

Maintenance Technician

MT 120 3.0 Units
Principles of Analog Electronics

Course Advisory: SCC minimum English and Math standards.
Introduces the topic of analog electronics as it applies to mechatronics. Studies include an introduction to DC and AC circuitry as well as advanced electronic components, instruments used in the operation, installation, and troubleshooting of electronic systems, schematic diagrams, and breadboarding. Students will construct several kits as part of the class. *Two hours lecture, three hours lab.*

MT 122 3.0 Units
Principles of Digital Electronics

Course Advisory: SCC minimum English and Math standards.
Introduces the topic of digital electronics as it applies to mechatronics. Studies include an introduction to digital numbering systems, digital codes and logic, registers, memories, Boolean Algebra, and integrated circuits as well as advanced topics in computerized control systems. Students will construct several kits as part of the class. *Two hours lecture, three hours lab.*

MT 130 3.0 Units
Principles of Mechanical Power Systems

Course Advisory: SCC minimum English and Math standards.
Introduces the topic of mechanical power systems and mechanical power transmission as it applies to mechatronics. Studies include mechanical theory, mechanical power, thermal systems, hand tools, precision measuring instruments, and mathematics applied to mechanical power systems. Includes studies in manufacturing technology using modern manufacturing equipment and software simulators. *Two hours lecture, three hours lab.*

MT 132 3.0 Units
Principles of Fluid Power Systems

Course Advisory: SCC minimum English and Math standards.
Introduces the topic of hydraulic and pneumatic systems as they apply to mechatronics. Studies include fluid power systems theory, pumps, actuators, accumulators, filters, meters, valves, control devices, and mathematics applied to fluid power systems. Includes studies in manufacturing technology using modern manufacturing equipment and software simulators. *Two hours lecture, three hours lab.*

MT 140 3.0 Units
Principles of Industrial Electrical Systems

Course Advisory: SCC minimum English and Math standards.
Introduces the topic of DC, single-phase and three-phase AC circuits as they apply to mechatronics. Introduces commercial/industrial electrical installations that meet National Electrical Code requirements. Students will complete labs and wiring projects. Lab, electrical and worksite safety is emphasized. *Two hours lecture, three hours lab.*

MT 142 3.0 Units
Principles of Electrical Machinery

Prerequisite: A minimum grade of C in MT 120, or MT 140.
Course Advisory: SCC minimum English and Math standards.
Introduces the topic of electrical machinery as it applies to mechatronics. Studies include direct-current and alternating-current generators, alternators, transmission equipment, and motors. Students will complete labs and electrical machinery projects. Lab, electrical and worksite safety is emphasized. *Two hours lecture, three hours activity.*

MT 162 3.0 Units
Robotic Manufacturing Systems

Course Advisory: SCC minimum English and Math standards.
Presentation of physical principles applied to automated manufacturing systems. Students will develop solutions to manufacturing problems using robots, programmable logic controllers (PLC) and computer numerical control (CNC) manufacturing machines. Students will also apply safety-oriented work habits to the completion of laboratory projects while working individually and in groups. *Two hours lecture, three hours lab.*

MT 164 3.0 Units
Programmable Logic Controllers

Course Advisory: SCC minimum English and Math standards.
Introduces the student to process control via Programmable Logic Controllers (PLC's). Content includes the popular Allen-Bradley PLC systems and the most common command instructions for the RSLogix 5, RSLogix 500, RSLogix 5000, Micrologix 1000, SLC5 and SLC 500 as well as ControlLogix processors. Troubleshooting and electrical safety are emphasized. *Two hours lecture, three hours lab.*

Management

Management

Program Description

This program is designed to emphasize training to improve thought processes and to provide familiarity with the analytical tools of management, sound decision-making, and how to get things done through and with people. Also, this option is designed for initial employment upon graduation and for job advancement opportunities.

Certificate of Achievement and Associate in Science Degree

A Certificate of Achievement can be obtained by completing the 21-unit major. The Associate in Science Degree can be obtained by completing a total of 60 units, including the major, the supporting courses and the general education requirements. All courses for this 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 Management Certificate of Achievement/ Associate Degree will be able to:

1. Demonstrate oral and written skills unique in the business community.
2. Apply leadership, ethical standards, and team building skills necessary for managerial positions in the 21st century.
3. Conduct a personal SWOT analysis for a future small business venture.
4. Design a comprehensive business plan for a future small business venture.
5. Demonstrate the ability to use technology in analyzing and solving business problems.
6. Use basic computation skills to analyze and solve business problems requiring the use of mathematics.

REQUIRED COURSES Units

BUS 005 Introduction to Business	3
BUS 092 Business Communication	3
BUS 181 Business Mathematics	3
CIS 050 Microcomputer Applications	3
MGMT 050 Principles of Management	3
MGMT 055 Management/Leadership Skills	3

MGMT 191 Human Relations

OR

MGMT 193 Human Resource Management

Total Units 21

Supporting Courses (for the A.S.)*Units

ACCT 001 Principles of Accounting - Financial

OR

ACCT 002 Principles of Accounting - Managerial

BUS 018 Legal Environment of Business

ECON 001 Principles of Economics (Macroeconomics) . 3

OR

ECON 002 Principles of Economics (Microeconomics) .. 3

Total Units 10

*Required for the A.S. degree

Recommended Electives

OCED 090 Occupational Work Experience

This is a Gainful Employment Program. For additional information, please visit
http://www.solano.edu/gainful_employment/ and select "Management."

Management

Retail Management

Program Description

Designed to serve the needs of the employees and employers within the retail industry. The program provides the knowledge and skills needed to prepare students for both entry level jobs and upward mobility opportunities in this dynamic and ever changing segment of our economy. Program emphasis is placed on professional and career development

Certificate of Achievement and Associate in Science Degree

A Certificate of Achievement in Retail Management can be obtained by completing the 31 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 for this 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 Retail Management Certificate of Achievement/ Associate Degree will be able to:

1. Demonstrate oral and written skills unique in the business community.
2. Apply leadership, ethical standards, and team building skills necessary for managerial positions in the 21st century.
3. Conduct a personal SWOT analysis for a future small business venture.
4. Design a comprehensive business plan for a future small business venture.
5. Demonstrate the ability to use technology in analyzing and solving business problems.
6. Use basic computation skills to analyze and solve business problems requiring the use of mathematics.

REQUIRED COURSES

(listed in recommended sequence).....	Units
BUS 092 Business Communication	3
BUS 181 Business Mathematics	3
CIS 050 Microcomputer Applications	3
MGMT 050 Principles of Management	3
ACCT 001 Principles of Accounting - Financial	4
MKT 171 Introduction to Marketing	3
MKT 174 Retail Merchandising	3
MGMT 191 Human Relations	3
MGMT 055 Management/Leadership Skills	3
MGMT 193 Human Resource Management	3
Total Units	31

Recommended Electives

BUS 182 Small Business Mathematics
OCED 090 Occupational Work Experience
OCED 091 General Work Experience

NOTE: This program is approved by the Western Association of food chains for awarding of the industry WAFC Certificate.

This is a Gainful Employment Program. For additional information, please visit http://www.solano.edu/gainful_employment/ and select "Retail Management WAFC."

Management

Small Business Management

Program Description

This program is designed for those planning to start their own business, buy an existing business, buy a franchise, or who already own their own business. This option emphasizes learning the concepts and practical skills necessary to be a successful, professional entrepreneur. Specifically designed for working adults, the courses emphasize a systematic approach to business which focuses on the integration of theoretical and practical skills.

Certificate of Achievement and Associate in Science Degree

A Certificate of Achievement can be obtained by completing the 28-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 for this 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 Small Business Management Certificate of Achievement/ Associate Degree will be able to:

1. Demonstrate oral and written skills unique in the business community.
2. Apply leadership, ethical standards, and team building skills necessary for managerial positions in the 21st century.
3. Conduct a personal SWOT analysis for a future small business venture.
4. Design a comprehensive business plan for a future small business venture.
5. Demonstrate the ability to use technology in analyzing and solving business problems.
6. Use basic computation skills to analyze and solve business problems requiring the use of mathematics.

REQUIRED COURSES

(listed in recommended sequence)	Units
MGMT 055 Management/Leadership Skills	3
MKT 174 Retail Merchandising	3
ACCT 050 Computer Accounting	3
BUS 005 Introduction to Business	3
BUS 018 Legal Environment of Business	3
BUS 181 Business Mathematics	3
BUS 182 Small Business Mathematics	1
BUS 092 Business Communication	3
6 units from Recommended Electives	6
Total Units	28

Recommended Electives: (select 6 units)	Units
ACCT 001 Principles of Accounting - Financial	4
ACCT 002 Principles of Accounting - Managerial	4
BUS 060 Introduction to International Business	3
ECON 001 Principles of Economics (Macroeconomics)..	3
ECON 002 Principles of Economics (Microeconomics)...	3
MGMT 191 Human Relations	3
MKT 173 Principles of Selling	3
OCED 090 Occupational Work Experience	1-8
OCED 091 General Work Experience	1-6
OT 054A Beginning Keyboarding A	1.5
OT 054B Beginning Keyboarding B	1.5
OT 055A Intermediate Keyboarding/ Word Processing A	1.5
OT 055B Intermediate Keyboarding/ Word Processing B	1.5

This is a Gainful Employment Program. For additional information, please visit http://www.solano.edu/gainful_employment/ and select "Small Business Management."

Management

MGMT 050

3.0 Units

Principles of Management

Course Advisory: Eligibility for ENGL 001; SCC minimum Math standard. An introduction and comprehensive survey of the theory and practices relevant to the management principles of: planning, organizing, staffing, directing and controlling. The course explores the nature and role of management/supervision in a contemporary environment focusing on the strategic planning, decision-making and problem-solving processes that affect organizational effectiveness and efficiency. Includes quantitative and qualitative methodology used in systems and contingency approach to management. *Three hours lecture.*

MGMT 055

3.0 Units

Management/Leadership Skills

Course Advisory: Eligibility for ENGL 001. A comprehensive development, analysis, and application of fundamental skills needed for the successful practice of supervision/leadership. This course addresses the quality principles of leadership applied to work processes, decision making and problem solving, communication, stress and time management, and delegating/facilitating in a team environment. The focus of the course is on job-relevant skills. Class exercises are employed to teach the various skills. *Three hours lecture.*

MGMT 191

3.0 Units

Human Relations

Course Advisory: SCC minimum English and Math standards. A comprehensive study and analysis of the concepts and skills associated with human behavior and relationships. The course stresses effective supervision and leadership practices as applied to human interaction. *Three hours lecture.*

MGMT 193

3.0 Units

Human Resource Management

Course Advisory: SCC minimum English and Math standards. Human resource administration of public and private organizations including personnel and administrative practices. The student will examine the evolution of unions including the various labor relations acts, collective bargaining processes, grievance procedures, and arbitration. Supervisor's and the steward's roles are emphasized for effectively maintaining negotiated contracts. The course focuses on actual personnel problems, principles and methods involved in recruitment, selecting and placement of employees with regard to affirmative action programs, training, experience and aptitude. *Three hours lecture.*

Marketing

Marketing

Program Description

Marketing involves a variety of activities including selection of target customer, product development, promotion, pricing and distribution. It applies equally to services, ideas, non-profit organizations, and the individual.

Certificate of Achievement and Associate in Science Degree

A Certificate of Achievement can be obtained by completing the 30–unit major 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 for this 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 Marketing Certificate of Achievement/ Associate Degree will be able to:

1. Apply marketing research principles to a company's product or service.
2. Apply advertising principles to promote a firm's image and product/service offering.
3. Develop a marketing plan for a business using the fundamental elements of the marketing mix.

REQUIRED COURSES Units

BUS 005 Introduction to Business 3
BUS 018 Legal Environment of Business 3
BUS 181 Business Mathematics 3

CIS 001 Introduction to Computer Science 3
OR
CIS 050 Microcomputer Applications 3

ECON 002 Principles of Economics (Microeconomics) .. 3

MGMT 050 Principles of Management 3
OR
MGMT 191 Human Relations 3

MKT 171 Introduction to Marketing 3
MKT 172 Market Management and Planning 3
MKT 173 Principles of Selling 3
MKT 174 Retail Merchandising 3

Total Units 30

Recommended Electives

ACCT 001 Principles of Accounting - Financial
BUS 060 Introduction to International Business
BUS 092 Business Communication
CIS 060 Introduction to the Internet
ECON 001 Principles of Economics (Macroeconomics)
MGMT 050* Principles of Management
MGMT 191* Human Relations
MKT 170 Advertising
OCED 090 Occupational Work Experience

***If not taken as part of major**

This is a Gainful Employment Program. For additional information, please visit
http://www.solano.edu/gainful_employment/ and select "Marketing."

Marketing

MKT 171

Introduction to Marketing

Course Advisory: SCC minimum English and Math standards.

A comprehensive study and analysis of initiating the marketing process (for both profit and non-profit organizations) with special emphasis on understanding the consumer and detailed studies of demographics and target marketing. Includes the role of marketing research, the process of defining a marketing problem and then systematically collecting and analyzing information to recommend actions to improve an organization's marketing activities. *Three hours lecture.*

3.0 Units

MKT 172

Market Management and Planning

Course Advisory: SCC minimum English and Math standards.

Covers marketing methodology related to all channels of distribution including pricing strategies, new product/services, and the development and evaluation of breakthrough opportunities. Practical applications in dealing with government regulations and the career field of sales, promotion/advertising. *Three hours lecture.*

3.0 Units

MKT 173

Principles of Selling

Course Advisory: SCC minimum English and Math standards.

The application of traditional selling skills including the approach, demonstrating the product, answering the customer's objections, and closing the sale to the customer's satisfaction. *Three hours lecture.*

3.0 Units

MKT 174

Retail Merchandising

Course Advisory: SCC minimum English and Math standards.

A comprehensive study of the principles and practices of merchandising management of product/services, with emphasis on store location analysis, layout, customer services, buying, sales promotion, consumer credit, and understanding consumer needs and wants. Course includes practical applications related to start-up of a new business and legal constraints of organizing, selling, advertising, consumer relations and personnel practices. *Three hours lecture.*

3.0 Units

Mathematics

Mathematics

Program Description

Successful completion of this major will assure competence in mathematics through differential and integral calculus, providing an adequate background for employment in many technological and scientific areas as well as providing a firm foundation for students planning advanced study.

Associate in Arts Degree

An Associate in Arts Degree can be obtained upon completion of 60 units, including the 20-21 unit major listed below, general education requirements, and electives. All courses for this 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 Mathematics Associate Degree will be able to:

1. Solve problems by applying appropriate math concepts and ideas
2. Effectively communicate the solution(s) of these problems.

REQUIRED COURSES	Units
MATH 020 Analytic Geometry and Calculus I	5
MATH 021 Analytic Geometry and Calculus II	5
MATH 022 Analytic Geometry and Calculus III	4
MATH 023 Differential Equations	4
OR	
MATH 011 Elementary Statistics	4
OR	
MATH 012 Mathematical Ideas	3
MATH 040 Introduction to Linear Algebra	3
Total Units	20 - 21

Mathematics

Associate in Science in Mathematics for Transfer (ADT: A.S.-T)

Program Description

Successful completion of this major will assure competence in mathematics through differential and integral calculus, providing an adequate background for employment in many technological and scientific areas as well as providing a firm foundation for students planning to pursue a baccalaureate degree in mathematics.

Associate in Science in Mathematics for Transfer

The Associate in Science for Transfer is especially appropriate for students who plan to complete a bachelor's degree in Mathematics at a CSU campus. Students completing an AS-T 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 AS-T will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree also prepares students for mathematics 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 the Associate in Science in Mathematics for Transfer degree, students must:

1. Complete 60 semester units that are eligible for transfer to the California State University, including both of the following:
 - a. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements
 - b. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
2. Obtain a minimum grade point average of 2.0.

Program Outcomes

Students who complete the Associate in Science in Mathematics for Transfer degree will be able to:

1. Solve a problem applying appropriate math concepts and ideas.
2. Effectively communicate solution(s).

REQUIRED COURSES Units

MATH 020 Analytic Geometry and Calculus I 5

MATH 021 Analytic Geometry and Calculus II 5

MATH 022 Analytic Geometry and Calculus III 4

MATH 040 Introduction to Linear Algebra 3

MATH 023 Differential Equations 4

OR

MATH 011 Elementary Statistics 4

Required Major Total Units 21

CSU General Education or IGETC Pattern Units 37 - 39

CSU Transferable Electives (as needed to reach 60 transferable units)* 3 - 5

Total Degree Units 60

* 3 units may be double counted toward both the major area of emphasis and CSU General Education or IGETC Pattern. Consult with a counselor for more information on completing this degree.

