unit
Study Systems
Course Advisory: SCC minimum English and Math standards. This course introduces note-taking, reading and study environment concepts/strategies and identifies attitudes and learning styles to assist students to achieve their educational and career goals. Other COUN 102 courses may be taken concurrently. *NOTE: Not open for credit to students who have completed COUN 007 with a grade of C or better. Four hours lecture (2 week course).*

COUN 103   3 Units
Disability and Success
Course Advisory: SCC minimum English and Math standards; Primarily for students with disabilities. This is an orientation course to assist students with disabilities in accessing services and completing their community college goals. It includes the SCC Disability Service Program, the College community, community agencies serving people with disabilities, laws and disabilities, coping with a disability, self advocacy, success in the classroom, and a final "Plan for Personal Disability Management." Student will receive a letter grade. *Three hours lecture.*

COUN 104   3 Units
Wellness and Maintaining Good Health
This course provides the tools, goals, and objectives, toward creating and maintaining good mental health. The course also addresses strategies for creating and maintaining health in the face of living with a chronic illness. Students will create their personal Wellness and Recovery Action Plan (WRAP) based on the concepts presented. This is a Pass/no-pass only course. *Three hours lecture.*

COUN 148E   1 Unit
Transition to College for Students with Disabilities
This is a transition course for high school seniors who are planning on entering the Community College system and receiving Disability Services. It includes the matriculation process of entering into college, the difference between college and high school for students with disabilities.Students will obtain a beginning understanding of how to navigate successfully through the Community College system and Disability Services. This is a Pass/No Pass only course. *Two hours lecture (8 week course).*

COUN 301   3 Units
Career Awareness and Disability Success
Prerequisite: Permission of Disability Services Counselor to help the student make a match between this specialized disability course content and methodology and the individual's needs and expected learning outcomes. Course Advisory: Primarily for Students with Disabilities. This course introduces career and job awareness and readiness for students with a disability. It will cover career and job related, interests, aptitudes, and personality characteristics. Students will also develop an awareness of the strengths and difficulties with their disability in particular job related task analyses. Disability related community agencies, as well as disability benefits versus employment salaries will be covered. This is a Pass/No Pass only course. *Three hours lecture.*

Counseling

COUN   302   **3 Units**
Adaptive Personal Development Life Skills
Prerequisite: Permission of Disability Services Counselor to help the student make a match between this specialized disability course content and methodology and the individual's needs and expected learning outcomes. Course Advisory: Primarily for students with disabilities. This Adaptive Personal Development course will teach students methods to enhance their self esteem and self determination. Students will also learn disability awareness, a healthy life style, interpersonal relations, and independent living skills. This is a Pass/No Pass only course. *Three hours lecture.*

COUN   303   **3 Units**
Life Skills for Health
Prerequisite: Permission of Disability Services Counselor to help the student make a match between this specialized disability course content and methodology and the individual's needs and expected learning outcomes. This is a health course primarily for students with disabilities who are transitioning into the community for the purpose of having a healthy approach to life for personal, family and career life skills. This is a Pass/No Pass only course. *Three hours lecture.*

Learning Skills

LS   102   **3 Units**
Learning Skills Strategies
Course Advisory: SCC minimum English and Math standards. Enrollment in other college courses recommended as strategies are applied to curricular materials. Helps the student with cognitive learning and processing disabilities that is planning to transfer to a 4-year school. The student will learn to analyze, compare, think critically and select effective learning strategies to help them access college curricular materials. Throughout the semester, students will learn to develop their self-understanding and ability to advocate for effective accommodations in academic, work, and social settings. *Two hours lecture, two hours activity.*

LS   301B   **1 Unit**
Reading Strategies
Course Advisory: SCC minimum English and Math standards. Enrollment in other classes is strongly recommended as strategies are applied to curricular materials. This course is one in a series of four that helps students with cognitive processing disabilities. This course focuses on strategies specific to reading needs. Students will learn to apply paraphrasing, questioning, pre-reading, vocabulary, and other strategies to help with their processing deficits. This is a Pass/No Pass only course. *Two hours lecture, one hour activity (8 week course).*

LS   301C   **1 Unit**
Writing Strategies
Course advisory: SCC minimum English and math standards; student advised to meet with DSP counselor and instructor prior to enrollment. Student advised to take other non-Learning Skills courses. This course is one in a series of four that helps students with cognitive processing disabilities. This course focuses on alternative strategies to become skillful in sentence writing, paragraph writing, error monitoring and theme writing to access their college classes. This is a Pass/No Pass only course. *Two hours lecture, one hour activity (8 week course).*

LS   306A   **3 Units**
Spelling Strategies
Emphasizes special spelling techniques, computer-assisted instruction, and assistive-device instruction to help the student compensate for a specific spelling disabilities impacting his/her college courses. Covers phoneme awareness, morphograph analysis, and beginning rule applications to affixes and base words. The students also begin to learn compensatory strategies. This is a Pass/No Pass only course. **NOTE: Combined enrollments in LS 306A and LS 306B may not exceed 3.** *Three hours lecture.*

LS   306B   **3 Units**
Spelling Strategies
Prerequisite: LS 306A. Spelling strategies for students with learning disabilities emphasizes special spelling techniques, computer-assisted instruction, and assistive-device instruction to help the student compensate for specific spelling disabilities impacting his/her college courses. 306B will continue with additional morphograph analysis, new rule applications, and concentration on compensatory strategies, greater emphasis on written application. This is a Pass/No Pass only course. **NOTE: Combined enrollments in LS 306A and LS 306B may not exceed 3.** *Three hours lecture.*

LS   307   3 Units
Reading for Life Skills
Prerequisite: Permission of Disability Services Counselor to help the student make a match between this specialized disability course content and methodology and the individual's needs and expected. Course Advisory: Primarily for Students with Disabilities. This reading course is written specifically for basic level readers to address their need to understand the printed material they encounter in everyday situations. The reading involves practical life skills materials such as the newspaper, job applications, work place, supermarket, restaurant, department store, directories and guides, personal health, nutrition, and grooming, bills, and much more. This is a Pass/No Pass only course. *Three hours lecture*.

LS   308   3 Units
Math for Life Skills
Prerequisite: Permission of Disability Services Counselor to help the student make a match between this specialized disability course content and methodology and the individual's needs and expected learning outcomes. Course Advisory: Primarily for Students with Disabilities. This course will teach students the ability to solve math problems from everyday life situations. Students will decide to apply either addition, subtraction, multiplication, or division to everyday life situations. They will also learn the use of decimals, percents, and fractions in practical applications. The use of the calculator will be taught as an additional tool for life skills math. This course is not meant to prepare students for advancement to higher level math courses at the college. This is a Pass/No Pass only course. *Three hours lecture*.

LS   312   1 Unit
Computer Tools for Accessibility
Course Advisory: SCC minimum English and math standards and concurrent enrollment in a non-Learning Skills course. Designed especially for the student with cognitive disabilities offering a variety of problem-solving solutions that include fundamental processing routines, academic skills solutions and productivity solutions. Students learn to be more successful in other college courses by integrating computers, software, and assignment requirements. This is a Pass/No Pass only course. *One hour lecture, one hour activity, and one hour lab.*

LS   313   1 Unit
Assistive Computer Technology I
Course Advisory: SCC minimum English and Math standards. A course for disabled students wishing to learn how to use assistive computer programs and hardware in academic and employment environments. Students will master the procedures for a configuration of assistive devices designed to overcome the limitations of their particular disabilities. *Two hours lecture, two hours activity (8 week course).*

LS   315   1 Unit
Assistive Computer Technology II
Prerequisite: LS 313. Course Advisory: SCC minimum English and Math standards. The second of a two course sequence for disabled students wishing to learn how to use assistive computer programs and hardware in academic and employment environments. Students will master the procedures for a configuration of assistive devices designed to overcome the limitations of their particular disabilities. *Two hours lecture, two hours activity (8 week course).*

LS   348D   1 Unit
Adaptive Basic Computer Skills
Course Advisory: Primarily for Students with Disabilities. A basic skills computer course primarily for students with disabilities. Students will learn disabilty-specific assistive computer technology and learn basic computer operations for everyday life. This is a Pass/No Pass course. *One lecture hour and two lab hours.*

LS   350   3.5 Units
Learning Skills Assessment
Course Advisory: Eligible for ENGL 305. This course is designed to help students know their academic strengths and weaknesses, help students discover their study and learning strategy style, and if necessary individually assess for a Learning Disability. Through reading, class activities, surveys, questionnaires, and assessment measures the student develops strategies that lead to proactive skills that help them become a more successful college student. *Three hours lecture; two hours by arrangement.*

Counseling

Tutoring

TUTR   050   **0.5 Unit**
Tutoring Practicum
Prerequisite: Completion with a grade of B or better in the subject to tutor, instructor recommendation, permission of Tutoring Center personnel after verification of prerequisite, and concurrent assignment as a Tutoring Center or in-class tutor. Provides supervised practice in tutoring, examines the basics of learning principles, communication, listening skills, effective tutoring techniques and is required for all students who work or volunteer in the Tutoring Center. *Eight hours lecture (1 week course).*

TUTR   500
Supervised Tutoring
Prerequisite: Recommendation by the course instructor or a counselor, permission of the Tutoring Center Supervisor to verify prerequisite, and concurrent enrollment in course or courses in which tutoring assistance is being requested. Provides academic support through content reinforcement and course-related materials. Peer tutors are assigned to individuals or small groups; the tutoring will take place in the Tutoring Center and the tutoring sessions are supervised by a credentialed instructor. This is an open entry/open exit course. *One-half to three hours weekly by arrangement.*

Criminal Justice

Criminal Justice, Computer Forensics

Program Description
This program is designed to prepare the student for employment as a computer forensics investigator. It includes a mix of several disciplines of study that, when combined, provide a basis for the general knowledge and skills required to perform the careful investigation of evidence obtained from computers and computer systems. In addition, this major provides the knowledge and skills required by computer network specialists involved in the tasks of securing computer systems and protecting information workers.

Certificate of Achievement and Associate in Science Degree
The Certificate of Achievement can be obtained upon completion of the 32.5-unit major listed below. The Associate Degree can be obtained upon completion of 60 units, including the major, general education requirements, and electives. All courses in the major must be completed with a grade of C or better or a P if the course is taken on a Pass/No Pass basis.

Program Outcomes
Students who complete the Certificate of Achievement/Associate Degree will be able to:
1. Perform complex operation and management of computer-based software systems.
2. Setup and maintain computer-based hardware systems.
3. Perform a computer investigation.
4. Understand the legal principles and practices of computer investigations.

REQUIRED COURSES . . . . **Units**
CJ 051 Criminal Investigation. 3
CJ 053 Legal Aspects of Evidence 3
CIS 001 Introduction to Computer Science. 3
CIS 162 A+ Computer Hardware Technology 4
CIS 164 A+ Computer Operating Systems Technology . . 4
CIS 166 Computer Network + Technology. 4
CIS 168 Computer Security + Technology 4
CIS 172 Computer Forensics: Evidence Recovery 1.5
CIS 173 Computer Forensics Investigations. 3
CIS 174 Computer Forensics:
       Operating Systems Internals 3
    Total Units **32.5**

Recommended Electives
CIS 022 Introduction to Programming
CIS 052 UNIX Operating System (UNIX OPERATING SYST)
CIS 055 MS Windows Operating Systems
CIS 073 Microsoft Excel
ENGL 004 Critical Thinking and Composition: Language in Context
ENGL 051 Technical Writing
OCED 090 Occupational Work Experience
OCED 091 General Work Experience
OT 054A Beginning Keyboarding A
OT 054B Beginning Keyboarding B
OT 055A Intermediate Keyboarding/Word Processing A
OT 055B Intermediate Keyboarding/Word Processing B
SOCS 022 Ethnic, Racial and Minority Group Relations in Harmony and Conflict
SPAN 001 First Semester Spanish
SPAN 002 Second Semester Spanish

Criminal Justice

Criminal Justice, Corrections

Program Description
This program offers core and selective courses which provide the student with a base of knowledge and proficiencies in the area of corrections. The program operates with the cooperation and participation of local corrections agencies. All instructors in the program have experience in the corrections field. Courses are scheduled both day and evening to accommodate full-time or part-time students seeking to acquire or upgrade skills in the corrections field.

Certificate of Achievement and Associate in Science Degree
The Certificate of Achievement can be obtained upon completion of the 30-unit major listed below. The Associate in Science Degree can be obtained upon completion of 60 units, including the major, general education requirements, and electives. All courses in the major must be completed with a grade of C or better or a P if the course is taken on a Pass/No Pass basis.

Program Outcomes
Students who complete the Certificate of Achievement/Associate Degree will be able to:
1. Demonstrate an understanding of the American Criminal Justice system and the scope of responsibilities of the various local, state, and federal law enforcement agencies beginning with arrest through parole.
2. Articulate the system's objectives, the crime problem, and role expectations of criminal justice personnel, and describe the various agencies and each subsystem within the system.
3. Describe the system's responsibilities to the community, factors in crime causation, the social implications of crime and communication barriers between the system and the community.
4. Articulate the differences between the major criminological theories of the causes of crime and how those theories relate to policies toward crime and criminal behavior.
5. Analyze legal concepts and make rational decisions about case processing. Demonstrate knowledge of the rules of evidence, legal definitions, and concepts of evidentiary law. Apply basic investigative proficiencies.
6. Demonstrate critical thinking and analytical skills acquired in the social sciences in preparation for continuance of college-level education.

REQUIRED COURSES . . . . **Units**
CJ 001 Introduction to Criminal Justice. 3
CJ 002 Concepts of Criminal Law 3
CJ 011 Community Relations 3
CJ 051 Criminal Investigation. 3
CJ 052 Investigative Report Writing 3
CJ 053 Legal Aspects of Evidence 3
CJ 058 Fundamentals of Crime and Delinquency 3
CJ 059 Interviewing and Counseling. 3
Select six units from the elective list below 6
    Total Units 30

Select six (6) units from the following . . . . **Units**
CJ 057 Criminal Justice Career Development. 3
CJ 060 Probation and Parole 3
CJ 062 Legal Aspects of Correction 3
CJ 091 Vocational Work Experience – Corrections . . . . 1 - 3

Recommended Electives
CIS 050 Microcomputer Applications
COMM 010 Interpersonal Communication
COUN 062 Helping Skills: Creating Alliances &
    Facilitating Change
ENGL 004 Critical Thinking and Composition: Language
    in Context
ENGL 051 Technical Writing
HUMN 003 Journey in a Multicultural Landscape
HS 051 Introduction to Human Services
HS 053 Serving Special Populations
OCED 090 Occupational Work Experience
OCED 091 General Work Experience
OT 054A Beginning Keyboarding A
OT 054B Beginning Keyboarding B
OT 055A Intermediate Keyboarding/Word Processing A
OT 055B Intermediate Keyboarding/Word Processing B
SOCS 022 Ethnic, Racial and Minority Group Relations in
    Harmony and Conflict
SOCS 030 Peace, Non Violence and Conflict Resolution
SPAN 001 First Semester Spanish
SPAN 002 Second Semester Spanish

Criminal Justice

Criminal Justice, Law Enforcement

Program Description
This program was established with the cooperation of the Solano County Criminal Justice Advisory Committee and offers courses for both pre-service and in-service students. All instructors have experience in law enforcement, and courses are scheduled day or evening to accommodate full-time and part-time students seeking to acquire or upgrade skills in the field.

Certificate of Achievement and Associate in Science Degree
The Certificate of Achievement can be obtained upon completion of the 30-unit major listed below. The Associate in Science Degree can be obtained upon completion of 60 units, including the major, general education requirements, and electives. All courses in the major must be completed with a grade of C or better or a P if the course is taken on a Pass/No Pass basis.

Program Outcomes
Students who complete the Certificate of Achievement/Associate Degree will be able to:
1. Demonstrate an understanding of the American Criminal Justice system and the scope of responsibilities of the various local, state, and federal law enforcement agencies beginning with arrest through parole.
2. Articulate the system's objectives, the crime problem, and role expectations of criminal justice personnel, and describe the various agencies and each subsystem within the system.
3. Describe the system's responsibilities to the community, factors in crime causation, the social implications of crime and communication barriers between the system and the community.
4. Articulate the differences between the major criminological theories of the causes of crime and how those theories relate to policies toward crime and criminal behavior.
5. Analyze legal concepts and make rational decisions about case processing. Demonstrate knowledge of the rules of evidence, legal definitions, and concepts of evidentiary law. Apply basic investigative proficiencies.
6. Demonstrate critical thinking and analytical skills acquired in the social sciences in preparation for continuance of college-level education

REQUIRED COURSES . . . . **Units**
CJ 001 Introduction to Criminal Justice. 3
CJ 002 Concepts of Criminal Law 3
CJ 011 Community Relations 3
CJ 051 Criminal Investigation. 3
CJ 052 Investigative Report Writing 3
CJ 053 Legal Aspects of Evidence 3
CJ 058 Fundamentals of Crime and Delinquency 3
CJ 059 Interviewing and Counseling. 3
Select six units from the elective list below 6
   Total Units 30