Mathematics

MATH 002 **3.0 Units**
Algebra For Calculus (College Algebra)

Prerequisite: MATH 104 with a minimum grade of C. *Course Advisory:* SCC minimum English standard. Designed to develop the skills and introduce the concepts necessary for further study in mathematics, and facilitate the application of those skills and concepts to other fields. Included is a review of elementary set algebra; the algebra of functions; the real and complex numbers as a field; algebraic, exponential, and logarithmic functions; equations and inequalities of these functions; solution of linear systems, matrix algebra, and introduction to sequences and series. Assignments may be given that require completion in the Math Activities Center. *Three hours lecture.*

MATH 004 **5.0 Units**
Precalculus Mathematics

Prerequisite: A minimum grade of C in both in MATH 103 and 104. *Course Advisory:* SCC minimum English standard. A comprehensive study of the mathematics that is prerequisite to the calculus sequence. Topics included are the elementary functions and their graphs, methods of solving equations and systems of equations, applied problems that are relevant to calculus, analytic geometry and mathematical induction. Assignments may be given that require completion in the Math Activities Center. NOTE: Not open to students who have completed MATH 051 or MATH 002 with minimum grade of C. *Five hours lecture.*

MATH 011 **4.0 Units**
Elementary Statistics

Prerequisite: A minimum grade of C in either MATH 104 or MATH 112. *Course Advisory:* Eligibility for ENGL 001. An introduction to elementary probability and statistics including the basic rules of probability, probability distributions, descriptive statistics, hypothesis testing, estimation, correlation and regression analysis using data from a variety of disciplines and appropriate technology. Assignments may be given that require completion in the Math Activities Center. C-ID MATH 110. *Four hours lecture.*

MATH 012 **3.0 Units**
Mathematical Ideas

Prerequisite: A minimum grade of C in MATH 104 or MATH 112. *Course Advisory:* SCC minimum English standard. An introduction to the diversity of mathematics through the examination of ideas from logic, sets, the numeration systems, and other topics from contemporary mathematics. The emphasis is on problem solving. *Three hours lecture.*

MATH 020 **5.0 Units**
Analytic Geometry and Calculus I

Prerequisite: A minimum grade of C in both MATH 002 and MATH 051, or MATH 004 with a minimum grade of C. *Course Advisory:* SCC minimum English standard. The first of the three-semester sequence in Analytic Geometry and Calculus for students majoring in mathematics, engineering, and most physical sciences, is the study of the differential and integral calculus of functions of one variable. Topics covered are limits, continuity, differentiation of algebraic and transcendental functions, applications of the derivative, definite and indefinite integrals, fundamental theorem of calculus, and applications of the definite integral. Assignments may be given that require completion in the Math Activities Center. *Five hours lecture.*

MATH 021 **5.0 Units**
Analytic Geometry and Calculus II

Prerequisite: MATH 020 with a minimum grade of C. *Course Advisory:* SCC minimum English standard. The second of the three-semester sequence in Analytic Geometry and Calculus for students majoring in mathematics, engineering, and most physical sciences, continues the study of the differential and integral calculus of functions of one variable. Topics included are introduction to differential equations, computing area and volume, applications and techniques of integration, polar coordinates, infinite series, improper integrals, and L'Hopital's Rule. C-ID MATH 220. Assignments may be given that require completion in the Math Activities Center. *Five hours lecture.*

MATH 022 **4.0 Units**
Analytic Geometry and Calculus III

Prerequisite: MATH 021 with a minimum grade of C. *Course Advisory:* SCC minimum English standard. The third of the three-semester sequence in Analytic Geometry and Calculus for students majoring in mathematics, engineering, and most physical sciences, is a study of three-dimensional analytic geometry, vectors and vector-valued functions, functions of several variables, the calculus of these functions, and vector analysis including Green's and Stokes' theorems. *Four hours lecture.*

Mathematics

MATH 023

Differential Equations

Prerequisite: MATH 021 with a minimum grade of C. *Course Advisory:* SCC minimum English standard. This course covers ordinary differential equations emphasizing linear differential equations and systems with applications to engineering, physics, and chemistry. Included are La Place transforms and power series methods of solution. C-ID MATH 240. *Four hours lecture.*

4.0 Units

MATH 040

Introduction to Linear Algebra

Prerequisite: MATH 021 with a minimum grade of C. *Course Advisory:* SCC minimum English standard. NOTE: A relatively high degree of mathematical maturity is required for this course. An introduction to linear algebra, with a focus on finite dimensional real vector spaces. Topics include systems of linear equations and matrices, linear transformations, general vector spaces, eigenvectors and eigenvalues and associated eigenspaces, inner products and orthogonality. C-ID MATH 250. *Three hours lecture.*

3.0 Units

MATH 026

Mathematics and Engineering Problem Solving Using Matlab

Prerequisite: MATH 021 with a minimum grade of C; May be taken concurrently. This course covers methodologies for solving mathematics and engineering problems. Students will also learn to perform mathematics and engineering computation and visualization using the MATLAB language. Students will write a variety of programs in the MATLAB language. Same course as ENGR 026. *Three hours lecture, three hours by arrangement.*

4.0 Units

MATH 049

Mathematics Honors

Prerequisite: MATH 021 with a minimum grade of B. This course requires students to complete an independent student project under the supervision of a member of the faculty. The project may involve extensive problem solving, research, or data analysis. In all cases, the final written product should show integration and synthesis of ideas. Students may take this course up to the maximum number of units over multiple semesters. This course requires approval of a faculty member sponsor and the Dean of the School of Math & Sciences. *Three to nine hours lab by arrangement.*

1.0 to 3.0 Units

MATH 030

Analytic Geometry and Calculus

Prerequisite: Math 104 with a minimum grade of C. *Course Advisory:* SCC minimum English standard. MATH 030 and 031 is a two-semester sequence in analytic geometry and calculus for students majoring in business, biological, and social sciences. This is not the calculus course for students majoring in mathematics, engineering or the physical sciences. MATH 030 covers differential and integral calculus of a single variable. Topics include limits, continuity, derivatives of algebraic and transcendental functions and their applications, integrals and their applications, and plane analytic geometry. Assignments may be given that require completion in the Math Activities Center. NOTE: Not open to students who have completed MATH 020 with a minimum grade of C. *Three hours lecture.*

3.0 Units

MATH 051

Trigonometry

Prerequisite: A minimum grade of C in both MATH 103 and MATH 104. *Course Advisory:* SCC minimum English standard. Presents the essentials of plane trigonometry to prepare students for subsequent studies in physics, calculus or related technical programs. Topics include definitions of the trigonometric functions and inverse trigonometric functions, solutions of triangles and applied problems, graphs, trigonometric identities and equations, and the trigonometric form of complex numbers. Assignments may be given that require completion in the Math Activities Center. *Three hours lecture.*

3.0 Units

MATH 031

Analytic Geometry and Calculus

Prerequisite: MATH 030 with a minimum grade of C. *Course Advisory:* SCC minimum English standard. A continuation of the calculus of functions of one variable (MATH 030). Topics included are the fundamental theorem of calculus, techniques of integration, numerical methods of integration, functions of several variables, elementary differential equations, and infinite series. Assignments may be given that require completion in the Math Activities Center. *Three hours lecture.*

3.0 Units

MATH 103

Plane Geometry

Prerequisite: A minimum grade of C in either MATH 330 or MATH 330B. *Course Advisory:* SCC minimum English standard. The study of Euclidean (plane) geometry through conjecture, proof, and problem solving. Topics include the mathematical relationships of angles, parallels, triangles, quadrilaterals, circles, and solids. Additionally, coordinate geometry transformations are covered. Assignments may be given that require completion in the Math Activities Center. *Three hours lecture.*

3.0 Units

Mathematics

MATH 104**Intermediate Algebra**

Prerequisite: A minimum grade of C in either MATH 330 or MATH 330B. *Course Advisory:* SCC minimum English standard. An extension of the fundamental algebraic concepts developed in elementary algebra. Additional topics include arithmetic operations on functions; composition of functions; basic graphing techniques; absolute value, exponential, logarithmic, quadratic, linear, and polynomial functions; equations of the second degree and their graphs; complex numbers; and systems of linear equations in two and three variables. Assignments may be given that require completion in the Math Activities Center. *Five hours lecture.*

MATH 112**Intermediate Algebra for Liberal Arts**

Prerequisite: A minimum grade of C in either MATH 330 or MATH 330B. *Course Advisory:* SCC minimum English standard. In this course students will develop their ability to solve problems with algebraic reasoning and learn to effectively communicate their solutions. Topics include number sense, functions, use of linear and exponential functions to model bivariate data, logarithms and an introduction to descriptive statistics and probability. This course is designed to meet the mathematics graduation requirement for an associates degree. This course can also be taken by students planning to transfer to a four-year institution and major in an area of liberal arts (non-STEM majors) that requires either Statistics (MATH 011) or Math Ideas (MATH 012). Students who need a calculus course must take MATH 104 in preparation for pre-calculus. All transfer students should consult with a counselor or mathematics instructor for advice on whether to take MATH 112 or MATH 104. 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. *Four hours lecture, one hour lab.*

MATH 160**Math for Nursing School Students**

Prerequisite: CONDITION OF ENROLLMENT: Current acceptance or on the waiting list of an RN Program. This course focuses on mathematics topics that are critical to success for students entering an RN program. This course provides a review of select 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. Pass/No Pass only course. *Two hours lecture. (4-week course)*

5.0 Units**MATH 305****Prepare for Math Success**

Students will review basic skills math topics from the last math course previously completed with the online math review program. In addition, students will explore and improve their math study skills. Students will need access to the internet. *4 hours lecture (2 week course).*

0.5 Units**MATH 310****Arithmetic**

Course Advisory: SCC minimum English standard. A course in basic mathematical computations designed to improve arithmetic skills and prepare the student for a pre-algebra level math course. Major topics include whole numbers, fractions, decimals, percents, simple geometry, measurement, and basic statistics. NOTE: Not open for credit to students who have completed MATH 304. *Three hours lecture.*

3.0 Units**MATH 320****Pre-Algebra**

Prerequisite: MATH 310 with a minimum grade of C, or 3 units of credit in MATH 304, or 3 units of BUS 181 with a minimum grade of C. *Course Advisory:* SCC minimum English standard. A course in pre-algebra designed to prepare the student for transition into a beginning algebra course. Major topics include operations on integers and rational numbers, the order of operations, introduction to variables, simplifying and evaluating expressions, solving basic linear equations, proportions, percents, basic geometry, graphing, and application 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. *Four hours lecture, one hour lab.*

4.0 Units**MATH 330****Elementary Algebra**

Prerequisite: MATH 320 with a minimum grade of C. *Course Advisory:* SCC minimum English standard. Introductory examination of the structure of the number system. Covers such topics as an introduction to set operations, the field axioms of the real numbers, and the properties of the whole number exponents. Emphasizes operations with fundamental expressions, solutions of first-degree equations, inequalities and linear systems. Introduces absolute value, radical and quadratic equations, applied problems involving first and second degree equations in one variable, point-slope and slope-intercept equations of lines and their graphs, and the concepts of relations and functions. Not open to students who have passed MATH 330A. Assignments may be given that require completion in the Math Activities Center. *Five hours lecture.*

5.0 Units

Mathematics

MATH 330A

Elementary Algebra, Part I

Prerequisite: MATH 320 with a minimum grade of C. Course Advisory: SCC minimum English standard. Introductory examination of the structure of the number system. Covers such topics as an introduction to the concept of set operations, the field axioms of the real numbers, order of operations, properties of whole number exponents, variables, variable expressions, operations with monomials, definition of a polynomial, addition and subtraction of polynomials, linear equations, graphing linear equations, linear inequalities, and systems of linear equations, solutions of first degree equations and inequalities in one variable, and applications. A student must take MATH 330B to complete Elementary Algebra. Students who pass MATH 330A are not eligible for MATH 330. Assignments may be given that require completion in the Math Activities Center. Three hours lecture.

3.0 Units

MATH 330B

Elementary Algebra, Part II

Prerequisite: MATH 330A with a minimum grade of C. Course Advisory: SCC minimum English standard. Covers such topics as multiplication and division of polynomials, factoring, solving quadratic equations by factoring, operations with rational expressions, simplifying rational expressions, solutions of equations containing rational expressions, roots, radicals and the quadratic formula, and introduction to functions. Successful completion of Math 330B completes Elementary Algebra. Assignments may be given that require completion in the Math Activities Center. Three hours lecture.

3.0 Units

Music

Associate in Arts in Music for Transfer (ADT: A.A.-T)

Program Description

The Associate in Arts in Music for Transfer degree provides students with the foundations for a broad range of musical specializations such as instrumental performance, vocal performance, jazz performance, composition, theory, musicology, ethnomusicology, music education, and music industry.

Associate in Arts in Music for Transfer

The Associate in Arts in Music for Transfer degree provides students with the foundations for a broad range of musical specializations such as instrumental performance, vocal performance, jazz performance, composition, theory, musicology, ethnomusicology, music education, and music industry. The Associate in Arts in Music for Transfer provides students with a major that fulfills the general requirements of the California State University for transfer. Students completing an Associate in Arts in Music for Transfer degree are guaranteed admission with junior status to the CSU system, but not to a particular campus or major.

To earn the Associate in Arts in Music for Transfer degree, students must:

1. complete 60 semester units that are eligible for transfer to the California State University, including both of the following:
 - a. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements
 - b. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
2. Obtain a minimum grade point average of 2.0.

Program Outcomes

Students who complete the Associate in Arts in Music for Transfer degree will be able to:

1. Analyze and perform the elements of music (rhythm, melody, harmony and form) with technical facility and artistry as a soloist and as a member of an ensemble.
2. Analyze musical scores and compositions
3. Critique personal music performances and those of other musicians.
4. Compare and contrast the characteristics of various musical cultures and historical periods.

REQUIRED COURSES	Units
MUSC 005 Music Fundamentals.....	3
MUSC 002 Beginning Theory II	4
MUSC 003 Advanced Theory I	4
MUSC 004 Advanced Theory II	4
MUSC 040A Applied Music I	0.5
MUSC 040B Applied Music II	0.5
MUSC 040C Applied Music III	0.5
MUSC 040D Applied Music IV	0.5
<i>Four semesters of Large Ensemble courses (a total of 4 units):</i>	<i>4</i>
Total Units	21

LARGE ENSEMBLE COURSES	4 units
MUSC 009 Wind Ensemble	1
MUSC 010 Concert Band	1
MUSC 011 Symphonic Band	1
MUSC 014 Jazz Ensemble	1
MUSC 015 Stage Band	1
MUSC 016 Symphony Orchestra	1
MUSC 017 Chamber Orchestra	1
MUSC 020 Choir	1
MUSC 024 Master Works Chorale	1
MUSC 025 Chamber Choir	1
MUSC 026 Vocal Jazz Ensemble	1

Required Major Total Units	21
CSU General Education or IGETC Pattern Units .	37 - 39
CSU Transferable Electives	
<i>(as needed to reach 60 transferable units)*</i>	3 - 5
Total Degree Units	60

Music

Music-Instrumental

Program Description

Students may select from three music programs--Instrumental, Theory-Composition, or Vocal. Music majors are urged to take class lessons or private instruction in their specialization each semester.

Associate in Arts Degree

The Associate in Arts Degree can be obtained by completing a total of 60 units, including the courses in the major for Instrumental, or Theory-Composition, or Vocal, the general education requirements, and elective courses. All courses for this major must be completed with 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 Music – Instrumental Associate Degree will be able to:

1. Learn and rehearse a piece utilizing various musical techniques.
2. Analyze/compose a musical exercise using a variety of technical skills.
3. Critically evaluate a musical work.

REQUIRED COURSES Units

MUSC 003 Advanced Theory 4
MUSC 004 Advanced Theory 4

MUSC 010* Concert Band 2

OR

MUSC 021 Chorus 2

MUSC 041A Music Majors Piano 1.5

MUSC 041B Music Majors Piano 1.5

One course from List A 1 - 1.5

Seven units from List B 7

Total Units 21 - 21.5

List A: (select one course) Units

MUSC 030 Intermediate Piano Part II 1.5

MUSC 032 Class Lessons in Brass 1.5

MUSC 033 Class Lessons in Strings 1

MUSC 034 Class Lessons in Percussion 2

MUSC 039 Class Lessons in Intermediate Guitar 1.5

List B: (select 7 units) Units

MUSC 008 Music Appreciation 3

MUSC 013 Multicultural Music in America 3

MUSC 014 Jazz Ensemble 2

MUSC 016 Symphony Orchestra 0.5 - 1

MUSC 017 Chamber Orchestra 2

MUSC 018 Beginning Steel Drum Band 2

MUSC 019 Instrumental Ensemble 2

MUSC 023 Handbell Ensemble 2

MUSC 042A Jazz and Pop Piano 1.5

OR

MUSC 042B Jazz and Pop Piano 1.5

MUSC 055 Introduction to Jazz Improvisation 3

MUSC 056 Jazz Improvisational Ensemble 3

***MUSC 010 required first semester of enrollment**

Music

Music-Theory-Composition

Program Description

Students may select from three music programs--Instrumental, Theory-Composition, or Vocal. Music majors are urged to take class lessons or private instruction in their specialization each semester.

Associate in Arts Degree

The Associate in Arts Degree can be obtained by completing a total of 60 units, including the courses in the major for Instrumental, or Theory-Composition, or Vocal, the general education requirements, and elective courses. All courses for this major must be completed with 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 Music - Theory – Composition Associate Degree will be able to:

1. Learn and rehearse a piece utilizing various musical techniques.
2. Analyze/compose a musical exercise using a variety of technical skills.

REQUIRED COURSES Units

MUSC 003 Advanced Theory 4

MUSC 004 Advanced Theory 4

MUSC 010* Concert Band 2

OR

MUSC 021 Chorus 2

MUSC 030 Intermediate Piano Part II 1.5

MUSC 041A Music Majors Piano 1.5

MUSC 041B Music Majors Piano 1.5

7 units from List A 7

Total Units 21

List A: (select 7 units) Units

MUSC 006 Composition, Arranging, Songwriting 3

MUSC 008 Music Appreciation 3

MUSC 013 Multicultural Music in America 3

MUSC 052 Sound Recording 2

MUSC 053 Advanced Sound Recording 2

MUSC 055 Introduction to Jazz Improvisation 3

MUSC 056 Jazz Improvisational Ensemble 3

MUSC 060 Computer Assisted Music Lab 1 - 3

MUSC 061 MIDI and Computer Music

Sequencing and Scoring 2

***MUSC 010 is required the first semester of enrollment**

Music

Music-Vocal

Program Description

Students may select from three music programs--Instrumental, Theory-Composition, or Vocal. Music majors are urged to take class lessons or private instruction in their specialization each semester.

Associate in Arts Degree

The Associate in Arts Degree can be obtained by completing a total of 60 units, including the courses in the major for Instrumental, or Theory-Composition, or Vocal, the general education requirements, and elective courses. All courses for this major must be completed with 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 Music - Vocal Associate Degree will be able to:

1. Learn and rehearse a piece utilizing various musical techniques.
2. Analyze/compose a musical exercise using a variety of technical skills.
3. Critically evaluate a musical work.

REQUIRED COURSES Units

MUSC 003 Advanced Theory 4

MUSC 004 Advanced Theory 4

MUSC 010* Concert Band 2

OR

MUSC 021 Chorus 2

MUSC 041A Music Majors Piano 1.5

MUSC 041B Music Majors Piano 1.5

One course from List A 1.5

7 units from List B 7

Total Units 21.5

List A: (select one course) Units

MUSC 035A Beginning Voice I 1.5

MUSC 035B Beginning Voice II 1.5

MUSC 036A Intermediate Voice I 1.5

MUSC 036B Intermediate Voice II 1.5

List B: (select 7 units)..... Units

MUSC 008 Music Appreciation 3

MUSC 013 Multicultural Music in America 3

MUSC 020 Choir 2

MUSC 024 Master Works Chorale 2

MUSC 025 Chamber Choir 2

MUSC 026 Vocal Jazz Ensemble 2

MUSC 051 Jazz and Popular Solo voice 1.5

*MUSC 010 is required the first semester of enrollment

Music

MUSC 001 **4.0 Units**
Beginning Theory I
Course Advisory: MUSC 027 or knowledge of musical notation; SCC minimum English and Math standards. This course is a study of diatonic scales and triads, intervals, diatonic chords, basic harmonic progressions and cadences, part writing, rhythm and meter, sight singing, ear training, dictation, history and performance. Short creative assignments are included to provide experience in the application of materials learned in class. It includes analysis and composition and is required for music majors. C-ID MUS 120; MUS 125. *Four hours lecture.*

MUSC 002 **4.0 Units**
Beginning Theory II
Prerequisite: MUSC 001 with a minimum grade of C. Course Advisory: MUSC 028; SCC minimum English and Math standards. This course is a continuation of MUSC 001. It provides a more in-depth study of scales, triads, diatonic harmonies, part writing, rhythms, sight singing, ear training, dictation, form, history, and performance. It also includes the study of harmonic progression, dominant and non-dominant seventh chords, modulation, secondary function chords, and binary and ternary form. It includes analysis and composition and is required for music majors. C-ID MUS 130; MUS 135. *Four hours lecture.*

MUSC 003 **4.0 Units**
Advanced Theory I
Prerequisite: MUSC 002 with a minimum grade of C. This course is a continuation of MUSC 002. It includes the study of 16th- and 18th- century counterpoint, fugue, variation, altered chords, sonata allegro, and rondo forms, and late 19th century writing techniques; practice in rhythmic, melodic, harmonic, and contrapuntal sight singing; ear training, and dictation. This course is required for music majors. C-ID MUS 140; MUS 145. *Four hours lecture.*

MUSC 004 **4.0 Units**
Advanced Theory II
Prerequisite: MUSC 003 with a minimum grade of C. Course Advisory: MUSC 030; SCC minimum English and Math standards. This course is a continuation of MUSC 003. It includes a more in-depth study of altered chords and late 19th- and 20th-century writing techniques including: 9th, 11th and 13th chords; altered dominants; chromatic harmony; dodecaphony; set theory; aleatory; minimalism; and analysis techniques. It includes practice in rhythmic, melodic, harmonic and contrapuntal sight-singing, ear-training and dictation. This course is required for music majors. C-ID MUS 150; MUS 155. *Four hours lecture.*

MUSC 005 **3.0 Units**
Music Fundamentals
Course Advisory: SCC minimum English and Math standards. This course introduces the elements of music including notation, rhythm and meter, diatonic scales and triads, key signatures, melody, chords and aural skills. Traces the historical and cultural progress of music through the development of musical symbols and their application. No previous musical study is required. C-ID MUS 110. *Three hours lecture.*

MUSC 007 **3.0 Units**
Jazz and Popular Music in America: Ragtime to Rock
Course Advisory: SCC minimum English standard. A survey of jazz and popular music in America, using an historical approach. Includes listening to and analyzing examples of jazz and popular music in relation to the social, technical and historical trends. *Three hours lecture.*

MUSC 008 **3.0 Units**
Music Appreciation
Course Advisory: SCC minimum English standard. This course is an introductory examination of how composers and songwriters apply the various elements of music to heighten the expressive impact of a composition. Aspects of melody, rhythm, harmony, tone, and structure are studied through focused listening of works from the Renaissance to contemporary styles of avant-garde and popular music. This course requires no previous musical study. *Three hours lecture.*

MUSC 009 **1.0 Units**
Wind Ensemble
Course Advisory: SCC minimum English and Math standards; Limitation on Enrollment: Ability to play a wind ensemble instrument. Students must demonstrate an adequate level of proficiency on an instrument to participate and perform with the wind ensemble. This course is the study and performance of wind ensemble repertoire. It is open to those who play a wind ensemble instrument. Public performances and/or field trips are required. Repeatable 3 times. C-ID MUS 180. *Three hours activity, one hour by arrangement.*

Music

MUSC 010

1.0 Units

Concert Band

Course Advisory: SCC minimum English and Math standards; Limitation on Enrollment: Ability to play a concert band instrument. Students must demonstrate an adequate level of proficiency on an instrument to participate and perform with the concert band. This course offers the study and performance of concert band literature. It is open to those who play a concert band instrument. Public performances and/or field trips are required. Repeatable 3 times. C-ID MUS 180. Three hours activity, one hour by arrangement.