Select six (6) units from the following . . . . **Units**
CJ 055 Traffic Control. 3
CJ 056 Juvenile Procedures 3
CJ 057 Criminal Justice Career Development. 3
CJ 064 Principles and Procedures of
      the Criminal Justice System 3
CJ 090 Vocational Work Experience -
      Law Enforcement . . . . 1 - 3

Recommended Electives
CIS 050 Microcomputer Applications
ENGL 004 Critical Thinking and Composition:
         Language in Context
ENGL 051 Technical Writing
OCED 090 Occupational Work Experience
OCED 091 General Work Experience
OT 054A Beginning Keyboarding A
OT 054B Beginning Keyboarding B
OT 055A Intermediate Keyboarding/Word Processing A
OT 055B Intermediate Keyboarding/Word Processing B
SOCS 022 Ethnic, Racial and Minority Group Relations
       in Harmony and Conflict
SPAN 001 First Semester Spanish
SPAN 002 Second Semester Spanish

Criminal Justice

CJ   001   3 Units
Introduction to Criminal Justice
Course Advisory: SCC minimum English and Math standards. Introduction to Criminal Justice presents an overview of informal and formal means of social control. It is a study of the history, evolution, philosophy, structure, operation and role of the criminal justice system and its component sub-systems (law enforcement, courts, corrections). It also explores the history of the U.S. Constitution and application of constitutional principles; theories of crime causation and criminal behavior. Another component of this course is the study of professional ethics, education and training for professionals in the criminal justice system. Required for all Criminal Justice majors. *Three hours lecture*.

CJ   002   3 Units
Concepts of Criminal Law
Course Advisory: SCC minimum English and Math standards; CJ 001. A study of the history, philosophy and development of law and various legal systems; case law and legal research; corpus delicti, mental elements, capacity to commit crimes, and defenses; classification of crimes and penalties; elements of major crimes. *Three hours lecture*.

CJ   011   3 Units
Community Relations
Course Advisory: SCC minimum English and Math standards. An exploration of actual and perceived special roles of criminal justice agencies and individual practitioners; interrelationships and role expectations of criminal justice practitioners and various individuals and groups; propaganda and pressure groups. Principal emphasis will be placed upon the development of the professional image of the criminal justice system and upon development of positive relationships between members of the criminal justice system and the public. *Three hours lecture*.

CJ   051   3 Units
Criminal Investigation
Course Advisory: SCC minimum English and Math standards; CJ 001. Fundamentals of investigation, crime scene search and recording, collection and preservation of evidence, scientific aid; interviews and interrogation, follow-up and case preparation. *Three hours lecture*.

CJ   052   3 Units
Investigative Report Writing
Course Advisory: Eligibility for ENGL 001; CJ 001; CJ 002;CJ 051. Presents investigative report writing in criminal justice relative to police, probation, institutional and parole activities. Includes practical experience in preparing field notes, statements, and reports. *Three hours lecture*.

CJ   053   3 Units
Legal Aspects of Evidence
Course Advisory: SCC minimum English and Math standards; CJ 001. A study of the origin, development, philosophy and constitutional basics of evidence; constitutional and procedural considerations affecting arrest, search and seizure; kinds of degrees of evidence and rules governing admissibility; judicial decisions interpreting individual rights and case studies. *Three hours lecture*.

CJ   055   3 Units
Traffic Control
Course Advisory: SCC minimum English and Math standards; CJ 001. A study of traffic law enforcement, regulations and control; fundamentals of traffic accident investigation, and an overview of the California Vehicle Code. *Three hours lecture*.

CJ   056   3 Units
Juvenile Procedures
Course Advisory: SCC minimum English and Math standards; CRIMJ 1. Presents the organization, function, and jurisdiction of juvenile agencies; the processing and detention of juveniles; juvenile case disposition; juvenile statutes and court procedures. *Three hours lecture*.

CJ   057   3 Units
Criminal Justice Career Development
Course Advisory: SCC minimum English and Math standards; CJ 001. Examines criminal justice career positions, employment standards and current occupational opportunities in the field. Includes practical aspects of various jobs and provides information and practice in entrance examination taking, oral interviews, and general preparation for various occupations within the criminal justice field. *Three hours lecture*.

CJ   058   3 Units
Fundamentals of Crime and Delinquency
Course Advisory: SCC minimum English and Math standards; CJ 001. Introduction to major types of criminal behavior, patterns of career offenders, factors which contribute to the production of criminality of delinquency. Includes methods used in dealing with violators in the justice system; the changing roles of police courts and after-care process of sentence, probation, prisons, and parole; changes of the law in crime control and treatment processes. *Three hours lecture*.

Criminal Justice

CJ   059   3 Units
Interviewing and Counseling
Course Advisory: SCC minimum English and Math standards; CJ 001. Overview of the interviewing and counseling techniques available to practitioners in law enforcement, the courts, and corrections emphasizing communication and practical skills. *Three hours lecture*.

CJ   060   3 Units
Probation and Parole
Course Advisory: Eligibility for ENGL 001; CJ 001; CJ 002; CJ 051. Presents the philosophy and history of correctional services. A survey of the correctional sub-systems of institutions by type and function, probation concepts and parole operations. A discussion of correctional employee responsibilities as applied to offender behavior modifications through supervisory control techniques. Covers rehabilitation goals as they affect individual and intimate cultural groups in both confined and field settings. *Three hours lecture*.

CJ   062   3 Units
Legal Aspects of Correction
Course Advisory: SCC minimum English and Math standards; CJ 058. Presents the legal aspects of corrections and code provisions relative to all phases of the correctional system. *Three hours lecture*.

CJ   064   3 Units
Principles and Procedures of the Criminal Justice Sy
Course Advisory: SCC minimum English and Math standards; CJ 001. Detailed study of the role and responsibility of each sub-system within the criminal justice system; an examination of the philosophy, history, structure, operation and interrelation of each sub-system component; a description of procedure from initial entry of the individual into the system to the final disposition. *Three hours lecture*.

CJ   090   1.00 to 3.00 Units
Vocational Work Experience - Law Enforcement
Course Advisory: CJ 001. Volunteer service in a variety of governmental and private criminal justice agencies related to Law Enforcement. One unit of credit may be earned for each 75 hours paid or 60 hours unpaid work per semester to a maximum of 3 units per semester. Students who enroll in CJ090 may not enroll in CJ 091 during the same semester. This is a credit/no credit only course. **NOTE: Combined units for all work experience courses shall not exceed 12. One hour lecture and five to twenty hours weekly by arrangement. To determine the correct number of units in which to enroll, refer to the following formula for paid employment*: Full Semester Sections: 1 unit = 5 hours per week 2 units = 10 hours per week 3 units = 15 hours per week *unpaid work requires fewer hours per week.**

CJ   091   1.00 to 3.00 Units
Vocational Work Experience - Corrections
Course Advisory: CJ 001. Volunteer service in a variety of governmental and private criminal justice agencies related to Corrections. One unit of credit may be earned for each 75 hours paid or 60 hours unapid work per semester to a maximum of 3 units per semester. Students enrolled in CJ 091 may not enroll in CJ 090 during the same semester. This is a credit/no credit only course. **NOTE: Combined units for all work experience courses shall not exceed 12. One hour lecture and five to twenty hours weekly by arrangement. To determine the correct number of units in which to enroll, refer to the following formula for paid employment*:Full Semester Sections: 1 unit = 5 hours per week 2 units = 10 hours per week 3 units = 15 hours per week *unpaid work requires fewer hours per week.**

Drafting

Drafting Technician

Program Description
This program is designed to provide students with entry-level skills in the fields of mechanical, electrical, civil and architectural drafting.

Certificate of Achievement and Associate in Science Degree
A Certificate of Achievement can be obtained upon completion of the 30-unit major listed below. The Associate in Science Degree can be obtained by completing a total of 60 units, including the major, general education requirements, and electives. All courses in the major must be completed with a grade of C or better or a P if the course is taken on a Pass/No Pass basis.

Program Outcomes
Students who complete the Certificate of Achievement/Associate Degree will be able to:
1. Demonstrate proficiency at reading, drawing and dimensioning industry standard drawings in the fields of Mechanical, Civil, Architectural, and Electronic drafting and design.
2. Demonstrate proficiency using industry standard computer aided drafting/design CADD software programs.

REQUIRED COURSES . . . . **Units**
DRFT 045 Introduction to
        Computer-Aided Drafting (CAD) 3
DRFT 046 Advanced CAD 3
DRFT 050 Basic Drafting 3
DRFT 055 Mechanical Drafting - Level I. 3
DRFT 060 Architectural Drafting I. 3
DRFT 075 Electronic Drafting. 3
DRFT 080 Civil Drafting I 3
DRFT 125 Solid Modeling with Solidworks. 3
IT 140 Industrial Materials 3
IT 151 Vocational Mathematics. 3
    Total Units **30**

Recommended Electives
DRFT 056 Descriptive Geometry
DRFT 057 Mechanical Drafting - Level II
DRFT 065 Architectural Drafting II
DRFT 070 Technical Illustration and Design
DRFT 079 Blueprint Reading
DRFT 085 Civil Drafting II
DRFT 092 Special Problems
DRFT 130 Advanced Printed Circuit Board Design
DRFT 135 Structural & Detail Drafting
DRFT 140 Surveying
HORT 030 Landscape Design I
INTD 052 Drafting and Perspective Drawing for Interiors
OCED 090 Occupational Work Experience
OCED 091 General Work Experience

NOTE: Many of the advanced courses will require CAD. It is important to take DRFT 045 (Intro. to CAD) as early in your program as possible. College credit may be obtained with credit by examination in DRFT 045, 050, and 060 or they may be waived.

Drafting

Survey Technician/Civil Drafting Technician

Program Description
This program is designed to provide students with entry-level skills in the fields of Surveying Technician, Civil Drafting Technician, and/or mapping technician.

Certificate of Achievement and Associate in Science Degree
A Certificate of Achievement can be obtained upon completion of 27 core requirement units. An Associate of Science Degree may be obtained by completing 27 core units in addition to 15 units of restricted elective courses and 21 units of General Education.

Program Outcomes
Students who complete the Certificate of Achievement/Associate Degree will be able to:
1. Demonstrate proficiency at reading, drawing and dimensioning industry standard drawings in the fields of Mechanical, Civil, Architectural, and Electronic drafting and design.
2. Demonstrate proficiency using industry standard computer aided drafting/design CADD software programs.

REQUIRED COURSES . . . . **Units**
DRFT 045 Introduction to
        Computer-Aided Drafting (CAD) 3
DRFT 046 Advanced CAD 3
DRFT 050 Basic Drafting 3
DRFT 060 Architectural Drafting I 3
DRFT 080 Civil Drafting I 3
DRFT 085 Civil Drafting II 3
DRFT 140 Surveying 3
GEOL 010 Introduction to Geographic
        Information Systems 3
OR
GEOG 010 Introduction to Geographic
        Information Systems 3
IT 151 Vocational Mathematics 3
    Total Units 27

Electives for Associate of Science degree
DRFT 056 Descriptive Geometry
DRFT 065 Architectural Drafting II
DRFT 070 Technical Illustration and Design
DRFT 079 Blueprint Reading
DRFT 092 Special Problems
GEOL 001 Physical Geology
GEOL 002 Geology Laboratory
GEOL 005 Geology of California

*Course advisory for all courses: Solano Community College minimum English and Math Standards.
*Drafting 050 should be taken in the first semester of study.

Drafting

DRFT 045   **3 Units**
Introduction to Computer-Aided Drafting (CAD)
Course Advisory: SCC minimum English and Math standards; DRFT 050; drafting experience helpful. Designed to introduce the drafting student to CAD technology and terminology. The student shall complete a series of related drawing problems using a CAD work station. *Two hours lecture, four hours lab.*

DRFT 046   **3 Units**
Advanced CAD
Prerequisite: DRFT 045 and DRFT 050. Course Advisory: SCC minimum English and Math standards. Designed to develop advanced proficiency in CAD. Covers symbol libraries, isometrics, external references (XREFS), 3-D drawing, basic solid modeling, tables and customization techniques. *Two hours lecture, four hours lab.*

DRFT 050   **3 Units**
Basic Drafting
Course Advisory: SCC minimum English and Math standards. Presents the fundamentals of drafting, including the use of instruments, lettering, freehand sketching, orthographic projection, dimensioning and sectioning. Recommended for non-majors and drafting majors. *Two hours lecture, four hours lab.*

DRFT 055   **3 Units**
Mechanical Drafting - Level I
Prerequisite: DRFT 050 and DRFT 045. Course Advisory: SCC minimum English and Math standards. Emphasizes sectioning, pictorials, threads, fasteners, springs, tolerancing, measurement, and working drawings. *Two hours lecture, four hours lab.*

DRFT 057   **3 Units**
Mechanical Drafting - Level II
Prerequisite: DRFT 055 with a grade of C or better; IT 151 (may be taken concurrently). Course Advisory: SCC minimum English and Math standards. A continuation of Drafting 55, with special emphasis on geometric tolerancing, gears, cams, electro-mechanical packaging, and advanced working drawings. *Two hours lecture, four hours lab.*

DRFT 060   **3 Units**
Architectural Drafting I
Prerequisite: DRFT 050 and DRFT 045. Course Advisory: SCC minimum English and Math standards. Practice in drawing a complete set of plans for a single family dwelling in accordance with local building regulations. Includes an introductory unit on heat loss computations. Recommended for non-majors and drafting majors. *Two hours lecture, four hours lab.*

DRFT 065   **3 Units**
Architectural Drafting II
Prerequisite: DRFT 060 with a grade of C or better; IT 151 (IT 151 may be taken concurrently). Course Advisory: SCC minimum English and Math standards. Introduction to the trade terms, detailing and basic construction practices related to light commercial design and delineation. *Two hours lecture, four hours lab.*

DRFT 070   **3 Units**
Technical Illustration and Design
Prerequisite: DRFT 050; DRFT 045. Course Advisory: SCC minimum English and Math standards. Designed for advanced drafting students to develop the basic tools, skills and concepts required in the field of engineering illustration. Includes freehand sketching and pencil shading. CAD drawings include isometric, perspective assembly, photo-tracing and cut-away drawings. *Two hours lecture, four hours lab.*

DRFT 075   **3 Units**
Electronic Drafting
Prerequisite: DRFT 050 and DRFT 045. Course Advisory: SCC minimum English and Math standards. Designed for drafters to develop skill in reading and drawing plans related to electronics. Topics include, terminology, component identification, schematic symbols, cable drawings, electro-mechanical design, and basic printed circuit board design. *Two hours lecture, four hours lab.*

DRFT 079   **3 Units**
Blueprint Reading
Course Advisory: SCC minimum English and Math standards. Designed to provide understanding and interpretation of a variety of blueprints. Emphasizes the ability to recognize and identify modern industrial blueprints and architectural blueprints. Includes basic development of freehand sketching abilities. *Three hour lecture, one hour lab.*

DRFT 080   **3 Units**
Civil Drafting I
Prerequisite: DRAFT 50 and DRAFT 45. Course Advisory: SCC minimum English and math standards; IT 151 recommended. Introductory course in civil drawing with emphasis on land division, breakdown of survey notes, office procedures and related math computations. Included is an introductory unit on modern CAD applications, as applied to preliminary and final maps. *Two hours lecture, four hours lab.*

Drafting

DRFT   085   3 Units
Civil Drafting II
Prerequisite: DRFT 080; IT 151. Course Advisory: SCC minimum English and Math standards. Designed for the advanced civil drafting student with emphasis on computer programs and experience compatible with the industry standards. Includes the study of plan and profile, cross-section and earth-work calculations. *Two hours lecture, four hours lab.*

DRFT   092   1.00 to 3.00 Units
Special Problems
Prerequisite: DRFT 050. Individualized projects for advanced students who demonstrate competency to carry out individual w*ork. Three to nine hours weekly by arrangement.*

DRFT   125   3 Units
Solid Modeling with Solidworks
Course Advisory: SCC minimum English and Math standards; DRFT 050 or knowledge of drafting concepts. This course is designed to teach the basic concepts and skills necessary to create, view, and manipulate objects in three dimensional space using Solidworks software. *Two hours lecture, four hours lab.*

DRFT   130   3 Units
Advanced Printed Circuit Board Design
Prerequisite: DRFT 075. Course Advisory: SCC minimum English and Math standards. The student will learn how to design complex circuit boards from schematic layout to artwork generation. Course requires completion of a complete set of drawings for a printed circuit board, including proper documentation, all based on industry standards. Through-hole and surface mount technology are studied. *Two hours lecture, four hours lab.*

DRFT   135   1 Unit
Structural & Detail Drafting
Course Advisory: SCC minimum English and Math standards. Provides a basic introduction to structural detailing. Covers basic terminology, shapes, types of connections, types of views, scaling and proportion, bills of materials and lettering, plus some detailing problems. *Five hours lecture, two hours weekly by arrangement (3 week course).*

DRFT   140   3 Units
Surveying
Prerequisite: DRFT 080 and IT 151. Course Advisory: SCC minimum English and Math standards. Presents the fundamentals of plane surveying with practice in the field using tape, levels, transit and theodolite. *Two hours lecture and four hours lab.*

DRFT   150   1 Unit
Computer Graphics for Non-Drafters
Course Advisory: SCC minimum English standard. Provides the opportunity for the non-drafting major to explore the creation of graphic images using the PC as a tool. *One hour lecture, three hours lab (8 week course).*

Economics

For Early Childhood Education, see Child Development and Family Studies.