MUSC 011

1.0 Units

Symphonic Band

Course Advisory: SCC minimum English and Math standards. This course offers the study and performance of various styles of symphonic band literature. Symphonic band literature, rehearsal technique, and performance practices are examined. Public performances and/or field trips are required. Repeatable 3 times. Three hours activity, one hour by arrangement.

MUSC 013

3.0 Units

Multicultural Music in America

Course Advisory: SCC minimum English standard. A survey of multicultural music in America, including listening to and analyzing examples of multicultural music in relations to social, technical, and historical trends, including the role of music in influencing American attitudes toward ethnic identity, stereotyping, and racial prejudice. This course also examines the uniquely American style resulting from the interaction among musicians of many cultural, racial, national, and ethnic backgrounds. Three hours lecture.

MUSC 014

1.0 Units

Jazz Ensemble

Course Advisory: SCC minimum English and Math standards; Limitation on Enrollment: Ability to play at least one instrument commonly used in jazz ensemble. This course is the study and performance of jazz ensemble repertoire encompassing a wide variety of music in the jazz style. Public performances and field trips are required. Repeatable 3 times. C-ID MUS 180. Three hours activity, one hour by arrangement.

MUSC 015

1.0 Units

Stage Band

Course Advisory: SCC minimum English and Math standards; Limitation on Enrollment: Ability to perform on one or more instruments in the stage band. Students must demonstrate an adequate level of proficiency on an instrument to participate and perform with the stage band. An instrumental ensemble class analyzing and performing stage band music. This class requires public performance. Repeatable 3 times. C-ID MUS 180. Three hours activity, one hour by arrangement.

MUSC 016

1.0 Units

Symphony Orchestra

Course Advisory: SCC minimum English and Math standards; Limitation on Enrollment: Ability to play an orchestral instrument. Students must demonstrate an adequate level of proficiency on an instrument to participate and perform with the symphony orchestra. This course is the study and performance of orchestral repertoire. It is open to those who play an orchestral instrument. A wide variety of musical literature is covered. Public performances and/or field trips are required. Repeatable 3 times. This is an Open Entry/Open Exit course. C-ID MUS 180. Three hours activity, one hour by arrangement.

MUSC 017

1.0 Units

Chamber Orchestra

Course Advisory: SCC minimum English and Math standards; Limitation on Enrollment: Ability to play an orchestral instrument. Students must demonstrate an adequate level of proficiency on an instrument to participate and perform with the chamber orchestra. This course is the study and performance of chamber orchestra repertoire. It is open to those who play an orchestral instrument. Public performances and/or field trips are required. Repeatable 3 times. C-ID MUS 180. Three hours activity, one hour by arrangement.

MUSC 018

2.0 Units

Beginning Steel Drum Band

Course Advisory: SCC minimum English and Math standards. An ensemble class with emphasis on music from the Caribbean. Regular rehearsal and performances using steel drums. This class also presents a comparison of Caribbean musical performance styles. Public performances and/or field trips required. Repeatable 3 times. One hour lecture, two hours activity, one hour by arrangement.

MUSC 019

2.0 Units

Instrumental Ensemble

Course Advisory: Ability to read music and play an instrument. The study and performance of representative music literature for strings, woodwinds, brass and small mixed group ensembles. Includes improvisation, reading, ensemble practice and outside performance when possible. Repeatable 3 times. Two hours lecture, one hour activity.

Music

MUSC 020 Choir

1.0 Units

Course Advisory: SCC minimum English and Math standards. Limitation on Enrollment: Ability to sing in a choir. Students must demonstrate an adequate level of proficiency to participate and perform with the choir. A performing mixed choir (S.A.T.B.) that studies and performs a variety of a cappella and accompanied choral literature. This course teaches fundamentals of reading choral music, using examples from choral literature. Note: This course may be repeated three times for a total of four enrollments since skills are enhanced by supervised repetition and practice. Attendance at public performances required. Field trips may be required. Students will be involved in public performances. Repeatable 3 times. C-ID MUS 180. Three hours activity, one hour by arrangement.

MUSC 021 Chorus

1.0 Units

Course Advisory: SCC minimum English and Math standards. Prerequisite: Students must demonstrate an adequate level of vocal proficiency to participate in and perform with the Chorus. Audition required. A performing mixed choir (S.A.T.B.) that sings a variety of music, both historical and contemporary. This course teaches fundamentals of reading choral music, using examples from choral literature. Note: This course may be repeated three times for a total of four enrollments since skills are enhanced by supervised repetition and practice. Repeatable 3 times. Three hours activity, one hour by arrangement.

MUSC 023 Handbell Ensemble

2.0 Units

Course Advisory: SCC minimum English and Math standards. Presents the study and performance of music for handbells. Music reading skills, techniques of handbell ringing, and musicianship skills are taught through lecture, rehearsal and performance of various styles of music arranged for handbells. Previous musical experience is helpful but not required. Public performance is required. Repeatable 3 times. One hour lecture, two hours activity, one hour by arrangement.

MUSC 024 Master Works Chorale

1.0 Units

Prerequisite: Audition to assess ability of music reading and vocal skills. Course Advisory: SCC minimum English and Math standards. Students must demonstrate an adequate level of vocal proficiency to participate and perform with the Master Works Chorale. Audition required. A performing mixed choir (S.A.T.B.) that sings a variety of music, both historical and contemporary, with an emphasis on large choral forms such as oratorios and cantatas, accompanied by instruments. Designed for singers with previous choral experience. Public performance required. Repeatable 3 times. C-ID MUS 180. Three hours activity, one hour by arrangement.

MUSC 025 Chamber Choir

1.0 Units

Course Advisory: SCC minimum English and Math Standards. Prerequisite: Audition required to assess ability of music reading and vocal skills. Students must demonstrate an adequate level of vocal proficiency to participate and perform with the Chamber Choir. Advanced study and performance of choral works for the small ensemble. Public performance required. Highly recommended for music majors, especially voice majors. Participation in public performances required. Field trips are required. Repeatable 3 times. C-ID MUS 180. Three hours lab, one hour by arrangement.

MUSC 026 Vocal Jazz Ensemble

1.0 Units

Course Advisory: SCC minimum English and Math Standards. Prerequisite: Audition required to assess ability of music reading and vocal skills. Students must demonstrate an adequate level of vocal proficiency to participate and perform with the Chamber Choir. Course Advisory: SCC minimum English standard. Advanced study and performance of choral works for the small ensemble. Public performance required. Highly recommended for music majors, especially voice majors. Participation in public performances required. Field trips are required. Repeatable 3 times. C-ID MUS 180. Three hours lab, one hour by arrangement.

Music

MUSC 027 **1.5 Units**
Elementary Piano Part I

Course Advisory: SCC minimum English. An introduction to beginning piano techniques, including hand position, posture, fingering, technical exercises, note reading, sight reading, and performance of piano literature. Numerous examples are assigned to demonstrate the essentials of reading and counting skills, coupled with the presentation of major and minor scales, chords, and other fundamentals of piano playing. *One hour lecture, one hour activity.*

MUSC 028 **1.5 Units**
Elementary Piano Part II

Prerequisite: MUSC 027. Course Advisory: SCC minimum English standards. A continuation of MUSC 027, this course expands the elementary piano techniques by exploring a progressive series of pieces and exercises which develop the reading skills and other concepts used in performance practice. Stresses use of all major and minor scales, arpeggios in exercise form, sight reading, chromatic fingering, and performance. *One hour lecture, one hour activity.*

MUSC 029 **1.5 Units**
Intermediate Piano Part I

Prerequisite: MUSC 028. Course Advisory: SCC minimum English standards. Presents the intermediate level of piano technique and literature. Emphasis is on interpretation, fingering, phrasing, technical studies and exercises including performance. Sight reading and continued development through the mastery of progressive pieces enables the pianist to reach a greater overall skill level and confidence during performance. *One hour lecture, one hour activity.*

MUSC 030 **1.5 Units**
Intermediate Piano Part II

Prerequisite: MUSC 029. Course Advisory: SCC minimum English standards. Presents more difficult techniques for the intermediate pianist. Emphasizes the culmination of reading skills, motor coordination, knowledge of harmony, exercises and fingering, overall interpretation, dynamics, attention to form, advanced technical problems concerning performance of the literature. Recommended for students seeking a working knowledge in piano, comparable to second year level in the literature. *One hour lecture, one hour activity.*

MUSC 031 **1.5 Units**
Class Lessons in Woodwinds

Class instruction in woodwind instruments. Music majors are required to take one unit of instruction in their major instrument for graduation. Four units are recommended for transfer majors. This class requires outside practice. *One hour lecture, one hour activity.*

MUSC 032 **1.5 Units**
Class Lessons in Brass

Class instruction in brass instruments. Music majors are required to take one unit of instruction in their major instrument for graduation. Four units are recommended for transfer majors. This class requires outside practice. *One hour lecture, one hour activity.*

MUSC 033 **1.0 Units**
Class Lessons in Strings

Class instruction in strings. Transfer students are required to study four semesters in their major instrument. *One hour lecture, one hour activity.*

MUSC 034 **2.0 Units**
Class Lessons in Percussion

Class instruction in percussion instruments. Music majors are required to take one unit of instruction in their major instrument. Transfer majors are required to study four semesters in their major instrument. This class requires outside practice. *One hour lecture, two hours activity.*

MUSC 035A **1.5 Units**
Beginning Voice I

Course Advisory: SCC minimum English standard. Group work on the fundamental techniques of singing, including literature of traditional/folk, art, musical theater and popular classics. Includes analysis of individual problems and the opportunity for solo performance. Transfer voice majors should study voice each semester. *One hour lecture, one hour activity.*

MUSC 035B **1.5 Units**
Beginning Voice II

Prerequisite: MUSC 035A. Course Advisory: SCC minimum English standard. A continuation of MUSC 035A. Group work on the fundamental techniques of singing, including study of standard vocal literature for solo performance, with increased emphasis in developing vocal and performance skills. *One hour lecture, one hour activity.*

MUSC 036A **1.5 Units**
Intermediate Voice I

Prerequisite: MUSC 035B. Course Advisory: SCC minimum English standard. A continuation of MUSC 035B with emphasis on the development of vocal technique and interpretation. Repertoire includes classical compositions from the English, Italian, and German languages. Analysis of individual vocal problems and performance skills is included. *One hour lecture, one hour activity.*

Music

MUSC 036B 1.5 Units
Intermediate Voice II

Prerequisite: MUSC 036A. A continuation of MUSC 036A with emphasis on vocal technique and interpretation. Solo repertoire appropriate to intermediate level includes standard voice literature. Analysis of individual vocal problems and performance skills is included. One hour lecture, one hour activity.

MUSC 038 1.5 Units
Class Lessons in Beginning Guitar

Presents the principles and techniques of fundamental guitar performance. The course stresses first position techniques, notereading, scales, fingerboard knowledge, chord positions, picking and strum techniques, and performance of selected musical literature appropriate to the beginning level. *One hour lecture, two hours activity.*

MUSC 039 1.5 Units
Class Lessons in Intermediate Guitar

Prerequisite: MUSC 038 or equivalent as assessed by instructor and ability to read simple guitar music. Presents the intermediate instruction level in guitar performance techniques and musical skill. The course covers 3rd and 5th positions, solo performance, musical notation exercise and application, musical interpretation and style, and intermediate literature. One hour lecture, two hours activity.

MUSC 040A 0.5 Units
Applied Music I

Corequisite: Student must be concurrently enrolled in a large performance ensemble (MUSC 009, 010, 011, 014, 015, 016, 017, 020, 021, 024 or 025) AND in a music theory class (MUSC 001, 002, 003 or 004). Prerequisite: Audition. Student must meet the performance standards of an entering first semester college music major as determined by an entrance audition. This is the first course in a four-part series which focuses on the development of individual performance skills and solo and ensemble repertoire. It includes one-on-one or small group instrumental, composition, or vocal instruction eight hours per semester. It also includes eight hours per semester of solo performance, masterclasses, and a final juried performance. It also includes one hour monitored practice time per week. This course is required for all traditional performance and jazz music majors. Students must be concurrently enrolled in a large performance ensemble and a music theory course. It is the first course in the four-part series required for the Associate Degree for Transfer. Audition required. Student must meet the performance standards of an entering first semester college traditional music major as determined by an entrance audition. C-ID MUS 160. One hour lab, one half-hour by arrangement.

MUSC 040B 0.5 Units
Applied Music II

Corequisite: Student must be enrolled in a large performance ensemble (MUSC 009, 010, 014, 015, 016, 017, 020, 021, 024, 025, or 026) AND in a music theory class (MUSC 001, 002, 003, 004). Prerequisite: MUSC 040A with a minimum grade of C. Audition required: Students must meet the performance standards of an entering second-semester college traditional music major as determined by an entrance audition. This is the second course in a four-part series which focuses on the development of individual performance skills and solo and ensemble repertoire. It includes one-on-one or small group instrumental, composition, or vocal instruction eight hours per semester. It also includes eight hours per semester of solo performance, masterclasses, and a final juried performance. It also includes one hour monitored practice time per week. This course is required for all traditional performance and jazz music majors. Students must be concurrently enrolled in a large performance ensemble and a music theory course. It is the second course in the four-part series required for the Associate Degree for Transfer. Audition required. Student must meet the performance standards of an entering second semester college traditional music major as determined by an entrance audition. C-ID MUS 160. One hour lab, one-half hour by arrangement.

MUSC 040C 0.5 Units
Applied Music III

Corequisite: Student must be enrolled in a large performance ensemble (MUSC 009, 010, 014, 015, 016, 017, 018, 020, 021, 024, 025, or 026) AND in a music theory class (MUSC 001, 002, 003 or 004). Prerequisite: MUSC 040B with a minimum grade of C. Audition required: Student must meet the performance standards of an entering third-semester college traditional music major as determined by an entrance audition. This is the third course in a four-part series which focuses on the development of individual performance skills and solo and ensemble repertoire. It includes one-on-one or small group instrumental, composition, or vocal instruction eight hours per semester. It also includes eight hours per semester of solo performance, masterclasses, and a final juried performance. It also includes one hour monitored practice time per week. This course is required for all traditional performance and jazz music majors. Students must be concurrently enrolled in a large performance ensemble and a music theory course. It is the third course in the four-part series required for the Music Associate Degree for Transfer. C-ID MUS 160. One hour lab, one-half hour by arrangement.

Music

MUSC 040D

0.5 Units

Applied Music IV

Corequisite: Student must be enrolled in a large performance ensemble (MUSC 009, 010, 014, 015, 016, 017, 018, 020, 021, 024, 025, or 026) AND in a music theory class (MUSC 001, 002, 003 or 004). Prerequisite: MUSC 040C with a grade of C or better. Audition required: Student must meet the performance standards of an entering fourth-semester college traditional music major as determined by an entrance audition. This is the final course in a four-part series which focuses on the development of individual performance skills and solo and ensemble repertoire. It includes one-on-one or small group instrumental, composition, or vocal instruction eight hours per semester. It also includes eight hours per semester of solo performance, masterclasses, and a final juried performance. It also includes one hour monitored practice time per week. This course is required for all traditional performance and jazz music majors. Students must be concurrently enrolled in a large performance ensemble and a music theory course. It is the final course in the four-part series required for the Music Associate Degree for Transfer. C-ID MUS 160. One hour lab, one-half hour by arrangement.

MUSC 041A

1.5 Units

Music Majors Piano

Course Advisory: SCC minimum English and Math standards. Instruction, practice and application of the techniques of piano performance. Emphasis will be placed on a variety of keyboard skills including harmonic progressions, scales, fingerings, drills and exercises, sight reading, and keyboard ear-training. The course will also present musical analysis, performance strategies, suggested rehearsal techniques, independent coordination, and memorization. The class is specially designed to accompany the music major and, therefore, is very specific in harmonic understanding, theory, melodic development and usage, and piano practice. One hour lecture, one hour activity.

MUSC 041B

1.5 Units

Music Majors Piano

Course Advisory: SCC minimum English and Math standards. Instruction, practice and application of the techniques of piano performance. Emphasis will be placed on a variety of keyboard skills including harmonic progressions, scales, fingerings, drills and exercises, sight reading, and keyboard ear-training. The course will also present musical analysis, performance strategies, suggested rehearsal techniques, independent coordination, and memorization. The class is specially designed to accompany the music major and, therefore, is very specific in harmonic understanding, theory, melodic development and usage, and piano practice. One hour lecture, one hour activity.

MUSC 042A

1.5 Units

Jazz and Pop Piano

Prerequisite: MUSC 027, 028, or equivalent as determined by instructor. Instruction, practice, performance, and application of the techniques of Jazz and Pop piano performance. Emphasis will be placed on establishing the foundations for an improvised approach as well as a review of available literature. The course will focus on the concepts of jazz and popular styles involving the realization of lead sheets, chord voicing, applied scale theory, rhythmic structure, arrangement techniques, improvisation, and accuracy in the development of all styles considered. One hour lecture, one hour activity.