Program Description
Economics is the study of how people make choices when faced with scarcity. It is therefore the study of the process of decision-making by individuals, business, governments, or any other group that must make such choices, and the study of the institutional context in which these decisions are made.

Associate Degree
Not offered in this discipline

ECON   001   3 Units
Principles of Economics (Macroeconomics)
Course Advisory: Eligibility for ENGL 001; SCC minimum Math standard. Introductory course dealing with the nature and scope of economics, supply and demand analysis, national income accounting, Keynesian models, money and banking, fiscal and monetary policy, stabilization methods, and current problems and issues. Emphasis on Macroeconomics. Online work may be required. *Three hours lecture*.

ECON   002   3 Units
Principles of Economics (Microeconomics)
Course Advisory: Eligibility for ENGL 001; SCC minimum Math standard. Introductory course dealing with the price and output determination, cost of production, market structures, anti-trust regulations, and international trade. Emphasis on Microeconomics. Online work may be required. *Three hours lecture*.

ECON   010   3 Units
Global Economics
Course Advisory: SCC minimum Math standard and Eligibility for ENGL 001. This is an introductory course that examines patterns of international trade and development. In this course students will understand how economies around the world are linked. Students will examine issues of global trade, trade policies, exchange rate systems, developing countries and controversies regarding trade policy. Students may be required to complete work online. *Three lecture hours.*

Engineering

Program Description

The field of Engineering deals with the design, production, and testing of new products as well as maintaining and improving existing ones. Engineers are professionals who apply mathematical and scientific principles to solve technical problems.

Associate Degree

Not offered in this discipline.

ENGR   001   1 Unit
Introduction to Engineering
Course Advisory: Eligibility for enrollment in ENGL 001 and SCC minimum Math standard. A first, non-technical course for engineering students and students considering majoring in engineering. Introduction to different engineering fields, the campus life of engineering students, schedule guidelines, opportunities in engineering, engineers' roles in society, ethics in engineering, and strategies and approaches required to survive math, science, and engineering courses. Possible field trips. *One hour lecture.*

ENGR   017   5 Units
Introduction to Electrical Engineering
Corequisite: MATH 023 Prerequisite: PHYS 007 with a grade C or better. Course Advisory: Eligibility for ENGL 001. Required for engineering majors, the course presents a study of basic circuit analysis techniques including Kirchhoff's laws, mesh-current, node-voltage, Thevenin and Norton equivalent; transient and steady-state responses of passive circuits; sinusoidal steady-state analysis; power calculations; operational amplifier; semiconductor devices. Weekly homework assignments and written tests, including a comprehensive final examination and lab reports, will be used to evaluate student success. *Four hours lecture, three hours lab.*

ENGR   030   4 Units
Engineering Mechanics: Statics
Prerequisite: MATH 021, PHYS 006 with a grade of C or better. Course Advisory: Eligibility for ENGL 001. This course, which is required for engineering majors, presents a study of the principles of statics of particles and rigid bodies as applied to equilibrium problems of two and three-dimensional structures, and the principles of friction, virtual work, and stability of equilibrium. *Four hours lecture.*

ENGR   045   4 Units
Properties of Materials
Prerequisite: PHYS 006 and CHEM 001. Course Advisory: Eligibility for ENGL 001. This required course for engineering majors covers the application of basic principles of physics and chemistry to the structure and properties of engineering materials. Special emphasis is devoted to the relationship between microstructure and the mechanical properties of metals, polymers and ceramics, and the electrical, magnetic, and optical properties of materials. Possible field trips. *Three hours lecture, three hours lab.*

English

Program Description

This program teaches writing, critical thinking, reading, and research skills as they apply to the areas of composition, creative writing, and the analysis of literature, the latter of which is presented through genre, survey, figure, and thematic courses.

Associate in Arts Degree

The Associate in Arts Degree can be obtained by completing a total of 60 units, including the 18-unit major listed below, general education requirements, and electives. All courses in the major must be completed with a grade of C or better or a P if the course is taken on a Pass/No Pass basis.

Program Outcomes

Students who complete an Associate Degree will be able to:

1. Demonstrate an ability to compose and communicate using appropriate rhetorical patterns and writing strategies.
2. Demonstrate college-level reading, writing, and analytical skills, such as the ability to use texts to generate and analyze arguments, collect, evaluate and synthesize evidence and proofs, and to understand the value of critical thinking and its applications.
3. Demonstrate an understanding of the importance and influence of literature's study of the human condition in shaping and reflecting intellectual history and cultural identity.
4. Demonstrate, through the study and analysis of literature from a variety of cultural or ethnic backgrounds and sexual orientations, an ability to recognize and examine assumptions about difference and social norms and an understanding of how the experience of reading literature from different perspectives can better prepare one for meaningful participation in a diverse global community.
5. Explore and demonstrate creative writing potential including the practice and study of diverse literatures and publishing.

REQUIRED COURSES . . . . **Units**
The courses are listed in the suggested sequence.
ENGL 002 Critical Thinking and
Writing About Literature 3
    Total Units **3**

One genre course from the list below: . . . . **Units**
ENGL 021 Introduction to Poetry 3
ENGL 023 Introduction to the Modern Novel 3
ENGL 024 Introduction to the Short Story 3
ENGL 025 Introduction to Drama as Literature. 3

Two survey courses from the list below: . . . . **Units**
ENGL 030 Survey of American Literature I 3
ENGL 031 Survey of American Literature II 3
ENGL 040 Survey of English Literature 3
ENGL 041 Survey of English Literature 3

Electives selected from the list of
Recommended Electives
ENGL 004 Critical Thinking and Composition: Language
      in Context
ENGL 005 Advanced Composition
ENGL 006 Creative Writing I
ENGL 007 Creative Writing II
ENGL 012 Modern Women Writers
ENGL 016 Masterpieces of Western World Literature
ENGL 018 Introduction to Mythology
ENGL 021 * Introduction to Poetry
ENGL 023 * Introduction to the Modern Novel
ENGL 024 * Introduction to the Short Story
ENGL 025 * Introduction to Drama as Literature
ENGL 030 * Survey of American Literature I
ENGL 031 * Survey of American Literature II
ENGL 032 Introduction to Native American Literature
ENGL 033 Survey of African American Literature in the
      United States
ENGL 034 African American Novel and Drama in the
      United States
ENGL 035 Latina/o Literature
ENGL 036 Multi-Ethnic Literature in America
ENGL 037 Survey of Asian American Literature
ENGL 040 * Survey of English Literature
ENGL 041 * Survey of English Literature
ENGL 044 Introduction to Shakespeare
ENGL 049 English Honors
ENGL 058 Creative Writing: The Literary Magazine
AMST 001 An Interdisciplinary Study of American Culture
AMST 002 An Interdisciplinary Study of American Culture
* If not previously taken for the major

English

ENGL   001   3 Units
College Composition
Corequisite: LR 010. Prerequisite: A score of 102 or better within the last three years on the sentence skills section of the assessment test; or SAT verbal score of at least 500; or ACT score of at least 23; or recommendation of a counselor or English instructor based on a Multiple Measures Evaluation; or a grade of "Pass" and a score of 8 or more on the Composition Mastery Final Examination upon completion of ENGL 305 or 350 or 355; or a grade of "Pass" in ENGL 370 or 348E or 380 or 348G or 360. A writing course which emphasizes critical reading, expository and argumentative writing, and mastery of library research techniques. It includes instruction and practice in critical thinking, in analytical reading and evaluation of written work, and in the methods of clearly communicating and supporting ideas in organized, coherent essays. Students are required to write 6-10 essays, one of which may be a research paper, based on essays, literature read in class, and/or personal experience. *Three hours lecture.*

ENGL   002   4 Units
Critical Thinking and Writing About Literature
Prerequisite: ENGL 001 with a minimum grade of C. The development of critical thinking, reading, and writing skills as they apply to the analysis of fiction, poetry and drama, literary criticism, and related non-fiction from diverse cultural sources and perspectives. Emphasis is on the techniques and principles of effective written argument as they apply to literature. Essay examinations, critical papers, and some research projects are required. *Four hours lecture.*

ENGL   004   3 Units
Critical Thinking and Composition:
Language in Context
Prerequisite: ENGL 001 with a minimum grade of C. Course Advisory: SCC minimum Math standard. A study of the process of thought and its representation in writing, focusing on the formation of responsible opinions and their presentation in written argument. This course offers practice in the intellectual skills necessary for critical thinking, including observation, analysis, and research; it provides instruction in the organization, arrangement, and stylistic presentation of informative and argumentative writing; it examines the informative and argumentative writing of others and it requires students to write their own analytical and argumentative essays. Essay examinations and critical papers are required. *Three hours lecture.*

ENGL   005   3 Units
Advanced Composition
Prerequisite: ENGL 001 with a minimum grade of C. A writing course which continues the development of expository writing skills through the study of sentence structure and variety, appropriate diction, and rhetorical devices and through reading and discussing professional and student essays. Emphasis is on improving student's expository writing skills through peer and teacher critiques, revision, and developing proofreading skills. *Three hours lecture.*

ENGL   006   3 Units
Creative Writing I
Prerequisite: ENGL 001 with a minimum grade of C. An introductory study of creative writing techniques in multiple genres. Students develop self-expression through writing and through individual and class criticism of student work. Frequent writing is required. *Three hours lecture.*

ENGL   007   3 Units
Creative Writing II
Prerequisite: ENGL 006 with a minimum grade of C. An intermediate study of creative writing techniques. Students refine skills of self-expression through individual and class criticism of student work. Frequent writing and intense individual and class criticism of student work are requirements. *Three hours lecture.*

ENGL   010   3 Units
Creative Writ. III
Prerequisite: ENGL 007 with a minimum grade of C. An advanced study of creative writing skills. Students will be expected to show proficiency in at least one genre (poetry, short story, drama, and novel). Frequent writing, intense individual and class criticism, and the compilation of an individual portfolio of genre-specific creative work are requirements. *Three hours lecture.*

ENGL   012   3 Units
Modern Women Writers
Prerequisite: ENGL 001 with a minimum grade of C. A study of 20th century women writers, concentrating on British and North American women writers. The course focuses on novels, short stories, poems, plays and essays written by women and attempts to define and assess the contributions of women writers to 20th century literature. Styles and themes employed in the literature, as well as the cultural and political background in which it was written, will also be examined and analyzed. Examinations and critical papers are required. *Three hours lecture.*

English

ENGL   013   3 Units
Mystery Fiction
Prerequisite: ENGL 001 with a minimum grade of C.
Examines the origins of mystery fiction and the great
fictional detectives, surveys the various schools of
mystery fiction, and explores reader fascination with
crime and detection in fiction. *Three hours lecture*.

ENGL   014   3 Units
The Bible as Literature
Prerequisite: ENGL 001 with a minimum grade of C. A
general survey of narratives, drama, poetry, biography,
history, culture, and prophecy of the 'Old Testament,'
'The Apocrypha,' and the 'New Testament' with
emphasis on literary interpretation of their content and
techniques. *Three hours lecture*.

ENGL   016   3 Units
Masterpieces of Western World Literature
Prerequisite: ENGL 001 with a minimum grade of C. A
study of a selection of major works in Western World
literature from the Greeks to the present, excluding
British Isles and American writers. This course will
examine these selected major works, introducing the
student to some of the most important literary efforts in
Western World literature, as well as the works' historical
and cultural contributions. Critical papers and
examinations are required. *Three hours lecture*.

ENGL   018   3 Units
Introduction to Mythology
Prerequisite: ENGL 001 with a minimum grade of C. A
survey of the major elements of mythology, its history
and development as part of the human experience with a
central focus on Western mythology, its origins and
development as well as its appearance in and influence
on literature. Examinations and papers are required.
Three hours lecture.

ENGL   021   3 Units
Introduction to Poetry
Prerequisite: ENGL 001 with a minimum grade of C. A
study of poetry as a form of literature and art. This course
examines the elements of poetry, the historical
development of the genre, and the major themes treated
by poetry. Examinations and critical papers are required.
Three hours lecture.

ENGL   023   3 Units
Introduction to the Modern Novel
Prerequisite: ENGL 001 with a minimum grade of C. A
study of selected novels written during the 20th Century,
including the development of the modern novel as a form
of literature and the specific techniques and themes
employed by novelists. Critical papers and examinations
are required. *Three hours lecture*.

ENGL   024   3 Units
Introduction to the Short Story
Prerequisite: ENGL 001 with a minimum grade of C. A
study of the short story as a form of literature, examining
the historical development of the short story, the literary
elements of the genre, and the major themes treated by
the short story. Examinations and critical papers are
required. *Three hours lecture*.

ENGL   025   3 Units
Introduction to Drama as Literature
Prerequisite: ENGL 001 with a minimum grade of C. A
study of the types of dramatic literature/tragedy,
comedy, and tragi-comedy/through a historical survey of
representative dramas. Students will read, analyze,
compare and contrast selected plays in class.
Examinations and critical papers are required. *Three
hours lecture*.

ENGL   030   3 Units
Survey of American Literature I
Prerequisite: ENGL 001 with a minimum grade of C. A
survey of literature written in the United States from the
time of early settlement to the end of the Civil War.
Through focus on significant works of diverse writers,
attention is given to major literary movements and to
understanding, comparing, and contrasting the diverse
political, religious, social, and cultural elements of
literature in the United States. Written examinations and
critical papers are required. *Three hours lecture*.

ENGL   031   3 Units
Survey of American Literature II
Prerequisite: ENGL 001 with a minimum grade of C. A
survey of literature written in the United States from the
end of the Civil War to the present. Through focus on
significant works of diverse writers, attention is given to
significant literary movements and to understanding,
comparing and contrasting the diverse political, religious,
social and cultural elements of literature in the United
States. Written examinations and critical papers are
required. *Three hours lecture*.

ENGL   032   3 Units
Introduction to Native American Literature
Prerequisite: ENGL 001 with a minimum grade of C. A
study of representative literature by various Native
American writers. Critical papers and written
examinations are required. *Three hours lecture*.

English

ENGL   033   3 Units
Survey of African American Literature
in the United States
Prerequisite: ENGL 001 with a minimum grade of C. A study of representative selections of poetry, short fiction, short drama, and essays written by African Americans from 1760 to the present. The ethnic context, artistic techniques, and literary themes will be studied. Critical papers and written examinations are required. *Three hours lecture.*

ENGL   035   3 Units
Chicana/o Literature
Prerequisite: ENGL 001 with a minimum grade of C. An introduction to contemporary and traditional literature created by Chicana/os, including an exploration of the political, social, cultural, historical, and psychological issues relevant to understanding gender, race, and ethnicity. Written examinations and critical papers are required. *Three hours lecture.*

ENGL   036   3 Units
Multi-Ethnic Literature in America
Prerequisite: ENGL 001 with a minimum grade of C. A study of representative literature by various American multicultural writers: Asian American, African American, European American, Latina/o, and Native American. Written examinations and critical papers are required. *Three hours lecture.*

ENGL   037   3 Units
Survey of Asian American Literature
Prerequisite: ENGL 001 with a minimum grade of C. A study of representative selections of poetry, fiction, short drama, and non-fiction by Asian American writers. The course examines the ethnic context, artistic technique, and literary themes. Critical papers and examinations are required. *Three hours lecture.*

ENGL   038   3 Units
The California Experience in Literature
Prerequisite: ENGL 001 with a minimum grade of C. A study of literature written by California writers, including historical and cultural backgrounds, variety of regional and ethnic experiences, and unifying themes, concepts, and dreams. *Three hours lecture.*

ENGL   040   3 Units
Survey of English Literature I
Prerequisite: ENGL 001 with a minimum grade of C. The study of works of major British authors from the Anglo-Saxon period through the Eighteenth Century, in poetry, prose, and drama. The course focuses on the development of a literature in English and explores how this literature responds to and shapes its historical and cultural context. It introduces students to the use of critical theory in the analysis of literature. Examinations and critical papers are required. *Three hours lecture.*

ENGL   041   3 Units
Survey of English Literature II
Prerequisite: ENGL 001 with a minimum grade of C. A study of major works in poetry, prose, and drama from approximately 1798 to the present. The course focuses on the Romantic Movement, the Victorian Age, early 20th Century, modernism, postwar literature, post-colonial literature, and late 20th Century post-modernism. It examines the shifting relationship between literature and its historical and cultural contexts. It introduces students to questions of canon formation and the use of critical theory in the analysis of literature. Examinations and critical papers are required. *Three hours lecture.*

ENGL   044   3 Units
Introduction to Shakespeare
Prerequisite: ENGL 001 with a minimum grade of C. An introduction to Shakespearean drama and poetry through a study of representative comedies, histories, tragedies, and sonnets. Students will be concerned with dramatic and poetic principles as well as with an understanding of the historical context into which Shakespearean drama fits. Examinations and critical papers are required. *Three hours lecture.*

ENGL   046   3 Units
American Sign Language 1
Prerequisite: Eligibility for ENGL 001. An introductory course on the culture and language of the deaf in this country. The course includes the acquisition of Fingerspelling skills and basic functional vocabulary of ASL. In addition to fluency in these two separate skills, the student will acquire basic knowledge of ASL syntax and nonverbal aspects of ASL, a history of the deaf in the country and deaf education, variations in Manual Communication, and the Culture of the Deaf. There will be both written and signed examinations, a research project, homework assignments, and individual examinations to demonstrate competency in both expressive and receptive ASL. Students will be expected to acquire a vocabulary of approximately 500 words (signs) and be proficient in Fingerspelling. *Three hours lecture.*

English

ENGL   047   3 Units
American Sign Language 2
Prerequisite: ENGL 046. Emphasis is on vocabulary expansion, introduction to ASL idiomatic expressions and information regarding the ethics and process of becoming a sign language interpreter. Assessment of competency is accomplished through written and communicative examination. Some interaction with the deaf population is required. *Three hours lecture*.