MUSC 042B

1.5 Units

Jazz and Pop Piano

Prerequisite: MUSC 027, 028, or equivalent as determined by instructor. Course Advisory: MUSC 042A. Instruction, practice, performance, and application of the techniques and principles of intermediate jazz and popular piano styles and skills. Emphasis will be directed to continuing the presentation made in 042A. Focus will be centered around arranging, improvisations, voicings, dialogue, hand formats, performance of literature, written projects and a further introduction to styles. The realization of lead sheets, sight reading, ear training, transcriptions of solos, fingerings, scale theory, exercises, and performance strategies will all be discussed. One hour lecture, one hour activity.

MUSC 049

1.0 to 3.0 Units

Music 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 minimum grade of B; an ability to work independently; permission of the School Dean based on instructor availability. Course Advisory: SCC minimum English standard. An independent study course in a selected musical area for sophomore students. The student works by arrangement with the instructor on an outlined program of study. A contract between student and instructor which details the specific area of interest including goals and schedule for project completion is required. Students may take this course up to the maximum number of units over multiple semesters. Three to nine hours by arrangement.

Music

MUSC 051

1.5 Units

Jazz and Popular Solo Voice

Course Advisory: SCC minimum English standard. The study and performance of songs in the popular and jazz idiom. Areas covered will include musical phrasing, emotional expression, popular vocal styling, stage presence and the use of sound reinforcement systems. This class requires public performance and/or field trips. *One hour lecture, one hour activity.*

MUSC 052

2.0 Units

Sound Recording

Course Advisory: SCC minimum English standard. Designed for musical performers and students interested in recording specifically. Development of recorded performances in the studio environment. Emphasis on acoustics, vocal and instrumental recording requirements, control board management, microphone techniques, organization and supervision of the recording session, mixing and mixdown. Particular attention is given to the hands-on experience in recording engineering and the overall recording process, including production, musical arrangement, mixdown, and studio demeanor. *One hour lecture, three hours lab.*

MUSC 053

2.0 Units

Advanced Sound Recording

Prerequisite: MUSC 052. Course Advisory: SCC minimum English and Math standards. Advanced recording techniques with particular attention given to hands-on techniques. *One hour lecture, three hours lab.*

MUSC 055

3.0 Units

Introduction to Jazz Improvisation

Course Advisory: SCC minimum English standard and knowledge of music fundamentals and basic instrumental skills. Techniques and literature of improvisation including application of scales, modes, harmonic progressions, solo shape, form, and dynamic, rhythmic, and melodic development and interpretation of concepts and materials in the jazz style. Provides development and understanding of these techniques in the occupational areas of music through the concepts and performance of improvisation. *Two hours lecture, one hour activity, one hour by arrangement.*

MUSC 056

3.0 Units

Jazz Improvisational Ensemble

Course Advisory: MUSC 055. Presents the principles and techniques of improvisational materials, combo performance, individual solo skills, advanced playing concepts, group dynamics, and increased performance ability. The class will perform a wide variety of arrangements and the overall performance standards are directed to feature individual soloists. Provides the occupational musician with an opportunity to develop confidence and advanced skills from performance in this ensemble. Repeatable 3 times. *Two hours lecture, one hour activity, one hour by arrangement.*

MUSC 060

1.0 to 4.0 Units

Sound Recording Lab

Corequisite: MUSC 052, 061, 062, 063, or 066A - G. Introduces or further develops recording skills through practical application of techniques learned in related courses. The course is designed to allow recording students additional time outside of other classes to work on sound recording projects. Students may take this course up to the maximum number of units over multiple semesters. Three to twelve hours lab.

MUSC 061

2.0 Units

Midi and Computer Sequencing And Scoring

Course Advisory: SCC minimum English and Math standards; MUSC 027 with a minimum grade of C. An introduction to Midi (Musical Instrument Digital Interface), and the hardware and software components of music sequencing and scoring. The course content will include hands on familiarization with the Macintosh computer, practical use of sequencing and scoring software, and an understanding of Midi terminology. *One hour lecture, three hours lab.*

MUSC 066A

1.5 Units

Advanced Sound Recording - Signal Processing

Prerequisite: MUSC 052 with a minimum grade of C. Course Advisory: SCC minimum English Standard. This course is one in a series of Advanced Sound Recording electives and continues building upon MUSC 052 skills, focusing on treatment of recorded audio files (signal processing), including applying reverberation, compression, equalization. This course is designed for students particularly interested in mixing audio. *One half hour lecture, three hours lab.*

Music

MUSC 066B 1.5 Units

Advanced Sound Recording - Microphone Technique

Prerequisite: MUSC 052 with a minimum grade of C. *Course Advisory:* SCC minimum English Standard. This course is one in a series of Advanced Sound Recording electives and continues building upon MUSC 052 skills, focusing on understanding microphone construction, operating principles and uses. This course is designed for students particularly interested in microphone design and placement technique. *One half hour lecture, three hours lab.*

MUSC 066C 1.5 Units

Advanced Sound Recording - Mixing and Mastering

Prerequisite: MUSC 052 with a minimum grade of C. *Course Advisory:* SCC minimum English Standard. Continues, building upon MUSC 052 skills, focusing on mixing and mastering recorded music. This course is designed for students particularly interested in balancing audio that has been recorded and finalizing it in preparation for duplication. *One half hour lecture, three hours lab.*

MUSC 066D 1.5 Units

Advanced Sound Recording - Analog Recording

Prerequisite: MUSC 052 with a minimum grade of C. *Course Advisory:* SCC minimum English Standard with a minimum grade of C. Continues, building upon MUSC 052 skills, focusing on recording music with analog equipment. This course is designed for students particularly interested in learning to record without computers. *One half hour lecture, three hours lab.*

MUSC 066E 1.5 Units

Advanced Sound Recording - Home Studio Recording

Prerequisite: MUSC 052 with a minimum grade of C. *Course Advisory:* SCC minimum English standard with a minimum grade of C. This course is one in a series of Advanced Sound Recording electives and continues, building upon MUSC 052 skills, focusing on learning how to adapt an existing home to accommodate a small recording studio. This course is designed for students particularly interested recording in a home studio. *One half hour lecture, three hours lab.*

MUSC 066F 1.5 Units

Advanced Sound Recording - Studio Design and Equipment

Prerequisite: MUSC 052 with a minimum grade of C. *Course Advisory:* SCC minimum English standard. This course is one in a series of Advanced Sound Recording electives and continues, building upon MUSC 052 skills, focusing on learning how to physically design and equip any recording studio. This course is designed for students particularly interested in designing, building and equipping a recording studio. *Off-campus field trip may be required. One-half hour lecture, three hours lab.*

MUSC 066G 1.5 Units

Sound Recording Project

Prerequisite: MUSC 052 with a minimum grade of C. *Course Advisory:* SCC minimum English Standard. This course is two in a series of Advanced Sound Recording electives and continues building upon MUSC 052 skills, focusing on practical application of recording skills. This course is designed for students particularly interested in applying recording skills in real-world situations. Required attendance at up to three recording sessions which take place outside of normal classroom hours. *One-half hour lecture, three hours lab.*

MUSC 067A 1.5 Units

Introduction to Pro Tools

Course Advisory: MUSC 052 with a minimum grade of C; SCC minimum English Standard. This course covers basic Pro Tools principles. It provides everything students need to complete a Pro Tools project—from initial set up to final mixdown. This course is an introduction to AVID's Pro Tools digital audio workstation software application. Basic Pro Tools principles, including how to complete a Pro Tools project from initial set up to final mixdown are covered. It includes how to record, edit, and mix music and Musical Instrument Digital Interface (MIDI) tracks within the Pro Tools application. This course is the first in a series of four courses leading to certification as a Pro Tools Operator. *One-half hour lecture, three hours lab.*

MUSC 067B 1.5 Units

Pro Tools Production

Prerequisite: MUSC 062 with a minimum grade of C. *Course Advisory:* SCC minimum English standard. This course provides a more detailed look at the Pro Tools system above and beyond the knowledge gained in MUSC 067A course. It covers all the key concepts and skills needed to operate a Pro Tools system at the user level. This is an intermediate course in Digidesign's Pro Tools digital audio workstation hardware and software application. Concepts and skills needed to operate large sessions in a project studio environment are covered. It includes managing large track counts, multiple channels of simultaneous inputs and outputs, and the use of specialized plug-ins for specific music and post-production tasks. This course is the second in a series of four courses leading to certification as a Pro Tools Operator. *One-half hour lecture, three hours lab.*

Music

MUSC 071**3.0 Units****Business of Music I**

Course Advisory: Eligibility for ENGL 001. This course covers the processes of the music industry including record contracts as well as the responsibilities of record producers, agents, managers, and performing artists. *Three hours lecture.*

MUSC 072**3.0 Units****Business of Music II**

Course Advisory: Eligibility for ENGL 001. This course is one in a series of Music Industry core courses, and continues building upon MUSC 071 skills, focusing on the duties of attorneys, publishers, and radio stations regarding musical and financial matters. The course also defines and analyzes publishing agreements, merchandising contracts, trademark and servicemark points, as well as radio and record-industry relations and sales and distribution. *Three hours lecture.*

MUSC 073**3.0 Units****Artist Management**

Course Advisory: Eligibility for ENGL 001. This course covers the definitions, duties, and agreements of artist management. Topics include the functions of a personal manager, guidelines to career planning, choosing managers and clients, record company negotiations, and selecting other team players. It also analyzes the personal manager agreement and how to organize an artist's tour. *Three hours lecture.*

MUSC 074**3.0 Units****Music Promotion**

Course Advisory: Eligibility for ENGL 001. This course covers the process of music promotion. Topics include definitions of promotion, developing media/industry fan lists, and assembling a promotion packet. The course also discusses current internet strategies and new technologies developed for promotion. In addition, a campaign for album release and distribution is discussed and planned. Field trips may be required. *Three hours lecture.*

Nursing

Nursing, Registered

The Nursing program is approved by the California State Board of Registered Nursing.

Program Description

The Registered Nursing Program at Solano Community College is a 2-year Associate Degree Program fully approved by the State Board of Registered Nursing and is subject to its regulations regarding the education and training of nurses. Successful completion of the program qualifies the student to take the National Council Licensing Examination (NCLEX) to become a Registered Nurse. The practice of nursing requires knowledge of the biological, behavioral, and physical sciences, as well as knowledge of, and the ability to speak, to read, and to write the English language proficiently. This program follows the policy of non-discrimination set forth by the Governing Board of Solano Community College.

Associate in Science Degree

The Associate in Science Degree is awarded upon successful completion of the major and 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 Registered Nursing Associate Degree will be able to:

1. Qualify for state licensure as a registered nurse by achieving a passing score on the National Council Licensure Examination for registered nurses (NCLEX-RN).
2. Synthesize principles of the nursing process and critical thinking to assist individuals, families and communities to achieve positive adaptation to change in health or a peaceful death.
3. Integrate evidenced based concepts of nursing practice across the health care continuum to ensure quality patient centered care.

Program Requirements and Courses

All courses taken toward the Registered Nursing Associate Degree must be completed with a letter grade of C or better.

Retention in Program:

1. Students are required to undergo criminal background checks and drug screens. Health Sciences may be unable to place students in a clinical setting if they have a positive criminal background check or drug screen; therefore, the student may be dropped from the nursing program.
2. If a student's conduct poses potential harm to the well-being of clients or is disruptive to the classroom or lab environment, the student may be terminated from the nursing program.
3. If a student's physical or emotional health appears to be such that he or she cannot meet the objectives of the program in nursing, the student may be asked to leave the nursing program.
4. In order to remain in the program and to graduate, a student must maintain a letter grade of C or better in the theory and the clinical portions of the nursing program.
5. Maintain current CPR, TB screening, clear criminal background check and drug screen.

In accordance with state law, the California Board of Registered Nursing (BRN) may deny licensure to an individual for crimes substantially related to the practice of nursing. Upon acceptance to the nursing program, any student who has had a conviction related to sex crimes, drug crimes (including DUI) and crimes of violence may need to contact the BRN regarding his/her status.

Nursing

REQUIRED COURSES Units

Nursing courses must be taken in sequence because one course is prerequisite to another.

NURS 058A-D Skills Lab I-IV 3
(Concurrent enrollment in NURS 058A-D is required for each of the following Nursing courses except NURS 052 & 065.)

First Year Courses Units

NURS 050A Fundamentals of Nursing 5
NURS 050B Basic Human Needs 6
CDFS 070 * Lifespan Human Development 3
NUTR 010 * Nutrition 3
NURS 052 * Pharmacology for Nursing 3
NURS 054 Maternal-Child Nursing 5
NURS 055 Nursing of Adults I 5

PSYC 001 ** Introduction to Psychology 3
OR

SOCS 022 Ethnic, Racial and Minority Group Relations in Harmony and Conflict 3

*Course must be completed prior to entry into NURS 054

**Course must be completed prior to entry into NURS 060/061

Second Year Courses Units

NURS 060 Nursing of Adults II/ Medical-Surgical Nursing 5
NURS 061 Psychiatric and Mental Health Nursing 5
NURS 063 Advanced Medical Surgical and Community Nursing 7
NURS 064 Issues and Leadership in Health Care Today 2
NURS 065 Role Transition in Practice 2.5

Concurrent Courses

The following courses are required for graduation and must be completed prior to entering the fourth semester of the Nursing Program, as the fourth semester schedule does not accommodate the scheduling of other courses.

ENGL 062 Analytical Reading 3
OR

meet the reading requirement Communications course other than ENGL 001 3

Students are encouraged to attend a Registered Nursing Information Workshop prior to seeing a counselor individually. These workshops provide a basic understanding of the nursing program and the requirements for application. After attending the Nursing Information Workshop, students planning to major in Nursing should make an appointment with a counselor for assistance in developing an education plan.

REQUIREMENTS FOR ADMISSION TO THE PROGRAM

1. Graduation from an accredited high school in the United States or successful completion of the General Education Development (GED) or California High School Proficiency Exam (CHSPE) per requirements of the Nurse Practice Act, Title 16, California Code of Regulations, Section 1412, prior to time of application.
 - Students with a high school diploma from a school outside the United States must have transcripts evaluated by a National Association of Credential Evaluation Service (NACES) approved independent agency.
 - Students who possess an Associate or Arts / Associate of Science degree or higher from a regionally accredited college in the U.S. are exempt from the educational requirements stated above.
 - Students who have attended college outside the United States must have transcripts evaluated by a NACES approved independent agency, demonstrating equivalency to an AA/ AS degree or higher from a U.S. regionally accredited college.
2. A Composite Score of 73% or greater. This is calculated using the applicant's College GPA, Core Biology GPA, English GPA and the applicant's Core Biology Repetitions (This includes grades of D or less and W's on the applicant's transcript).
3. A grade of "C" or better in the following pre-major and general education courses:

BIO 004	NUTR 010
BIO 005	PSYC 001
BIO 014	CDFS 070
ENGL 001	COMM 001*
NURS 052	All GE Graduation Requirements

4. Students are required to take the "Test of Essential Academic Skills (TEAS)" developed by the Assessment Technologies Institute. A minimum passing composite score of 62% is required within the first two (2) attempts. Further information can be found on the <http://www.atitesting.com/solutions/pre-program/TEAS-Discover.aspx> website regarding TEAS preparation, registration and testing.
5. First-time applicants are required to meet with an SCC counselor to obtain a NURSING PRE-MAJOR AND GENERAL EDUCATION REQUIREMENT CHECK SHEET and document completion of all eligibility requirements. Call (707) 864-7101 or go online to schedule an appointment.

Nursing

COURSES REQUIRED FOR THE ASSOCIATE OF SCIENCE DEGREE IN REGISTERED NURSING

Prerequisites / Graduation Requirements		Course Sequence for Degree
BIO 004	Social and Behavioral Science	Semester 1 NURS 050A, NURS 050B, NURS 058A
BIO 005	Humanities	
BIO 014	Reading Requirement	Semester II NURS 054, NURS 055, NURS 058B
ENGL 001	Math 104 or higher	
NUTR 010	Cross Cultural Studies	Semester III NURS 060, NURS 061, NURS 058C
PSYC 001*	Kinesiology	Semester IV NURS 063, NURS 064, NURS 065, NURS 058D
CDFS 070		
COMM 001*		

*Or equivalent (See Nursing Pre-Major and General Education Requirements available online)

APPLICATION / ACCEPTANCE TO THE PROGRAM

Currently the Nursing Program admits students once per year. Applications are available online. Check the SCC Nursing website for specific details and deadlines. <http://www.solano.edu/health/disciplines.php#nursing>

The Nursing Program at Solano Community College is impacted; there are more students who apply than can be accepted into the program. Selection is based on a randomized lottery selection process. Fifty (50) percent of the selected applicants will have a composite score of 86% or greater and the other fifty (50) percent will have a score between 73 and 85%. Returning qualified applicants will have their name included into the appropriate pool for each time they have applied to SCC's nursing program. Only students who meet and complete the application criteria will be considered for admission. Meeting these requirements does not guarantee acceptance into the program. If a qualified applicant is not chosen, he/she may reapply the following application period.

Once accepted to the Nursing Program, students, at their own expense, must provide the following:

- Health History and Report of Medical Examination with required titers / inoculations.
- Background check and drug screening
- Current American Heart Association CPR card for Healthcare Providers.
- Compliance with specific healthcare partner requirements.

Students accepted for entry into the Nursing Program are required to attend a mandatory information meeting. Date, time, and location will be provided in the acceptance packet.

APPLICATION GUIDELINES

COMPLETE ALL PRE-MAJOR AND GENERAL EDUCATION COURSES BEFORE SUBMITTING AN SCC NURSING APPLICATION. Transcripts with courses in progress at the time of application will be voided or not accepted. Please refer to the nursing website for more information.

APPLY for admission to SCC online.

- ✓ Students who have never attended SCC must submit an online application. Go to the SCC home page (www.solano.edu) and click on Application.
- **Note: Returning SCC students who did not attend last semester** must complete a new SCC application before accessing the Nursing Application.

Nursing

- ✓ **STUDENT ID NUMBER.** After submitting an online application, allow 30 minutes for processing. An email will be sent to the email address provided in the application and it will include the applicant's SCC ID number, username and password for the applicant's MySolano account.
 - When completing a new application to Solano, if you already have an ID number, the system will re-activate the same ID number. After this step, you can complete the Nursing Application.
- ✓ **MYSOLANO EMAIL ACCOUNT.** All correspondence regarding the application status will be sent to the applicant's SCC email address. Applicants will not receive any paper or phone verification regarding their status.