ENGL   049   1.00 to 3.00 Units
English Honors
Prerequisite: Completion of 24 units of college credit with a minimum GPA of 3.3; a minimum of 5 units in the discipline with a grade of B or better; an ability to work independently; permission of the Division Dean based on instructor availability. An independent study project which generally results in a critical examination of literature of significant creative and/or analytical writing. *Three to nine hours weekly by arrangement with instructor and division Dean.*

ENGL   051   3 Units
Technical Writing
Prerequisite: A score of 102 or better in the last three years on the sentence skills section of the assessment test; or recommendation of a counselor or English instructor based on a Multiple Measures Evaluation; or a grade of 'Credit' and a score of 8 or more on the Composition Mastery Final Examination upon completion of ENGL 305 or 350 or 355; or a grade of 'Credit' in ENGL 370. Course Advisory: Keyboarding skills. The fundamentals of technical writing, including memos, forms, resumes, proposals, and formal and informal reports. Emphasis is on techniques for organizing, evaluating, and presenting information in the simple, direct, and objective style required in modern technical communications. Use of word processing, desktop publishing, graphics, tables, appropriate fonts, layout, and format will also be emphasized. *Three hours lecture*.

ENGL   058   3 Units
Creative Writing: The Literary Magazine I
Prerequisite: ENGL 001 with a minimum grade of C. A course in the contemporary American Literary magazine which will also produce its own literary magazine: requesting submissions, reviewing them, selecting material, arranging contents and determining the format. Students may write creatively and make their work available for class commentary, as well as for possible inclusion in the magazine. *Three hours lecture*.

ENGL   059   3 Units
Creative Writing: The Literary Magazine II
Prerequisite: ENGL 058 with a minimum grade of C. An advanced study of the contemporary American literary magazine and the practice of publishing its own literary magazine, The Suisun Valley Review, where the student is expected to assume a lead editorial role. Students may write creatively and make their work available for class commentary, as well as for possible inclusion in the magazine. *Three hours lecture*.

ENGL   087   1 Unit
Drama in Performance
Prerequisite: Permission of instructor to confirm opening. Course Advisory: ENGL 001. Introduction to the principles of drama through a study of plays being presented at the Oregon Shakespearean Festival. A travel study course. *Sixteen to thirty-two hours lecture (1 week course).*

ENGL   305   3 Units
Introductory Reading and Writing Skills
Intensive instruction in developmental language processing skills, reading and writing skills, and general classroom survival skills. Success in this class will be based on attendance, satisfactory completion of in- and out-of class reading and writing assignments and the Composition Mastery Examination. This is a credit/no credit only course. *Three hours lecture*.

ENGL   310   0.50 to 1.50 Units
Writing Skills Lab
Upon registration, each student's writing sample will be used to identify his/her individual writing problems, and an individualized program will be designed to provide instruction in those problem areas. Credit will be earned upon successful completion and mastery of the student's course of study and an appropriate number of hours as specified in each student's contract. This is an open entry/open exit, credit/no credit only course. *Two hours activity weekly per unit.*

English

ENGL   350   **3 Units**
Reading and Writing Skills for ESL Students
Prerequisite: ENGL 350L (or may be taken concurrently). A score of 51-69 within the last three years on the sentence skills section of the assessment test; or Recommendation of a counselor or English instructor based on a Multiple Measures Evaluation; or A grade of "Pass" or better and a score of 4 or more on the Composition Mastery Final Examination upon completion of ENGL 305 or ESL 6. Corequisite: This course must be taken together with 1.5 units of the English 350L. Credit for this course will be given only when the requirements of both components have been completed. Combines writing and reading practice to increase skill in developing clear paragraphs and short essays. This course includes an intensive study of grammar, reading comprehension, and ways to find ideas. ESL students will acquire new language patterns for writing standard American English. This is a Pass/No Pass only course. *Three hours lecture.*

ENGL   350L   **1.5 Units**
English 350 Lab
Corequisite: ENGL 350. Upon registration in English 350L, students will go through structured curriculum which develops their reading and writing skills. Credit will be earned upon successful completion and mastery of the course of study and completion of the appropriate number of hours as specified. Students who fail the coreq ENGL 350 twice must enroll in ENGL 310 for individualized instruction. This is a Pass/No Pass course. *Four and one-half hours Lab.*

ENGL   355   **3 Units**
Writing and Reading Skills
Prerequisite: A score of 51-69 within the last three years on the sentence skills section of the assessment test; or recommendation of a counselor or English instructor based on a Multiple Measures Evaluation; or a grade of "Pass" or better and a score of 4 or more on the Composition Mastery Final Examination upon completion of ENGL 305 or 350. Corequisite: This course must be taken together with 1.5 units of 355L. Credit for this course will be given only when the requirements of both components have been completed. Combines writing and reading practice to increase skill in developing clear paragraphs and short essays. This course includes an intensive study of grammar, reading comprehension, and ways to find ideas. This is a Pass/No Pass Course. *Three hours lecture.*

ENGL   355L   **1.5 Units**
English 355 Lab
Corequisite: ENGL 355. Upon registration in English 355L, students will go through structured curriculum which develops their reading and writing skills. Credit will be earned upon successful completion and mastery of the course of study and completion of the appropriate number of hours as specified. This is a Pass/No Pass course. *Four and one-half hours lab.*

ENGL   360   **5 Units**
Accelerated English
This is an intensive, accelerated English course which gives students the tools to read and write the sort of sophisticated texts required of them in transfer level courses. This course is open to all students, regardless of assessment results or past experience with reading and writing. This is a Pass/No Pass only course. *Five hours lecture.*

ENGL   370   **3 Units**
English Fundamentals
Prerequisite: A score of 70-101 within the last three years on the sentence skills section of the assessment test; or recommendation of a counselor or English instructor based on a Multiple Measures Evaluation; or a grade of 'Credit' and a score of 6 or more on the Composition Mastery Final Examination upon completion of ENGL 305 or 350 or 355. Corequisite: ENGL 370L. Credit for the course will be given only when the requirements for all components have been met. Course Advisory: ENGL 353. Principles and practice of English composition, emphasizing analytical paragraphs and essays; critical reading, thinking, and writing; principles of essay and paragraph construction; grammar and punctuation; construction of effective sentences. This is a Pass/No Pass course. *Three hours lecture.*

ENGL   370L   **0.5 Unit**
English Fundamentals Lab
Corequisite: ENGL 370. Upon registration in English 370L, students will go through structured curriculum which develops their reading and writing skills. Credit will be earned upon successful completion and mastery of the course of study and completion of the appropriate number of hours as specified. Students who fail the coreq ENGL 370 twice must enroll in ENGL 310 for individualized instruction. This is a Pass/No Pass course. *One and one-half hours lab.*

English

ENGL   380   3 Units
Advanced English Fundamentals
Prerequisite A score of 90-101 within the last three years on the sentence skills sections of the assessment test. Course Advisory ENGL 353. Principles and practice of English composition, emphasizing analytical paragraphs and essays; critical reading, thinking, and writing; principles of essay and paragraph construction; grammar and punctuation; construction of effective sentences. This is a Pass/No Pass only course. *Three hours lecture*.

Learning Resources

LR   010   1 Unit
Introduction to Library Research
and Information Competency
Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standards. An introduction to Information Competency skills necessary to use research tools and to select, locate, retrieve and evaluate information. *One hour lecture.*

LR   011   1.5 Units
Internet Explored! Advanced
Information Competency
Course Advisory: Eligibility for ENGL 001, Computer literacy (familiarity with basic computer functions). An advanced information competency course evaluating information and exploring information technology in society including Internet, World Wide Web, search engines (e.g., Google, Ask, Live), retrieval systems, and electronic publishing. Formerly LR 051. *One and one-half hours lecture.*

LR   012   1.5 Units
Information and Society
Course Advisory: Eligibility for ENGL 001; Computer literacy (familiarity with basic computer functions). LR001, LR010, or LR011. Exploration of the social, cultural, and political context of information and information technologies like the Internet, World Wide Web, search engines, retrieval systems, electronic publishing, and distribution of media, including newspapers, books, and music. *One and one-half hours lecture.*

LR   500
Topics in Research and Information Competency
A series of workshops introducing students to the fundamentals of Library Research & Information Competency. See the current schedule of classes for topics offered. *One hour weekly by arrangement.*

Reading

ENGL   062   3 Units
Analytical Reading
Prerequisite: Eligibility for ENGL 370. Course Advisory: ENGL 353. A college-level reading course designed to improve and enhance the student's ability to understand inferential reading passages. Emphasis is on the development of critical reading skills, including the ability to understand the author's point of view and to engage in textual analysis. In addition, the student should develop the ability to successfully critique college-level reading material by analyzing a variety of prose structures. *Three hours lecture*.

ENGL   320   0.50 to 1.50 Units
Reading Improvement Lab
Designed to identify students' individual reading needs and to provide individualized instruction. Students will be assigned a worktext based on assessment in consultation with a Reading instructor. Credit will be earned when student has successfully completed the assigned course of study and appropriate number of lab hours as specified in each student's contract. This is an open entry/open exit, credit/no credit course. *Two hours activity weekly per unit.*

ENGL   331   3 Units
Vocabulary Strategies for Reading Comprehension
Course Advisory: CPT Reading score of 35 to 49. A vocabulary skills development course designed to help students learn new words to understand reading. This course will emphasize strategies for word analysis and dictionary use to identify, learn, use, and retain meanings of unfamiliar words. NOTE: This is a credit/no credit only course. *Three hours lecture.*

ENGL   353   3 Units
Textbook Reading Strategies
Course Advisory: CPT Reading score of 50 or above. Reading strategies and practice to improve understanding, enlarge vocabulary, and improve retention. Students will learn how to comprehend main idea-supporting detail relationships, use the knowledge they already have, recognize organizational patterns and author's purpose, and respond thoughtfully through discussion and writing. To develop skills in college study reading, primary emphasis is on reading materials typically found in textbooks. NOTE: This is a credit/no credit only class. *Three hours lecture*.

English

English As a Second Language

ESL   006   3 Units
ESL Composition Skills
Prerequisite: Minimum grade of C in ESL 078 or 079.
Course Advisory: ESL Assessment Test Score: Level 1. An advanced class for non-native speakers of English which offers practice in academic writing. Emphases include paragraph and essay logic, writing from sources, advanced sentence structure, and vocabulary building. Frequent compositions, quizzes, graded exercises, and a final exam are required. This course is a prerequisite for English 350 for those students who score 31-75 on the ESL assessment test. *Three hours lecture*.

ESL   055   3 Units
Advanced ESL Reading
Prerequisite: Minimum grade of C in ESL 078 or ESL 079 or ESL Assessment Test Score Level 1. A class for advanced non-native speakers of English involving the active, problem-solving process of intensive reading and focusing on the coordination of a number of skills to assist the student in drawing information from a content-oriented, college-level text. Students will also practice critical, extensive reading and writing at their individual level and pace using outside texts from the ESL collection at the Solano College Library. Comprehension tasks, exercises, quizzes, a final exam and weekly written journals are required for successful completion. *Three hours lecture*.

ESL   077   3 Units
Conversation/Pronunciation Skills
Corequisite: Concurrent enrollment in ESL 077L.
Prerequisite: Minimum grade of C in ESL 372, 373, or 374.
Course Advisory: ESL Assessment Test Score: At or above Level 2. Offers practice in acquiring patterns of American English grammar and pronunciation for the purpose of conversing clearly and completely. Includes practice in critically evaluating semantic and syntactic contrasts among various languages represented by students. *Three hours lecture*.

ESL   077L   0.5 Unit
ESL 077 Lab
Corequisite: ESL 077. Course Advisory: Familiarity with basic reading and writing skills: English alphabet letter names, numbers, and ability to follow directions. Provides structured listening comprehension and pronunciation practice, basic grammar practice, and elementary word processing practice for students new to the English language who wish to improve their own ability to speak and understand clearly. Instruction is individualized. Materials for the lab may be purchased in the bookstore. This is an open entry/open exit, Pass/No Pass only course. *One and one-half hours lab.*

ESL   078   3 Units
Intermediate ESL Reading
Prerequisite: Minimum grade of C in ESL 372, 373, or 374.
Course Advisory: ESL Assessment Test Score: At or above Level 2. Offers development in reading and vocabulary improvement for the intermediate ESL student. College-level reading passages range from narration to argumentation. Students practice the phonetic structure of the English sound and spelling systems to decrease confusion in reading comprehension. Graded exercises, quizzes, comprehension tasks, unit tests, and a final exam are required for successful completion of this course. *Three hours lecture*.

ESL   079   3 Units
Intermediate Sentence Structure:
The English Verb System
Prerequisite: Minimum grade of C in ESL 372, 373, or 374.
Course Advisory: ESL Assessment Test Score: At or above Level 2. An intermediate English course for non-native speakers focusing on the correct use of basic English sentence structures in oral communication. Knowledge of the structures reinforced and verified through written assignments. *Three hours lecture*.

ESL   087   3 Units
Advanced Sentence Structure: Written English
Prerequisite: Minimum grade of C in ESL 078 or 079, or ESL Assessment Test Score: Level 1. An advanced English course for non-native speakers focusing on the correct use of basic English structures in written communication. Knowledge of the structures reinforced and verified through written assignments. Continuation of ESL 079. *Three hours lecture*.

English

ESL   100   3 Units
Health Professionals: Exploring Career Goals
in Health Care
Prerequisite: Eligibilty for placement in ESL 077,078,079.
Course Advisory: SCC minimum English and Math
standards. Designed for health care professionals with
low-intermediate English language proficiency.
Integrated language skills on themes such as career
options and requirements in health care, job resumes and
interviews in health care, and phone and email
communication in health care settings. *Three hours*
lecture.

ESL   101   3 Units
Health Professionals: Communicating
with Patients and Families
Prerequisite: Eligibilty for placement in Level II ESL
courses which are ESL 077, ESL 078, and ESL 079.
Designed for health care professionals with low-
intermediate English language proficiency. Integrated
language skills on themes such as discussion of treatment
options with patients, patient-centered communication
techniques, and strategies for communicating with
special-needs patients. *Three lecture hours.*

ESL   330   0.5-1.5 Unit
ESL Lab
Course Advisory: Familiarity with basic reading and
writing skills: English alphabet letter names, numbers,
and ability to follow directions. Provides structured
listening comprehension and pronunciation practice,
basic grammar practice, and elementary word processing
practice for students new to the English language who
wish to improve their own ability to speak and
understand clearly. This is an open entry/open exit,
Pass/No Pass only course. *One one-half to four one-half*
hours activity.

ESL   372   3 Units
Fundamentals of ESL Reading
Course Advisory: Familiarity with basic reading and
writing skills, English alphabet letter names, numbers,
and ability to follow directions and ESL Assessment Test
Score: Level 3. Offers practice in high beginning level
reading comprehension, vocabulary acquisition and
writing skills development for the ESL student who is
still developing fluency. *Three hours lecture*.

ESL   373   3 Units
ESL Basic Oral Communication Skills
Course Advisory: Familiarity with basic reading and
writing skills, English alphabet letter names, numbers,
and ability to follow directions and ESL Assessment Test
Score: Level 3. For students still developing fluency in
spoken English, this course offers practice in mastering
the patterns of spoken American English through study
of the English sound system (pronunciation),
conversation strategies, related grammar, writing, and
spelling at a high-beginning level of proficiency with oral
communication and listening as the focus. *Three hours*
lecture.

ESL   374   3 Units
Fundamentals of ESL Grammar
Course Advisory: Familiarity with basic reading and
writing skills, English alphabet letter names, numbers,
and ability to follow directions and ESL Assessment Test
Score: Level 3. The major goals of this course are
increasing fluency and comprehension in speaking,
listening, reading and writing English through the
careful, guided study of grammar: Present, future and
past verb tenses, singular and plural nouns, constructing
simple sentences, special verbs and patterns, idioms to
facilitate communication, spelling and study skills for
learning a language. Attendance, participation,
completion of quizzes and homework assignments
requiring reading and writing will determine the
student's success in completing the course. *Three hours*
lecture.