COUNSELING SERVICES FOR FIRST-TIME NURSING APPLICANTS. An appointment with a Solano Community College (SCC) Counselor is required to obtain a Nursing Pre-Major and General Education Requirement Check Sheet to document completion of all eligibility requirements. This is especially important when coursework is not completed at SCC. A copy of this document can be found at: <http://www.solano.edu/health/disciplines.php#nursing>

- ✓ **Counseling Appointment: Call (707) 864-7101 to schedule an appointment with a Counselor.** If you have 15 or more units from other colleges, you will need to schedule a one-hour appointment with a Counselor. During the appointment the Counselor can assist with completion of the **Nursing Pre-Major and General Education Requirement Check Sheet**, petitioning of course equivalencies, requirements for foreign transcripts, and degree completion requirements. Official transcripts from other colleges should be brought to this appointment. If you completed Anatomy, Physiology, or Microbiology at an international college or university, please bring course descriptions in addition to transcripts.
- ✓ **Drop-In Meetings:** Drop-in meetings are only 15 - 20 minute sessions with counselors to address general counseling questions and NOT for completing a Nursing Pre-Major and General Education Requirement Check Sheet, petitioning of course equivalencies, requirements for foreign transcripts, and / or degree completion requirements. To find out when drop-ins are offered call (707) 864-7101.
- ✓ **Counseling Email:** If you have a general counseling question that requires minimal research and can be resolved in a couple of minutes, please contact the e-counselor at e-counselor@solano.edu

TO APPLY TO THE NURSING PROGRAM AT SCC:

- ✓ Log-in to the SCC website
- ✓ From the A-Z index locate the Registered Nursing website (<http://www.solano.edu/health/disciplines.php#nursing>)
- ✓ Click the "Registered Nursing Application" link
- ✓ Complete all required data elements on the Application packet
- ✓ Once you have completed all documents print the Application packet
- ✓ **TOOLS** to assist with the Nursing Program Application Process.
 - Students should refer to the nursing website for step-by-step instructions on how to complete the Application for the Nursing Program.
 - Email Support: Questions related to the nursing application process may be sent to the Administrative Assistant in the School of Health Sciences. Please allow five (5) business days for a reply. Due to the high volume of calls, DO NOT CALL the Nursing Department. We will respond only to student emails.

SUBMITTING the Nursing Program Application. All first-time and returning applicants must submit their Application Packet and required supporting documentation, if applicable, to SCC Nursing Department (Building 800, Room 805B) by the deadline date and time in a large 9 ½ x 11 self-addressed stamped envelope. Late Application Packets will not be accepted.

- ✓ If the applicant's application is not chosen to fill the incoming class, the Application Packet will be mailed back in the large 9 ½ x 11 self-addressed stamped envelope submitted at the time of application.

IMPORTANT NOTE: Application procedures may change. Please consult the website at <http://www.solano.edu/health/disciplines.php#nursing> for the most current instructions on applying to the program.

Nursing

LVN to RN Program

The LVN to RN Program at Solano Community College provides an opportunity for qualified licensed vocational nurses to be admitted with advanced placement into the Registered Nursing program. This program is designed to prepare technically competent nurses for service in the community. The curriculum includes study in general education, biophysical and social science courses. Principles derived from academic study are applied to the practice of nursing. The nursing major is comprised of lecture-discussion classes on campus and client care laboratory experience in agencies within the community. Nursing preparation includes the care of adults and children in medical, surgical, psychiatric and community settings. This program is approved by the California Board of Registered Nursing.

Program Requirements and Courses

Students are encouraged to attend a Registered Nursing Information Workshop prior to seeing a counselor individually. These workshops provide a basic understanding of the nursing program and the requirements for application. After attending the Nursing Information Workshop, students planning to major in Nursing should make an appointment with a counselor for assistance in developing an education plan.

Program Information

Licensed vocational nurses have two LVN to RN options:

Registered Nursing Associate Degree Option:

Applicants must complete prerequisites for the nursing program, science courses, and the general education requirements for the Associate Degree. By choosing this option:

- You would complete a total of 49 to 52 units toward the 60 units required for the Associate Degree.
- You would be a graduate of an accredited ADN program.
- You would be eligible for RN licensure by endorsement in other states.

Prerequisites

To be eligible to apply to the LVN to RN Program Associate Degree Option, students must have completed:

- ENGL 001 - College Composition (3 units)
- BIO 004 - Human Anatomy (5 units)
- BIO 005 - Introductory Physiology (5 units)
- BIO 014 - Principles of Microbiology (4 units)
- NUTR 010 - Nutrition (3 units)
- CDFS 070 - Lifespan Human Development (3 units)
- NURS 052 - Pharmacology for Health Care Professionals I (3 units)
- PSYC 001 - Introduction to Psychology: Individual & Social Processes (3 units)
- OR
- SOCS 022 - Ethnic, Racial, and Minority Group Relations in Harmony and Conflict (3 units)

NOTE: All courses required for graduation should be completed prior to entering the fourth semester of the Nursing Program, as the fourth semester schedule does not accommodate the scheduling of other courses. It is highly recommended that ENGL 062 or the college reading requirement be met prior to entering the program.

Thirty-Unit Option:

By choosing this option:

- You would complete a total of 29-30 units.
- You would not be a graduate of an Associate Degree Program.
- You would not be a graduate of the Solano Community College Nursing Program and may not wear the school pin.
- You would be eligible for licensure in California and may not be eligible for licensure in other states.

Nursing

Prerequisites

- BIO 004 – Human Anatomy (5 units)
- BIO 005 - Introductory Physiology (5 units)
- BIO 014 - Principles of Microbiology (4 units)

You must achieve a composite score of 73 or above to qualify for the waiting list. Composite score is determined by a combination of : (a) overall college GPA, (b) English GPA, (c) core Biology (Anatomy, Physiology & Microbiology) GPA, and (d) core Biology course repetitions.

Application Steps

1. **In order to apply to the LVN-RN Waitlist, letter grades of at least C or better must be officially posted to a transcript to verify COMPLETION of the following EIGHT prerequisite courses.**

ENGL 001 College Composition

BIO 004 Human Anatomy w/Lab (4 sem. units minimum)

BIO 005 Physiology w/Lab (4 sem. units minimum)

BIO 014 Microbiology w/Lab (4 sem. units minimum)

NUTR 010 Nutrition

CDFS 070* Lifespan Human Development

NURS 052 Pharmacology

PSYC 001 or SOCS 022 Ethnic Race Relations

2. **APPLY** for admission to SCC online at www.solano.edu (if not already a current/continuing student).
3. **WE HIGHLY RECOMMEND THAT YOU ATTEND AN RN INFORMATION WORKSHOP.**
For the RN Information Workshop schedule, go to www.solano.edu (Search for Nursing in the A – Z index)
4. **APPLY IN PERSON** at the Counseling Office located in the 400 Building at the Fairfield Main Campus (Monday – Thursday 8:30 – 6:00, Friday 8:30 – 3:00)

PLEASE BRING:

1. **California Driver's License or photo ID.**
2. **OFFICIAL TRANSCRIPTS** in sealed, unopened envelopes from **ALL** colleges, universities, or educational institutions **EVER** attended, except Solano. (Transcripts must be hand carried. New, current transcripts are required even if transcripts were submitted prior to submitting the application in person.)

NOTE: We need ALL transcripts

Even if you did not complete any of the ADN (Associate's Degree in Nursing) required classes at the other institutions you attended, we still *need the transcript*. Even if you feel the courses taken do not relate to SCC's Nursing Program, we still need ALL transcripts.

Failure to list ALL colleges of universities, and submit ALL transcripts, will VOID the application.

5. **WAIT 90-BUSINESS-DAYS.** During this time, Admissions and Records (A&R) will be evaluating your transcripts and calculating your overall RN Composite Score. Students must earn a score of 73 or above to qualify for the waitlist. **Do not contact A&R for your results.** IMPORTANT: Completion timeline may be extended beyond 90 days depending on volume of applications received.
6. **WAIT 90-BUSINESS-DAYS RETURN IN PERSON OR CALL** (707-864-7101) the Counseling Office to schedule a one-hour "LVN-RN Referral Appointment." *This is your responsibility.*
7. **ATTEND THE SCHEDULED LVN-RN REFERRAL APPOINTMENT.** During your counseling appointment, the counselor will review and post all completed pre-Major and General Education requirements, and list the remaining required courses for you to graduate from Solano Community College. You will then receive a wait list number by mail from the School of Health Sciences.
8. Once on the waitlist, you will be invited to take the **TEAS Test** and you must earn a 62 or higher. For more information, see: <https://www.atitesting.com/Solutions.aspx>.

NOTE: Dishonest or unethical conduct during the application process may lead to disqualification of the application.

Other Requirements

Upon admission to the program, students are required to enroll in NURS 159 during the next session.

Nursing

Prior to First Class Meeting, Students Must Have:

1. Physical examination indicating physical fitness and freedom from illness with required immunizations.
2. Cardiopulmonary Resuscitation (CPR) for Health Care Providers card.
3. Attended an orientation meeting with nursing faculty to be arranged by Health Sciences.
4. Taken the reading assessment test or have met the reading requirements for graduation.
5. Provide a clear criminal background check and drug screen.
6. Achieve a score of 62 or greater on the TEAS test.

Retention in Program:

1. Students are required to undergo criminal background checks and drug screens. The Health Sciences Division may be unable to place students in a clinical setting if they have a positive criminal background check or drug screen; therefore, the student may be dropped from the nursing program.
2. If a student's conduct poses potential harm to the well-being of clients or is disruptive to the classroom or lab environment, the student may be terminated from the nursing program.
3. If a student's physical or emotional health appears to be such that he or she cannot meet the objectives of the program in nursing, the student may be asked to leave the nursing program.
4. In order to remain in the program and to graduate, a student must maintain a grade of "C" or better in the theory and the clinical portions of the nursing program.
5. Maintain current CPR, TB screening, clear criminal background check and drug screen.

In accordance with state law, the California Board of Registered Nursing (BRN) may deny any license to an individual for crimes substantially related to the practice of nursing. Upon acceptance to the nursing program, any student who has had a conviction related to sex crimes, drug crimes (including DUI) and crimes of violence may need to contact the BRN regarding his/her status.

Certified Nursing Assistant Job-Direct Certificate

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

Required Courses	Units
NURS 103 Certified Nursing Assistant	6.5
Total Units	6.5

Nursing

NURS 050A

5.0 Units

Fundamentals of Nursing

Corequisite: NURS 058A. Prerequisite: A minimum grade of C in ENGL 001, BIO 004, BIO 005, and BIO 014; current CPR for Healthcare Providers, current physical exam, immunizations and background check with drug screen. Authorization to enter RN program. Course Advisory: Basic computer navigation skills and frequent internet access is required. Introduction to the principles of nursing to meet needs common to all individuals. Utilizing the concept of homeostasis and communications theory, the student will study stressors affecting the patient's position on the wellness-illness continuum. The nursing process will be introduced, utilized and applied at the beginning level. The basis of the nurse-patient relationship will be explored. Clinical assignments, self-study modules and small group seminars will be offered concurrently with theory. *Eight hours lecture, six hours lab (8-week course).*

NURS 050B

6.0 Units

Basic Human Needs

Corequisite: NURS 058A. Prerequisite: NURS 050A with a minimum grade of C. Course Advisory: Basic computer navigation skills and frequent internet access is required. This course is an introduction to the demands for increased care that are necessitated by deviations in health in the adult. Emphasis is placed on the basic human needs of activity and rest, oxygenation, fluid and electrolytes, nutrition, comfort, and elimination. Also included in the course are gerontology, nursing process, oral and injectable medication administration, wound care, and care of the adult perioperative patient. Clinical assignments, self-study modules and seminar will be offered concurrently with theory. *Seven hours lecture, fifteen hours lab (8-week course).*

NURS 052

3.0 Units

Pharmacology for Nursing

Prerequisite: BIO 005 with a minimum grade of C. Course Advisory: SCC minimum English and Math standards. Basic computer navigation skills and frequent internet access is required for Nursing or Pre-nursing Students. This course is designed to focus on nursing pharmacology by presenting a firm theoretical foundation. The course presents general principles, theories, and facts about medicinal agents. General characteristics of major classifications of medications are discussed. Specific information regarding action, dosage, side effects, adverse reactions and contraindications of selected medications within each classification is addressed. Practical information is presented on how the nursing process is integrated with pharmacology. Specific drug information is discussed in relation to assessment, client monitoring, interventions, client education, and evaluation of safe and effective drug therapy. *Three hours lecture.*

NURS 054

5.0 Units

Maternal-Child Nursing

Corequisite: Concurrent enrollment in NURS 058B. Prerequisite: Minimum grade of C in NURS 050A, NURS 050B, NURS 052, NUTR 010, and CDFS 070. Course Advisory: Basic computer navigation skills and frequent internet access is required. A family centered course with emphasis on nursing care of women and children. The focus includes the antepartal, intrapartal, postpartal, neonatal and pediatric client, both sick and well. This course provides students the opportunity to synthesize and utilize nursing knowledge and skills in providing care to clients in a variety of settings. Concepts of homeostasis, communication, and growth and development are integrated throughout the course. The nursing process is utilized with concepts of legal aspects, pharmacology, clinical skills, safety and asepsis, crisis intervention, health teaching, and self-evaluation. Clinical assignments and self-study modules are offered concurrently with theory. This course must be completed successfully with a minimum grade of C to advance in the nursing program. *Five hours lecture, fifteen hours lab (8-week course).*

NURS 055

5.0 Units

Nursing of Adults I

Corequisite: NURS 058B or 058E. Prerequisite: A minimum grade of C in NURS 050A, 050B, NURS 052, NUTR 010, and CDFS 070. Course Advisory: Basic computer navigation skills and frequent internet access is required. Covers the theory and practice of nursing necessary to assist the adult in meeting selected health care needs. Emphasis is placed on the client experiencing health alterations in the musculoskeletal, respiratory, cardiovascular and gastrointestinal systems. The concepts of safety, communication, clinical decision making, asepsis, pharmacology, legality, ethics, health teaching and self-evaluation are integrated throughout the course. Issues related to culture, developmental level and sexuality are considered, as nursing care is individualized to the client. Skill modules and clinical experiences are offered concurrently with theory. *Five hours lecture, fifteen hours lab (8-week course).*

Nursing

NURS 058A Skills Lab I

1.0 Units

Corequisite: NURS 050A with a minimum grade of C (may be taken concurrently). Course Advisory: Basic computer navigation skills and frequent internet access is required. This is a 1.0 unit course that is required for students who are enrolled in the first semester of the nursing program. Students will participate in basic skills and introduction to simulations that involve group, peer and instructor evaluations. Students have the opportunity to practice and employ the required knowledge, skills and attitudes of a Registered Nurse through the use of the nursing process and QSEN standards for each course throughout the curriculum. Students are required to demonstrate competency in the required skills modules as well as participation in human patient care simulation scenarios by the end of the semester. Major modules that are instructor moderated include: spirometry, applying a dry, sterile dressing, administering enteral feedings, administering and managing primary intravenous line therapy and insertion, irrigation discontinuing a nasogastric tube, and oropharyngeal suctioning. Other peer evaluated skills include application of cold/heat therapy, use of compression devices, incentive spirometry, and oropharyngeal suctioning. Students are required to purchase a Nursing Skills Lab kit, stethoscope, white lab coat and uniform per the Registered Nursing Student Handbook. This is a Pass/No Pass only course. *Three hours lab.*

NURS 058B Skills Lab II

1.0 Units

Corequisite: NURS 055 or NURS 054. Prerequisite: A minimum grade of C in NURS 058 or NURS 058A. Course Advisory: Basic computer navigation skills and frequent internet access is required. This is a 1.0 unit course that is required for students who are enrolled in the second semester of the nursing program. Students will build on previously learned concepts, participate in skills and simulations that involve group, peer and instructor evaluations. Students have the opportunity to practice and employ the required knowledge, skills and attitudes of a Registered Nurse through the use of the nursing process and QSEN standards for each course throughout the curriculum. Students are required to demonstrate competency in the required skills modules including: urinary catheter insertion, care and removal, application of a wet-to-damp dressing/packing; Intravenous (IV) piggyback medication; IV push medication; conversion of an IV to a saline lock; IV pump programming; ostomy bag application and management; performing blood glucose monitoring; collection of a pediatric urine specimen. Participation in human patient care simulation scenarios by the end of the semester are required. Students are required to purchase a Nursing Skills Lab kit, stethoscope, white lab coat and uniform per the Registered Nursing Student Handbook. This is a Pass/No Pass only course. *Three hours lab.*

NURS 058C Skills Lab III

0.5 Units

Corequisite: NURS 060 or NURS 061. Prerequisite: A minimum grade of C in NURS 058, NURS 058B or 058E. Course Advisory: Basic computer navigation skills and frequent internet access is required. This is a 0.5 unit course that is required for students who are enrolled in the third semester of the nursing program. Students will continue to build on previously learned concepts content and participate in skills and simulations that involve group, peer and instructor evaluations. Students will continue to practice and employ the required knowledge, skills and attitudes of a Registered Nurse through the use of the nursing process and QSEN standards for each course throughout the curriculum. Students are required to demonstrate competency in the required skills modules including: administration of blood and blood products; central line care including blood drawing, flushing, dressing change and injection port change; continual practice of previously completed modules from first year skills courses and participation in human patient care simulation scenarios. Students are required to purchase a Nursing Skills Lab kit, stethoscope, white lab coat and uniform per the Registered Nursing Student Handbook. This is a Pass/No Pass only course. *One and one-half hours lab.*

NURS 058D Skills Lab IV

0.5 Units

Corequisite: NURS 063. Prerequisite: A minimum grade of C in NURS 058 or NURS 058C. Course Advisory: Basic computer navigation skills and frequent internet access is required. This is a 0.5 unit course that is required for students who are enrolled in the fourth semester of the nursing program. Students will continue to build on previously learned concepts and participate in more advanced skills and simulations that involve group, peer and instructor evaluations. Students will continue to practice and employ the required knowledge, skills and attitudes of a Registered Nurse through the use of the nursing process and QSEN standards for each course throughout the curriculum. Students are required to demonstrate competency in the required skills modules including venipuncture, tracheostomy care and suctioning, management of a chest tube drainage system and practice of all previously completed skills from prior semesters. Participation in human patient care simulation scenarios is required. Students are required to have purchased a Nursing Skills Lab kit, stethoscope, white lab coat and uniform per the Registered Nursing Student Handbook. This is a Pass/No Pass only course. *One and one-half hours lab.*

Nursing

NURS 058E**1.0 Units****Skills Lab for LVN Transition Students**

Corequisite: NURS 159 or NURS 055. Course Advisory: Basic computer navigation skills and frequent internet access is required. This is a 1.0 unit course that is required for students who are enrolled in the LVN to RN Transition Course, NURS 159. Students will continue to build on previously learned concepts and participate in skills and simulations that involve group, peer and instructor evaluations including: dry-sterile dressing application; wet-to-damp dressing and packing; enteral feedings; insertion, maintenance and discontinuance of nasogastric tubes; intravenous (IV) therapy and medication administration via piggyback and IV push; urinary catheter insertion; care & removal, blood glucose monitoring; conversion of an IV to a saline lock; ostomy care; nasopharyngeal suctioning; administration of non-IV medication. Students will continue to practice and employ the required knowledge, skills and attitudes of a Registered Nurse through the use of the nursing process and QSEN standards for each course throughout the curriculum. Students are required to demonstrate competency in the required skills modules as well as participation in human patient care simulation scenarios by the end of the semester. Students are required to purchase a Nursing Skills Lab kit, stethoscope, white lab coat and uniform per the Registered Nursing Student Handbook. This is a Pass/No Pass only course. *Three hours lab.*

NURS 060**5.0 Units****Nursing of Adults II/Medical-Surgical Nursing**

Corequisite: NURS 058C. Prerequisite: A minimum grade of C in NURS 054 and NURS 055 and either PSYC 001, PSYC 002 or SOCS 022. Course Advisory: Basic computer navigation skills and frequent internet access is required. This course continues with the theory and practice of nursing necessary to assist the adult in meeting selected health care needs. Emphasis is placed on the patient experiencing health alterations related to nutritional deficits, the endocrine, renal/urinary, neurological and immune systems. The concepts of delegation, safety, communication, clinical decision-making, asepsis, pharmacology, legality, ethics, health education, and self-evaluation are integrated throughout the course. Issues related to culture, developmental level and sexuality are considered, as nursing care is individualized to the patient. Leadership and management concepts are introduced. Skill modules and clinical experiences are offered concurrently with theory. *Five hours lecture, fifteen hours lab (8-week course).*

NURS 061**5.0 Units****Psychiatric and Mental Health Nursing**

Prerequisite: NURS 054 & NURS 055 or NURS 159 & NURS 055 and either PSYC 001 or SOCS 022. All courses completed with a minimum grade of C. *Course Advisory: Basic computer navigation skills and frequent internet access is required.* Theory and practice related to mental health and illness is studied. This includes the principles and practices of mental health nursing using the prevailing psychobiological theories of mental health and illness, interpersonal communication, group process, growth and development and sociocultural theories. The nursing process is emphasized as the student nurse maintains and promotes mental health and seeks to prevent mental illness. Clinical experience is provided concurrently with theory in acute psychiatric hospitals, long-term care facilities and community agencies. Opportunity is provided for working with children, adolescents and adults individually, as well as in groups. *Five hours lecture, fifteen hours lab (8-week course).*

NURS 063**7.0 Units****Advanced Medical Surgical and Community Nursing**

Corequisite: NURS 058D. Prerequisite: A minimum grade of C in NURS 060 and NURS 061. Course Advisory: SCC minimum English and Math standards. Basic computer navigation skills and frequent internet access is required. This course builds on the concepts introduced in previous nursing courses. Complex alterations in physiological processes are studied as they relate to multi-system illnesses. This course requires students to develop and utilize critical thinking skills in working with patients across the lifespan in emergency, critical care, medical surgical units and the community. The clinical experience affords students the opportunity to apply theoretical knowledge, critical thinking skills (which are inherent to the nursing process), and psychomotor skills to a practical situation. The focus is to provide care to multiple patients across the lifespan who have complex multi-system illnesses and patients in the community. This course facilitates the student's entry into the profession of nursing. Legal and ethical responsibilities related to professional nursing practice are considered. Skill modules and clinical experience is offered concurrently with theory. *Four hours lecture, sixteen hours lab (12-week course).*

Nursing

NURS 064 2.0 Units
Issues and Leadership in Health Care Today

Corequisite: NURS 063 and/or NURS 065. Prerequisite: A minimum grade of C in NURS 060 and NURS 061. Course Advisory: SCC minimum English and Math standards. Basic computer navigation skills and frequent internet access is required. This course facilitates the graduates' entry into the profession of nursing. Topics include current issues, trends and leadership theories in the registered nurse's scope of practice in an ever-changing health care delivery system. Included is the delineation of the major functions of professional nursing organizations, accountability in nursing practice (quality improvement and risk management), identification of socio-political factors as well as leadership and management issues influencing professional nursing practice and their nursing implications. Legal and ethical concepts and responsibilities related to registered nursing practice are further considered. This is a non-clinical course. *Field trips may be required. Two hours lecture.*

NURS 065 2.5 Units
Role Transition in Practice

Corequisite: NURS 064. Prerequisite: NURS 063 with a minimum grade of C. Course Advisory: SCC minimum English and Math standards. Basic computer navigation skills and frequent internet access is required. This course is the final course in the nursing sequence. The focus of this course is on nursing care and first level management / leadership skills in caring for groups of hospitalized patients. Emphasis is placed on team management skills in acute care settings. The registered nurse preceptor directly supervises the student under the guidance of the nursing faculty liaison. Professional development skills, as well as current issues in nursing, are applied. This course focuses on managing groups of patients with respect to the individual's cultural / religious beliefs related to wellness, illness and health care practice. Clinical application of both previously learned theory and skills are applied in various healthcare agencies. *Twenty-four hours lab (5-week course).*

NURS 101 3.0 Units
Preparation for Nursing

Course Advisory: SCC minimum English and Math standards. Basic computer navigation skills and frequent internet access is required. Designed to provide pre-nursing and beginning nursing students with realistic and useful strategies to enhance their success in reaching this career goal. Students will gain a realistic understanding of the nursing profession, critically analyze their own strengths, and develop strategies to identify and strengthen areas needing improvement. The course will also provide the student with the knowledge and skills to identify and locate social and financial resources; develop and/or enhance language, math and communication skills to work effectively with a culturally diverse population; develop and enhance critical thinking skills; and enhance self-assessment and accountability skills. *Three hours lecture.*

NURS 103 6.5 Units
Certified Nursing Assistant

Prerequisite: Applicants must be at least 16 years old. Course Advisory: SCC minimum English and Math standards. Basic computer navigation skills and frequent internet access is required. Prepares the student to function in the role of Certified Nursing Assistant in the acute care, long-term care, and home health settings. Students must apply to the CNA program through Solano Community College's Office of Admissions and Records, as well as attend a mandatory information session prior to the beginning of class. *8-week course. Eight hours lecture, sixteen hours lab.*

NURS 104 2.0 Units
Home Health Aide

Prerequisite: NURS 103 with a minimum grade of C (may be taken concurrently). The home health aide course is an extension of the nursing assistant training. It is a didactic model that addresses the transition of skills from an institutional environment to the home setting. The course consists of nine modules, 20 hours classroom instruction including use of state curriculum, lectures, videos and discussion. *4-week course. Six hours lecture, six hours lab.*

Nursing

NURS 105

Acute Care Nursing Assistant

Prerequisite: NURS 103 with a minimum grade of C. CNA acute care courses focus on patients with acute illness or short-term illness or injury. These classes prepare current CNAs to work in an emergency room or other short-term care facility, assisting registered nurses (RNs) and other health care personnel. Students refine skills learned in the general or long-term care CNA courses, such as measuring vital signs. Certified nursing assistants in this class become skilled at observing patients for discomfort, pain and learning how to apply basic knowledge and skills to delivery quality patient care. The CNA acute care curriculum also covers anatomy and physiology, infection control and safety procedures in an acute care setting. This course is typically taken by current CNAs. It is commonly referred to as a CNA level 2 course. The nurse assistant is an important member of the health care team. The nurse assistant, under the direct supervision of licensed nursing personnel, provides direct care to the resident; promotes comfort measures, and collects, records and reports data. Eight hours lecture, ten hours lab. (3-week course).

2.0 Units

NURS 111

Medical Terminology

Course Advisory: SCC minimum English and Math standards. Basic computer navigation skills and frequent internet access is required. A study of the language of medicine. The student will develop a working knowledge of terms, word roots, and abbreviations related to structure and functioning of the systems of the body as they pertain to medical practice. Three hours lecture.

3.0 Units

NURS 148M

Maternal Nursing for International Nurses

Prerequisite: Dean Authorization to Enroll; Board of Registered Nursing Letter stating need for additional content and lab hours in Maternal Nursing, Physical exam, Immunizations and proof of TB clearance as required by partner health care facilities; Criminal Background check and Drug Screen per Nursing Program requirements; CPR for Health Care Providers from the American Red Cross or American Heart Association. Course Advisory: SCC minimum English and Math Standards. Basic computer navigation skills and frequent internet access is required. A family-centered course with emphasis on nursing care of women and children for the foreign nurses. The focus includes the antepartal, intrapartal, postpartal, and neonatal client, both healthy and ill. This course provides students the opportunity to synthesize and use nursing knowledge and skills in providing care to clients in a variety of settings. Concepts of homeostasis, communication, and growth and development are integrated throughout the course. The nursing process is used with concepts of legal aspects, pharmacology, clinical skills, safety and asepsis, crisis intervention, health teaching, and self-evaluation. Clinical assignments and self-study modules are offered concurrently with theory. This course must be completed successfully with minimum grade of C to pass the class. This class is for nursing school graduates from non-BRN accredited programs/foreign nursing program graduates, satisfying the BRN obstetric education requirement to be able to obtain a registered nursing license in the United States of America. Five hours lecture, Fifteen hours lab. (8-week course)

5.0 Units

Nursing

NURS 159

Career Mobility Transition

Prerequisite: Dean Authorization to Enroll; Board of Registered Nursing Letter stating need for additional content and lab hours in Maternal Nursing, Physical exam, Immunizations and proof of TB clearance as required by partner health care facilities; Criminal Background check and Drug Screen per Nursing Program requirements; CPR for Health Care Providers from the American Red Cross or American Heart Association. Course Advisory: SCC minimum English and Math Standards. Basic computer navigation skills and frequent internet access is required. A family-centered course with emphasis on nursing care of women and children for the foreign nurses. The focus includes the antepartal, intrapartal, postpartal, and neonatal client, both healthy and ill. This course provides students the opportunity to synthesize and use nursing knowledge and skills in providing care to clients in a variety of settings. Concepts of homeostasis, communication, and growth and development are integrated throughout the course. The nursing process is used with concepts of legal aspects, pharmacology, clinical skills, safety and asepsis, crisis intervention, health teaching, and self-evaluation. Clinical assignments and self-study modules are offered concurrently with theory. This course must be completed successfully with minimum grade of C to pass the class. This class is for nursing school graduates from non-BRN accredited programs/foreign nursing program graduates, satisfying the BRN obstetric education requirement to be able to obtain a registered nursing license in the United States of America. *Five hours lecture, Fifteen hours lab. (8-week course)*

3.5 Units

NURS 223

Critical Care Nursing

Prerequisite: RN or LVN Licensure and NURS 219. Course Advisory: SCC minimum English and Math standards. Basic computer navigation skills and frequent internet access is required. Designed for staff nurses to provide essential knowledge and skills to adequately function in a critical care unit. For each body system, course content includes: brief review of anatomy and physiology; identification of critical illness states; potential complications; correlation of specific physical assessment/laboratory data; operational principles for the use of critical care equipment; nursing care responsibilities in the care of the critically ill patient; legal aspects of critical care nursing. *Four hours lecture.*

4.0 Units

NURS 230

Emergency Nursing

Prerequisite: RN or LVN licensure and NURS 219. Course Advisory: SCC minimum English and Math standards. Basic computer navigation skills and frequent internet access is required. Prepares staff nurses with essential knowledge and skills to function effectively within an emergency department. Topics include the emergency care of patients with: respiratory, cardiovascular, shock, neurological, orthopedic, abdominal, ENT, obstetrical, gynecological, genitourinary, pediatric, environmental, endocrine, trauma, psychological, psychiatric, abuse, and toxicologic emergencies. For each topic, pertinent physical and laboratory assessments, priorities of nursing care, interventions, and standards for documentation are explored. *Four hours lecture.*

4.0 Units

NURS 219

Cardiac Rhythms

Prerequisite: BIO 004, BIO 005. Course Advisory: SCC minimum English and Math standards. Basic computer navigation skills and frequent internet access is required. Designed for health care professionals who need to distinguish among the various cardiac rhythms/dysrhythmias while caring for patients on cardiac monitors. Topics include: basic cardiac physiology, electrophysiology of cardiac tissues; basic pathophysiology of coronary artery disease; identification and interpretation of sinus rhythms versus cardiac dysrhythmias; application of chest monitoring electrodes and 12 Lead ECG electrodes; and use of an oscilloscope. *Four hours lecture (8-week course).*

2.0 Units

Nutrition

Nutrition

Educational Course Offerings

The Health Science discipline of Nutrition provides students the opportunity to learn how the effect of diet interacts with the structure and function of the human body. The knowledge base includes an understanding of the basic biochemical foundations of proteins, carbohydrates, lipids, vitamins, and minerals and their relationship to metabolic disease and overall health.

Associate in Science Degree

Not offered in this discipline.

NUTR 010

3.0 Units

Nutrition

Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standards. Study of the scientific concepts of human nutrition. Essential nutrients, functions, chemical compositions of foods and their utilization in the body will be covered. The course will emphasize topics such as weight loss, sports nutrition, food safety, the diet-disease relationship, global nutrition, and analysis of special nutritional requirements during the lifecycle among others. Students utilize computer technology and nutritional assessment methods to evaluate personal dietary habits. C-ID NUTR 110. *Three hours lecture.*

NUTR 054

3.0 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 is the same course as CDFS 054. Three hours lecture.*

NUTR 012

.5 to 2.0 Units

Evaluating Current Topics in Nutrition

Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standard. Methods of evaluating current nutritional topics, determining reliable and unreliable sources of information and judging validity of experimental design. This course provides opportunities to study current, controversial topics in nutrition. Course topics include, but are not limited to, vitamin and mineral supplements, weight loss fads, phytochemicals and foods as medicine. *One-half to two hours lecture.*

Occupational Education

Occupational Education

Description

These courses are designed to combine academic studies with practical, on the job experience, enabling students to apply theories learned in the classrooms to real work situations while earning college credits. OCED 090 and 091 are variable-unit work experience courses available to all occupational education certificate and degree programs students. Students wishing to continue OCED 090 and 091 over multiple semesters must contact the Work Experience Coordinator for enrollment assistance.

Through an agreement formulated at the beginning of the semester, each student establishes specific "Measurable Learning Objectives" to be accomplished by the end of the grading period. This cooperative agreement may be in the private sector or in public agencies and may be paid or volunteer.

For more information on Solano Community College's Work Experience program, please visit

<http://www.sccworkexperience.com/>.

All unit counts may not be offered in a given semester. Students enrolled in OCED 091 may not enroll in OCED 090 or any other experiential or practicum course and count the same hours during the same semester.

Soft Skills for Technicians Job-Direct Certificate

Program Outcomes

Students completing a Soft Skills for Technicians Job-Direct Certificate will be able to:

1. Identify and demonstrate proper occupational readiness, solid soft skills, a professional attitude, the ability to work as a team, and identify career goals.
2. Demonstrate the ability to create an accurate and comprehensive set of technical reports.
3. Demonstrate the ability to assess and solve a technical problem through accurately selecting and applying the appropriate measurement and performing calculations to confirm results.

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

REQUIRED COURSES	Units
OCED 070 Occupational Soft Skills.....	1.5
OCED 071 Occupational Portfolio Development	1.5
IT 140 Industrial Mathematics	3
IT 151 Vocational Mathematics	3
3 units from Recommended Electives.....	3
Total Units	12

Recommended Electives: (select 3 units).....	Units
ATEC 070 Automotive Fundamentals	3
CIS 001 Introduction to Computer Science	3
CIS 050 Microcomputer Applications	3
DRFT 079 Blueprint Reading.....	3
IT 050 Alternative Energy Technologies	3
IT 101 How Things Work.....	3
IT 110 Modern Welding.....	3
OCED 090 Occupational Work Experience	3
OCED 091 Occupational Work Experience	3

Occupational Education

OCED 070

1.5 Units

Occupational Soft Skills

Course Advisory: Minimum SCC math and English standard.

Covers the critical tools to help occupational students develop the employability or soft skills needed for a smooth transition to the work force based on the Secretary's Commission on Achieving Necessary Skills (SCANS). Topics include practical elements required to meet employer expectations, create cooperative co-worker interactions and development of positive personal characteristics. This is not a work experience course. *Three hours lecture.*

OCED 071

1.5 Units

Occupational Portfolio Development

Course Advisory: SCC minimum English standard. Innovative in career planning, career portfolios are designed to assist in demonstrating skills and competencies. In this course, participants will identify personal strengths and weaknesses in key skill areas and develop a plan for obtaining the skills they need. Professional and educational samples will be collected, categorized, and evaluated. Participants will analyze how the career portfolio can be used as a tool for the job search as well as for career advancement. A hard copy and/or electronic career portfolio will be completed by the end of this course. 8-week course. *Three hours lecture.*

OCED 090

1.0 to 8.0 Units

Occupational Work Experience

Corequisite: Student must be working (paid or unpaid) from 5 to 40 hours per week for a licensed business for a total of 75 hours per unit for paid work and 60 hours per unit for unpaid work. Duties must relate to student's major field. Course Advisory: SCC minimum English and Math standards. To Qualify for Occupational Work Experience credit, the student must be working (paid or unpaid) for a legal business in a position directly related to the declared major. Students must work 75 hours per unit of credit for paid work and 60 hours per unit of credit for unpaid work. Students will attend a weekly coordination seminar and develop job-oriented objectives. OCED 090 may be required for some majors and is an elective for all occupational education certificate and degree programs.

Qualified students who are not working or volunteering may seek placement assistance from the Student Placement Office. 1 unit of credit may be earned for each 75 hours paid or 60 hours unpaid work per semester to a maximum of 8 units per semester to a total of 16 units over multiple semesters.

NOTE: Students enrolled in OCED 90 may not enroll in OCED 91 or any other experiential or practicum course and count the same hours during the same semester. Lab hours are the hours students spend on their job sites. Students wishing to take the maximum OCED units may continue OCED 090 over multiple semesters not to exceed 16 units total for all work experience courses. Students wishing to continue OCED 090 in subsequent semesters must contact the Work Experience Coordinator for enrollment assistance.

OCED 091

1.0 to 6.0 Units

General Work Experience

Corequisite: Student must be available to work from 5 - 30 hours or more per week for a licensed business for a semester total of 75 hours per unit for paid work and 60 hours per unit for unpaid work. Job does not need to be related to major. To Qualify for General Work Experience credit, the student must be working (paid or unpaid) for a legal business. Students must work 75 hours per unit of credit for paid work and 60 hours per unit of credit for unpaid work. Work does not need to be related to major. Students will attend a weekly coordination seminar and develop job-oriented objectives. OCED 091 is an elective for all occupational education certificate and degree programs. Course Advisory: SCC minimum English and Math standards.

Qualified students who are not working or volunteering may seek placement assistance from the Student Placement Office. 1 unit of credit may be earned for each 75 hours paid or 60 hours unpaid work during the semester to a maximum of 6 units. OCED 091 may be taken over multiple semesters for a maximum of 6 units.

NOTE: Students enrolled in OCED 91 may not enroll in OCED 90 or any other experiential or practicum course and count the same hours during the same semester. Total work experience units may not be more than 16. Lab hours are the hours students spend on their job sites. Note: CSU will accept up to 12 units for transfer.

Office Technology

Administrative Assistant

Program Description

This program is designed to develop technical and communication skills required for management support. Computer literacy, keyboarding skills, document formatting, proofreading and grammatical skills, presentation skills, spreadsheet, and organizational skills are emphasized.

Certificate of Achievement and Associate in Science Degree

A Certificate of Achievement can be obtained upon successful completion of all courses. An Associate in Science Degree can be obtained upon completion of 60 units, including the required courses in the major, and the general education requirements. All courses for 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 Administrative Assistant Certificate of Achievement/ Associate Degree will be able to:

1. Demonstrate mastery of the alpha and numeric typewriting keyboard.
2. Demonstrate mastery in the keyboarding of correspondence, manuscripts, and compositions under timed conditions with established accuracy and formatting standards using proper techniques.
3. Develop a high degree of competency and a broad knowledge of skills as they relate to general office procedures.

REQUIRED COURSES:..... Units

BUS 092 Business Communication 3
BUS 100 Work Readiness 1.5
BUS 181 Business Mathematics 1

CIS 001 Introduction to Computer Science 3
OR
CIS 050 Microcomputer Applications 3

CIS 066 Microsoft Word 3
CIS 073 Microsoft Excel 3
CIS 090 Introduction to PowerPoint 1.5
CIS 091 Microsoft Outlook 1.5
OCED 090 Occupational Work Experience 1
OT 054A Beginning Keyboarding A 1.5
OT 054B Beginning Keyboarding B 1.5
OT 055A Intermediate Keyboarding/
Word Processing A 1.5
OT 055B Intermediate Keyboarding/
Word Processing B 1.5
OT 056 Business Grammar and Proof Reading 2
OT 151 Office Systems & Procedures 3
OT 162 Ten-Key 1
Total Units: 30.5

This is a Gainful Employment Program. For additional information, please visit
http://www.solano.edu/gainful_employment/ and select "Office Technology Administrative Assistant."

Office Technology

Medical Front Office Clerk

Program Description

The goal of this program is to prepare students to enter the health care industry at an entry-level position in two semesters.

Certificate of Achievement

A Certificate of Achievement can be obtained upon successful completion of the 26-unit major below. All courses 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 Medical Front Office Clerk Certificate of Achievement will be able to:

1. Demonstrate alpha and numeric keyboarding skills at 40 wpm with established accuracy.
2. Demonstrate computer literacy and word processing skills related to formatting business documents.
3. Use medical terminology for human diseases.
4. Demonstrate the differences in medical insurance and explain the duties of a medical office assistant, HIPPA.
5. Demonstrate ability to type medical documents and facility at using medical software such as Medisoft.
6. Employ the necessary soft skills to apply and find employment and keep it.

REQUIRED COURSES

(listed in recommended sequence)Units

Semester 1

NURS 111 Medical Terminology	3
OT 060 Administrative Medical Assistant.....	3
CIS 066 Microsoft Word.....	3
OT 054A Beginning Keyboarding A.....	1.5
OT 054B Beginning Keyboarding B.....	1.5
CIS 091 Microsoft Outlook.....	1.5

Semester 2

BUS 100 Work Readiness	1.5
OT 056 Business Grammar and Proofreading	2
OT 059 Medical Keyboarding and Computer Applications.....	3
OT 061 Health Insurance.....	3
OT 101 Study of Human Diseases for Medical Assistants	3
Total Units	26

This is a Gainful Employment Program. For additional information, please visit http://www.solano.edu/gainful_employment/ and select "Medical Front Office Clerk."

Office Technology

Medical Office and Coding Specialist

Program Description

This program builds upon the Medical Front Office Clerk program. Additional course work prepares students to perform medical front office duties including Medical Coding.

Certificate of Achievement and Associate in Science Degree

The Certificate of Achievement can be obtained upon successful completion of all courses. The Associate in Science Degree can be obtained upon completion of 60 units, including the required courses in the selected major, and the general education requirements. All courses for this 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 Medical Office and Coding Specialist Certificate of Achievement/ Associate Degree will be able to:

1. Apply both coding diagnostic and procedural for insurance billing while demonstrating understanding of medical terminology.
2. Enter patient information into medical software.
3. Keyboard accurately using the proper technique at 45+ wpm.

REQUIRED COURSES Units

BUS 092 Business Communication	3
BUS 100 Work Readiness	1.5
BUS 181 Business Mathematics	1
CIS 066 Microsoft Word	3
CIS 073 Microsoft Excel	3
CIS 091 Microsoft Outlook	1.5
NURS 111 Medical Terminology	3
OCED 090 Occupational Work Experience	1
OT 054A Beginning Keyboarding A	1.5
OT 054B Beginning Keyboarding B	1.5
OT 055A Intermediate Keyboarding/ Word Processing A	1.5
OT 055B Intermediate Keyboarding/ Word Processing B	1.5
OT 056 Business Grammar and Proof Reading	2
OT 059 Medical Keyboarding and Computer Applications	3
OT 060 Administrative Medical Assistant	3
OT 061 Health Insurance	3
OT 063 Introduction to ICD-CM Coding	3
OT 064 Intermediate ICD-CM Coding	3
OT 066 CPT-IV Coding	3
OT 101 Study of Human Diseases for Medical Assistants	3
OT 151 Office Systems & Procedures	3
Total Units	49

Recommended Electives:

ACCT 180 Introduction to Accounting
CIS 001 Introduction to Computer Science
CIS 050 Microcomputer Applications
CIS 078 Access - Database Management System
CIS 090 Introduction to PowerPoint
MGMT 055 Management/Leadership Skills
OCED 090 Occupational Work Experience

This is a Gainful Employment Program. For additional information, please visit http://www.solano.edu/gainful_employment/ and select "Office Technology Medical Office and Coding Specialist."

Office Technology

OT 054A 1.5 Units

Beginning Keyboarding A

OT 054A is an individualized beginning keyboarding course taught on the computer. Touch typing is developed for the alphabet, punctuation, symbols, and top row number keys. Speed will be built to a minimum of 20 words per minute. Students may test out of OT 54A if they can meet a minimum of 20 wpm with proper technique. *Three hours lecture (8-week course).*

OT 054B 1.5 Units

Beginning Keyboarding B

Prerequisite: OT 054A with a minimum grade of C or instructor consent. OT 054B is an individualized beginning keyboarding course taught on the computer. Touch typing is developed for the alphabet, punctuation, symbols, and top row number keys. Speed will be built to a minimum of 30 words per minute. Materials studied include production of documents such as correspondence, memos, reports and tables in standard formats. *3 hours lecture (8-week course).*

OT 055A 1.5 Units

Intermediate Keyboarding/Word Processing A

Prerequisite: OT 054B with a minimum grade of C or instructor recommendation. Course Advisory: CIS 066 with a minimum grade of C. OT 055A is a keyboarding course using a computer with units of study including skill building, correspondence, reports, compositions, tables, special projects, and business forms. Speed will be built to a minimum of 35 words per minute. *3 hours lecture (8-week course).*

OT 055B 1.5 Units

Intermediate Keyboarding/Word Processing B

Prerequisite: OT 055A with a minimum grade of C or instructor recommendation. An individualized keyboarding course using a computer with units of study including skill building, correspondence, reports, compositions, tables, special projects, and business forms. Speed will be built to a minimum of 40 words per minute. *Three hours lecture (8-week course).*

OT 056 2.0 Units

Business Grammar and Proof Reading

Prerequisite: OT 055B with a minimum grade of C or P, or pass the placement test. Course Advisory: SCC minimum English and Math standards. This course is designed to prepare students for professional work in an office with a heavy emphasis on business grammar and proof-reading. Speed will be built to a minimum of 50 words per minute. *Two hours lecture.*

OT 059 3.0 Units

Medical Keyboarding and Computer Applications

Prerequisite: Completion of all modules of OT 054 with minimum grade of C or P or passing the OT 059 placement test; and Nursing 111 (may be taken concurrently). Course Advisory: SCC minimum English standard. A medical document processing course. Students will process documents in various medical specialty units including: head and neck, cardiovascular medicine, plastic surgery, allergy / immunology, urology, surgery, oncology, dermatology, and internal medicine. Students will build keyboarding speed and accuracy. *Three hours lecture, two hours lab.*

OT 060 3.0 Units

Administrative Medical Assistant

Course Advisory: Eligibility for English 001 and SCC minimum Math standard. This course introduces the student to the responsibilities of an Administrative Medical Office Assistant including: HIPPA (legal and ethical considerations), interpersonal skills, scheduling appointments in person and by telephone, records and file management, written communications, and financial duties. This course will be offered in the Learning Community for the Medical Front Office Clerk Program. It may also be offered as a course which could be taken in conjunction with the Medical Office Specialist Program. *Three hours lecture.*

OT 061 3.0 Units

Health Insurance

Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standard. Introduces health insurance claims processing and reimbursement issues. Discusses the major health care insurance programs and the impact of federal regulations. The course introduces the use of diagnosis and procedures coding. Teaches the student how to accurately complete a claim. This class is offered as part of the Medical Front Office Clerk Learning Community. If taken as part of the community, students must enroll in all other Learning Community courses. The course may also be offered independently. *Three hours lecture.*

Office Technology

OT 100 1.0 Units
Skill Building on the Computer Keyboard

Course Advisory: Ability to touch type at 20 wpm; SCC minimum English and Math standards. Individualized skill building keyboarding course taught on the microcomputer. Speed and accuracy skills are enhanced on the alphabet, punctuation, and numbers. The unit of study includes identifying the specific needs of the individual and then assigning diagnostic drills, skill-development practice and pre and post-testing. The skill building goal will be to increase typing speed or straight copy 3- to 5-minute timed writings between 5 to 10 words per minute above the starting rate with an accuracy level of not more than one error per minute. *Two hours lecture (8-week course).*

OT 101 3.0 Units
Study of Human Diseases for Medical Assistants

Course Advisory: SCC minimum English standard. Study of the pathological process, imparting basic knowledge to paramedical personnel. The student will study the basic concepts, terminology, etiology and characteristics of pathological processes. Diseases are classified according to both causative agents and the body system to which they relate. *Three hours lecture.*

OT 151 3.0 Units
Office Systems & Procedures

Corequisite: One unit of OCED 90. *Prerequisite:* Typing rate of 45 words per minute and microcomputer word processing skills. *Course Advisory:* SCC minimum English and Math standards. An advanced level course designed to complete the training of Office Technology program students in office systems and procedures. Course should be taken during the student's final semester of the program or as a refresher for experienced business students. One unit of work experience will be required in the specialty area of the student's major. *Three hours lecture.*

OT 162 1.0 Units
Ten-Key

Course Advisory: SCC minimum English and Math standards. Individualized course offering the fundamentals of operating the ten-key microcomputer number keypad. The touch system of operation and continuous speed and accuracy development are emphasized throughout the course. *Two hours lecture (8-week course).*

OT 163 3.0 Units
Introduction to Diagnostic Coding

Prerequisite: A minimum grade of C in OT 101 and NURS 111. *Course Advisory:* SCC minimum English standard; A minimum grade of C in BIO 016 and BIO 016L. Introductory course in the basic principles of coding disease and procedures using the International Classification of Disease, Clinical Modification (ICD--CM) and ICD--CM coding handbook for entry-level coders. Current ICD--CM books only will be utilized in this course. The accuracy of coding using the ICD-DM manual is the focus of this course. The impact of coding on reimbursement will be discussed. *Three hours lecture.*

OT 164 3.0 Units
Intermediate ICD-PCS Coding

Prerequisite: Minimum grade of C in NURS 111 and OT 101. *Course Advisory:* SCC minimum English standard. This course explores the guidelines, conventions, and process for selecting procedural codes for inpatient claims. The course will focus on Procedural Coding System (PCS) coding in compliance with The Centers for Medicare and Medicaid Services (CMS) and the National Center for Health Statistics (NCHS) guidelines for coding and reporting using the International Classification of Diseases, Procedure Coding System (ICD-PCS). ICD-PCS is a procedure classification published by the United States for classifying procedures performed in hospital inpatient health care settings. *Three hours lecture.*

OT 166 3.0 Units
Current Procedural Coding

Prerequisite: NURS 111 and OT 101. *Course Advisory:* Minimum grade of C in OT 063 and OT 064; SCC minimum English and Math standards. Course that covers the principles and mechanics of coding professional services rendered using the CURRENT PROCEDURAL TERMINOLOGY (CPT-IV) coding system. *Three hours lecture.*

Philosophy

Philosophy

Program Description

The philosophy program consists of one comprehensive survey course augmented by special courses in critical thinking, ethics, political philosophy, and religion. All constitute a basic and well-rounded introduction to philosophy. Each course presumes no prior study of philosophy.

Associate Degree

Not offered in this discipline

PHIL 001 3.0 Units

Introduction to Critical Thinking and Reasoning

Course Advisory: ENGL 001 or ENGL 062. Study of logical thinking and reasoning in everyday life. Emphasis is on informal logic in contrast to formal symbolic logic. Special attention is given to 'computer literacy' and 'educational television.' Critical reading and writing is required. The course does not fulfill the IGETC critical thinking requirement. *Three hours lecture.*

PHIL 003 3.0 Units

Introduction to Philosophy

Course Advisory: ENGL 001 or ENGL 062. General introduction to the central methods and recurring problems in the Western philosophical tradition. Topics of inquiry are theories of knowledge, theories of existence, philosophy of religion, free will and determinism, and the mind-body problem. *Three hours lecture.*

PHIL 004 3.0 Units

Introduction to Moral Philosophy

Course Advisory: ENGL 001 or ENGL 062. Introduction to moral philosophy and major ethical theories of the Western philosophical tradition. Critical reading and writing are required. *Three hours lecture.*

PHIL 005 3.0 Units

Critical Thinking: The Philosophic Grounds of Literacy

Prerequisite: ENGL 001. Course Advisory: SCC minimum Math standard. Designed to educate students in the fundamental principles of sound and cogent thinking and reasoning expressed primarily in argumentative essays. More specifically, the course is a practicum in critical literacy, i.e., the written practice and refinement of fundamental skills and dispositions required in effective argumentation, critical analysis and evaluation, conceptual inquiry, and discursive expression in general. The study of exemplary argumentative writings from a variety of philosophical, social, and political sources is integral. Objective exams and critical essays are required. This course fulfills the IGETC critical thinking requirement. *Three hours lecture.*

PHIL 006 3.0 Units

Introduction to Political Philosophy

Course Advisory: ENGL 001 or ENGL 062. An inquiry into fundamental political concepts in political thought (e.g. justice, freedom, equality, power, authority, obligation and citizenship) as expressed by major political thinkers. Includes the study of basic skills, criticisms, and methods in political inquiry relevant to the life and education of citizens. Critical reading and writing is required. *Three hours lecture.*

Photography

Photography, Professional

Program Description

Pre-employment training in professional photography is designed to prepare students for self-employment and employment in the private and public sectors and covers a broad spectrum of photographic fields, e.g., advertising illustration, industrial, portraiture, medical, commercial, photojournalism, and landscape.

Certificate of Achievement and Associate in Science Degree

A Certificate of Achievement can be obtained upon completion of the 28-unit major. The Associate in Science Degree can be obtained by completing a total of 60 units, including the major and the general education requirements. All courses for this 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 Photography, Professional Certificate of Achievement / Associate Degree will be able to:

1. Demonstrate and comprehend the technical components of digital/analog cameras to effectively photograph varied subject matter with visual literacy.
2. Analyze and distinguish creative components of a photograph within its contextual usage (light, composition, impact, etc.) and apply knowledge in producing successful images as they pertaining to the photographic usage, i.e., fine art or applied world.

REQUIRED COURSES Units

PHOT 151 Professional Photography: Introduction	4
PHOT 152 Professional Photography: Portraiture	4
PHOT 153 Professional Photography: Product and Advertising	4
PHOT 154 Professional Photography: Interior & Exterior	4
PHOT 156 Portfolio Development	3
PHOT 070 Beginning Digital Imaging	3
ART 002 Art History	3
3 units from List A	3
Total Units	28

Recommended Electives

ART 011 Survey of Modern Art
ART 054 Illustration I
ART 056 Graphic Design I
ART 060 Exhibition Design
CINA 010 The Art of Cinema
MGMT 184 Small Business Management and Planning
MKT 171 Introduction to Marketing
OCED 090 Occupational Work Experience
PHOT 035 Art of Photography

List A (select 3 units) Units

PHOT 030 Photojournalism & Documentary Photography	3
PHOT 031 Intermediate Photography	3
PHOT 056 Photojournalism & Documentary Photography	3
PHOT 071 Digital Imaging	1 - 3

This is a Gainful Employment Program. For additional information, please visit http://www.solano.edu/gainful_employment/ and select "Professional Photography."

Photography

PHOT 030 3.0 Units
Beginning Film Photography
Course Advisory: Eligibility for ENGL 001, SCC minimum Math standard and PHOT 035, ART 011. An introduction to black and white film photography. Includes a brief history and discussion of image composition, with special emphasis on darkroom techniques, photographic principles and materials. Camera equipment is essential for this course and there are a substantial number of cameras for loan. SLR 35mm film camera and related materials are required. *Field trip may be required. Two hours lecture, three hours lab.*

PHOT 031 3.0 Units
Intermediate Photography
Prerequisite: PHOT 070 with a minimum grade of C. Course Advisory: PHOT 035, SCC minimum English and Math standard. This course is designed to further develop a student's basic technical and visual skills with an emphasis on continued visual literacy. Students may work with either film or digital cameras. Camera equipment is not provided by the college. *SLR Film or SLR Digital camera is required. Two hours lecture, three hours activity.*

PHOT 035 3.0 Units
Art of Photography
Course Advisory: ENGL 001, ART 011. This course is an introduction to photography and visual literacy through a survey of historical and contemporary movements and photographers. Students will complete photo assignments related to course content to deepen their understanding of the concepts. Camera equipment is not provided by the college. Students registering for this class may use any film or digital camera to complete assignments. Access to a film or digital camera is required to complete some assignments. Any camera is acceptable. *Field trips may be required. Three hours lecture.*

PHOT 040 3.0 Units
Alternative Photography
Course Advisory: PHOT 035, ART 038, SCC minimum English and Math standard. Students experiment with alternative photographic and non-photographic materials to create visual images. Camera equipment is not provided by the college. *Two hours lecture, three hours lab.*

PHOT 045 3.0 Units
DSLR Videography
Course Advisory: PHOT 070 with a minimum grade of C. ENGL 001 and SCC minimum MATH standard. This course is designed to augment the professional photography courses with the ability to create digital video content via a DSLR camera. DSLR camera is required. *Two hours lecture, three hours lab.*

PHOT 051 0.5 to 1.0 Units
Photography Laboratory
Corequisite: Concurrent Enrollment in any SCC Photography course excluding PHOT 035. Course Advisory: SCC minimum English and Math standard. Photography laboratory is intended to augment concurrent enrollment in other darkroom, digital, and/or studio courses. The class provides individual assistance with projects requiring special darkroom, lightroom, and/or studio techniques as well as reinforcement of the proper care and maintenance practices of a darkroom, digital, and studio facility. Students may take this course up to the maximum number of units over multiple semesters. This is an Open Entry / Open Exit, Pass/No Pass only course. *One and one-half to three hours lab.*

PHOT 056 3.0 Units
Photojournalism & Documentary Photography
Prerequisite: A minimum grade of C in PHOT 030 or PHOT 070. Course Advisory: Eligibility for ENGL 001. Covers aspects of the camera as an editorial, journalistic and documentary tool. Covered are news and feature photography and photographic essays, including composition, impact, and creativity, for newspapers, magazines, Internet and other mass communications media. A camera is not provided by the College for this course. SLR film or SLR digital camera required. C-ID JOUR 160. *Two hours lecture, three hours lab.*

PHOT 070 3.0 Units
Beginning Digital Photography
Course Advisory: SCC minimum English and Math standard. An introduction to digital photography, including a brief history and discussion of image composition, camera usage, workflow and output options. This course is prerequisite to the Professional Photography program and most other photography courses. Camera equipment is not provided by the college. A SLR digital camera is required. *Two hours lecture, three hours activity.*

Photography

PHOT 071

Digital Imaging 1

Prerequisite: PHOT 070. Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standard. This course expands on the basic concepts and skills of digital imaging through usage of Lightroom and PhotoShop. Scanning and image editing included. SLR digital camera is required. Two hours lecture, three hours activity.

3.0 Units

PHOT 151

Professional Photography: Introduction

Prerequisite: PHOT 070 with a minimum grade of C. Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standard. This course is designed for students who are considering a career in photography. Students will be exposed to the technical and creative possibilities of applied and personal photography. SLR Digital camera required. Field trips may be required. Two hours lecture, six hours activity.

4.0 Units

PHOT 152

Professional Photography: Portraiture

Prerequisite: PHOT 070 with a minimum grade of C. Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standard. This course focuses on varied applications of portrait work in the applied and fine art environments. SLR Film or SLR Digital camera required. Field trip may be required. Two hours lecture, six hours activity.

4.0 Units

PHOT 153

Professional Photography: Product and Advertising

Prerequisite: PHOT 070 with a minimum grade of C. Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standard. This course is designed to explore varied film and lighting techniques to execute photographs in the context of advertising. Assignments will vary from studio work to location settings using a wide variety of subjects (food, wine, autos, etc). SLR Digital camera required. Field trip may be required. Two hours lecture, six hours activity.

4.0 Units

PHOT 154

Professional Photography: Interior and Exterior

Prerequisite: PHOT 070 with a minimum grade of C. Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standard. This course provides the student with skills to photograph architecture in the rural and urban landscape. SLR Digital camera required. Field trip may be required. Two hours lecture, six hours activity.

4.0 Units

PHOT 156

Portfolio Development

Prerequisite: PHOT 151 with a minimum grade of C and a minimum grade of C in one of the following: PHOT 152, 153 or 154. An advanced course designed to serve the student in the preparation of a professional fine art or commercial portfolio. Emphasis is placed on individual direction and personal goals. The student can expect individual consultation by the instructor. A digital or film camera is required. Student should expect to spend approximately \$200 in photographic materials. Two hours lecture, three hours lab.

3.0 Units

Physical Science

PHSC 012

4.0 Units

Introduction to Principles of Physical Science

Course Advisory: Eligibility for ENGL 001; SCC minimum Math standard. An introduction to the physical universe from atomic particles to the stars, with emphasis on the basic principles of physics, chemistry, astronomy, and the geo-sciences. This is a general education course in the physical science area for non-science majors that satisfies the physical science requirement for most universities and colleges. *Field trips may be required. Three hours lecture, three hours lab.*

Physics

Physics

Program Description

The focus of this program is on developing an understanding of and appreciation for the basic laws of our physical universe. This is done largely through the development of conceptual understanding, problem solving skills, and laboratory investigations.

Associate in Science Degree

The Associate in Science Degree can be obtained by completing a total of 60 units, including the 35 – 39-unit major listed below, the general education requirements, and electives. All courses for this 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 Physics Associate Degree will be able to:

1. Demonstrate analytical and problem solving skills.
2. Carry out experiments and critically assess their data.
3. Learn the roles of hypotheses, measurement and analysis in the development of scientific theory as evidenced by laboratory reports.
4. Write a laboratory report or give an oral presentation.

REQUIRED COURSES Units

PHYS 006 Physics for Science and Engineering	5
PHYS 007 Physics for Science and Engineering	5
PHYS 008 Physics for Science and Engineering	5
MATH 020 Analytic Geometry and Calculus I	5
MATH 021 Analytic Geometry and Calculus II	5
MATH 023 Differential Equations	4
One course from Biological Science	3-5
One course from Physical Science	3-5
Total Units	35-39

Biological Science (select one course) Units

BIO 002 Principles of Cell and Molecular Biology	5
BIO 003 Evolution, Ecology & Biodiversity	5
BIO 005 Human Physiology	5
BIO 012 Environmental Science	3
BIO 014 Principles of Microbiology	4
BIO 015 Introduction to Biology	4
BIO 016 Introduction to Human Biology	3
BIO 018 Biology of Sex	3

Physical Science (select one course) Units

ASTR 010 General Astronomy	3
ASTR 020 Astronomy Laboratory	1
ASTR 030 The Solar System	3
ASTR 040 Stars, Galaxies, and Cosmology	3
CHEM 001 General Chemistry	5
CHEM 002 General Chemistry	5
CHEM 003 Organic Chemistry I	5
CHEM 004 Organic Chemistry II	5
CHEM 010 Intermediate Chemistry	4
CHEM 011 Basic Organic Chemistry and Biochemistry	4
GEOG 001 Physical Geography	3
GEOG 001L Physical Geography Laboratory	1
GEOL 001 Physical Geology	3
GEOL 002 Geology Laboratory	1
GEOL 005 Geology of California	3
PHSC 012 Introduction to the Principles of Physical Science	4

Physics

Associate in Science in Physics for Transfer (ADT: A.S.-T)

Program Description

The focus of this program is on developing an understanding of and appreciation for the basic laws of our physical universe. This is done largely through the development of conceptual understanding, problem-solving skills, and laboratory investigations. The Physics 006,007,008 sequence is a three-semester offering in introductory physics requiring math through calculus. This sequence satisfies the lower division physics requirement for majors in physics, chemistry, geology or other physical sciences, and engineering. Physics 006 is a study of mechanics, gravitation, vibration and fluids. In Physics 007, students will cover the topics of electricity, magnetism, wave motion, and sound. In Physics 008, students will cover heat, optics, relativity, and modern physics. Students will learn to analyze and solve problems appropriate for this level. Experiments relating to the topics covered will be performed.

Associate in Science in Physics for Transfer

The Associate in Science in Physics for Transfer, which aligns with the physics TMC, will prepare students for a baccalaureate degree in physics. It consists of the courses necessary for beginning physics students to be able to succeed in the upper division physics courses that they will encounter in the CSU system, or any institution (such as the UC system) that grants an undergraduate physics degree.

To earn the Associate in Science in Physics for Transfer degree, students must:

1. Complete 60 semester units that are eligible for transfer to the California State University, including both of the following:
 - a. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
 - b. A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
2. Obtain a minimum grade point average of 2.0.

Program Outcomes

Students who complete the Associate in Science in Physics for Transfer degree will be able to:

1. Demonstrate analytical and problem-solving skills.
2. Carry out experiments and critically assess their data
3. Learn the roles of hypotheses, measurement, and analysis in the development of scientific theory as evidenced by laboratory reports.
4. Write a laboratory report or give an oral presentation.

REQUIRED COURSES Units

PHYS 006 Physics for Science and Engineering	5
PHYS 007 Physics for Science and Engineering	5
PHYS 008 Physics for Science and Engineering	5
MATH 020 Analytic Geometry and Calculus I.....	5
MATH 021 Analytic Geometry and Calculus II.....	5
MATH 022 Analytic Geometry and Calculus III	4

Required Major Total Units 29

CSU General Education or IGETC Pattern Units	37 - 39
CSU Transferable Electives (as needed to reach 60 transferable units)*	1
Total Degree Units	60

* 7 units may be double counted toward both the major area of emphasis and CSU General Education or IGETC Pattern. Consult with a counselor for more information on completing this degree.

Physics

PHYS 002 **5.0 Units**
General Physics (Non-Calculus)

Prerequisite: A minimum grade of C in either MATH 051 or MATH 004. *Course Advisory:* Eligibility for ENGL 001. PHYS 002 & 004, a two-semester sequence in introductory physics using math through trigonometry, is recommended for teachers, technicians, pre-dentistry, pre-medical, and biology majors, and others who need a general physics course. It covers the study of motion, energy, momentum, gravitation, solids, fluids, thermodynamics and the gaseous state, vibration, wave motion, and sound. Experiments relating to the topics covered will be performed and students will analyze the experiments. *Field trip may be required.* C-ID PHYS 105. *Four hours lecture, three hours lab.*

PHYS 004 **5.0 Units**
General Physics (Non-Calculus)

Prerequisite: PHYS 002 with a minimum grade of C. *Course Advisory:* Eligibility for ENGL 001. PHYS 002 & 004, a two-semester sequence in introductory physics using math through trigonometry, is recommended for teachers, technicians, pre-dentistry, pre-medical, and biology majors, and others who need a general physics course. It is a study of electricity, magnetism, light and optics, and modern physics. Students learn to analyze and solve problems appropriate for this level in these topics. Experiments relating to the topics covered will be performed and students will analyze the experiments. *Field trip may be required.* C-ID PHYS 110. *Four hours lecture, three hours lab.*

PHYS 006 **5.0 Units**
Physics for Science and Engineering

Prerequisite: MATH 021 with a minimum grade of C (may be taken concurrently). *Course Advisory:* Eligibility for ENGL 001 and High School Physics, or PHYS 002 with a minimum grade of C. The Physics 006, 007, 008 sequence is a three-semester offering in introductory physics requiring math through calculus. This sequence satisfies the lower division physics requirement for majors in physics, chemistry, geology or other physical sciences, and engineering. This course is a study of mechanics, gravitation, vibration and fluids. Students will learn to analyze and solve problems appropriate for this level in these topics. Experiments relating to the topics covered will be performed. C-ID PHYS 205. *Four hours lecture, three hours lab.*

PHYS 007 **5.0 Units**
Physics for Science and Engineering

Prerequisite: A minimum grade of C in both PHYS 006 and MATH 021. *Course Advisory:* Eligibility for ENGL 001. The PHYS 006, 007, 008 sequence is a three-semester offering in introductory physics requiring math through calculus. This sequence satisfies the lower division physics requirement for majors in physics, chemistry, geology or other physical sciences, and engineering. This course is a continuation of PHYS 006, covering the topics of electricity, magnetism, wave motion, and sound. Students will learn to analyze and solve problems appropriate for this level in these topics. Experiments relating to the topics covered will be performed. C-ID PHYS 210. *Four hours lecture, three hours lab.*

PHYS 008 **5.0 Units**
Physics for Science and Engineering

Prerequisite: A minimum grade of C in both PHYS 006 and MATH 021. *Course Advisory:* Eligibility for ENGL 001. The Physics 006, 007, 008 sequence is a three-semester offering in introductory physics requiring math through calculus. This sequence satisfies the lower division physics requirement for majors in physics, chemistry, geology or other physical sciences, and engineering. A continuation of PHYS 006 and PHYS 007, covering heat, optics, relativity, and modern physics. Students will learn to analyze and solve problems appropriate for this level in these topics. Experiments relating to the topics covered will be performed and students will analyze the experiments. *Field trip may be required.* C-ID PHYS 215. *Four hours lecture, three hours lab.*

PHYS 010 **3.0 Units**
Descriptive Physics

Course Advisory: SCC minimum English standard; MATH 330 or MATH 330B. An introductory physics course for both the non-science and the beginning science student. Includes topics such as nuclear physics, relativity, mechanics, properties of matter, quantum physics, heat, light, electricity and magnetism, sound and waves. Written assignments, tests, and a comprehensive final exam will be used to evaluate student success. *Field trip may be required.* *Three hours lecture.*

Political Science

Associate in Arts in Political Science for Transfer (ADT: A.A.-T)

Program Description

This program examines the theory and practice of government and the powerful personalities that affect governmental decisions. This interplay of individual citizens, public leaders, elections, and world events make political inquiry relevant today. The program provides a broad base for the analysis of how government resolves social conflict within the United States and around the world.

Associate in Science in Political Science for Transfer

Upon completion of the Associate in Arts in Political Science for Transfer Degree, students will be eligible to transfer to a CSU undergraduate Political Science program. The Associate in Arts in Political Science for Transfer Degree will facilitate successful transfer to the CSU system, allowing students to complete baccalaureate degrees in a more timely fashion.

To earn the Associate in Arts in Political Science for Transfer degree, students must:

1. Complete 60 semester units that are eligible for transfer to the California State University, including both of the following:
 - a. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements
 - b. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
2. Obtain a minimum grade point average of 2.0.

Program Outcomes

Students who complete the Associate in Arts in Political Science for Transfer degree will be able to:

1. Increase intellectual curiosity and political awareness.
2. Acquire an understanding of basic citizenship skills and requisite knowledge.
3. Demonstrate competency in the SCC “Core Four” competencies.
4. Expand knowledge and understanding of governmental systems and world politics. Apply political science skills to critically analyze and evaluate world governments, political movements and political change.
5. Demonstrate reading, writing, and analytical skills necessary to succeed in college, to transfer to four-year institutions, and to increase career and professional opportunities.
6. Develop awareness of cultural, social, political, environmental and economic forces in the US and world and arrive at a higher level of understanding of cultural and political diversity.

REQUIRED COURSES Units

PLSC 001 Introduction to American Government and Politics	3
Three courses from List A	9 – 10
Two courses from List B	6

List A: (select three courses)..... Units

PLSC 002 Introduction to Comparative Government	3
PLSC 006 Basic Concepts in Political Thought	3

PLSC 003 Introduction to International Politics	3
OR	
IR 001 Global Interdependence	3

MATH 011 Elementary Statistics	4
PLSC 004 Introduction to Political Science.....	3

List B: (select two courses) Units

Any List A course not used	
PLSC 005 Constitutional Rights in a Multicultural Society	3
PLSC 016 The American Legal System	3
PLSC 019 Human Rights and Sexual Orientation.....	3
PLSC 049 Political Science Honors	1 - 3
PLSC 050 Student Leadership	1

Required Major Total Units 18 - 19

CSU General Education or IGETC Pattern Units	37 - 39
CSU Transferable Electives (as needed to reach 60 transferable units)*.....	8 - 17
Total Degree Units	60

* 6 - 12 units may be double counted toward both the major area of emphasis and CSU General Education or IGETC Pattern. Consult with a counselor for more information on completing this degree.

Political Science

PLSC 001 3.0 Units

Introduction to American Government and Politics

Course Advisory: Successful completion of ENGL 001 with a minimum grade of C and SCC minimum Math standard. Introduction to the theory and practice of American politics, this course includes an analysis of the operation of national, state, and local governments, as well as the U.S. and California Constitutions. C-ID POLS 110. *Three hours lecture.*

PLSC 002 3.0 Units

Introduction to Comparative Government

Course Advisory: PLSC 001; Successful completion of ENGL 001 with a minimum grade of C; SCC minimum Math standard. The political institutions of selected industrialized and developing nations are examined comparatively. Emphasis is on the formation of political institutions; government, political culture, ethnic groups, citizen and interest participation, political parties and modern bureaucratic public policy roles. This course includes a 10-12 page research paper. C-ID POLS 130. *Three hours lecture.*

PLSC 003 3.0 Units

Introduction to International Politics

Course Advisory: ENGL 001 and SCC minimum Math standard. Successful completion of PLSC 001. An introductory study of the international system from the U.S. perspective focusing on such concepts as the nation state and nationalism, power, war and military strategy, international law and approaches to international peace and stability. C-ID POLS 140. *Three hours lecture.*

PLSC 004 3.0 Units

Introduction to Political Science

Course Advisory: ENGL001 with a minimum grade of C and SCC minimum Math standard. An introduction to political science designed to familiarize students with basic political concepts, political ideologies, political systems, and subfields within political science. C-ID POLS 150. *Three hours lecture.*

PLSC 005 3.0 Units

Constitutional Rights in a Multicultural Society

Course Advisory: PLSC 001; ENGL 001; SCC minimum Math standard. Introduction to Constitutional rights, this course will highlight the impact of European, Native American, African American, Asian American, and Latino American cultures on United States and California law and government. The effect of the legislative, executive, and judicial branches will be explored. Cross-cultural issues will also be an integral part of this inquiry, including the freedom of expression, religious culture, and the politics of ethnic groups. Satisfies B or E requirements for graduation. *Three hours lecture.*

PLSC 006 3.0 Units

Introduction to Political Philosophy

Course Advisory: ENGL 001 or ENGL 062. An inquiry into fundamental political concepts in political thought (e.g. justice, freedom, equality, power, authority, obligation and citizenship) as expressed by major political thinkers. Includes the study of basic skills, criticism, and method in political inquiry relevant to the life and education of citizens. *Critical reading and writing are required.* C-ID POLS 120. *Three hours lecture.*

PLSC 016 3.0 Units

The American Legal System

Course Advisory: PLSC 001; ENGL 001; SCC minimum Math standard. Introduction to the American legal system and influence of other legal systems, emphasizing the evolution of legal concepts in response to the changing environment. The American judicial system will be analyzed to include civil and criminal procedure, torts & contracts, as well as current legal issues including the death penalty, insanity defense, drugs, environmental law, right to die, forensic evidence and role of juries. *Three hours lecture.*

PLSC 019 3.0 Units

Human Rights and Sexual Orientation

Course Advisory: ENGL 001. An introduction to gay/lesbian studies with an analysis of a variety of concepts and theories in relation to political science, gay rights and the law, the politics of AIDS, health issues, the political/religious right, marriage and family, and current gay agenda issues. *Three hours lecture.*

PLSC 048G 3.0 Units

Human Rights: A Global Perspective

Course Advisory: Completion of ENGL 001, SCC minimum Math standard. An introduction to the developing systems, laws and norms for the promotion and the protection of human rights in the world today. This course will also provide a foundation for understanding legal, political, and economic aspects of human rights. Topics will include ideological and cultural perspectives; sources of violations; the United Nations, regional, and national systems; women's human rights; and the role of non-governmental organizations. Overall the course will be looking at prevailing concepts, institutions, rules, procedures, problems, and Human Rights potentialities. *Three hours lecture.*

Political Science

PLSC 049

1.0 to 3.0 Units

Political Science Honors

Prerequisite: Completion of 24 units of college credit with a minimum GPA of 3.3; a minimum of 6 units in the discipline with a minimum grade of B; an ability to work independently; permission of the School Dean based on instructor availability. Independent study project which results in a critical examination of government, politics, or law. Students may take this course up to the maximum number of units over multiple semesters. *Three to nine hours by arrangement*

PLSC 050

1.0 Units

Student Leadership

Course Advisory: SCC minimum English and math standards. A class devoted to the practical application of the governmental process through participation in the student government program. Open to all students. *Two hours activity, one hour by arrangement.*

Psychology

Psychology

Program Description

The psychology program provides a broad overview of psychology as a science, in particular regard to major theories, methods, and applications. The program emphasizes critical thinking, skeptical inquiry and the scientific approach to understanding behavior and mental processes. In addition, personal, social, and organizational issues are explored using psychological principles.

Associate in Arts Degree

The Associate in Arts Degree can be obtained by completing a total of 60 units, including the 18-unit major, general education requirements and electives. All courses for this 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 Psychology Associate Degree will be able to:

1. Demonstrate an understanding of psychology as a science in regard to major theories, methods, and applications.
2. Successfully complete required psychology (major) program courses

REQUIRED COURSES Units

PSYC 001 Introduction to Psychology	3
PSYC 002 Biological Psychology	3
PSYC 004 Research Methods in Behavioral Science	3
MATH 011 Elementary Statistics	3
9 units from Recommended electives	9
Total Units	18

Recommended Electives: (select 9 units) Units

PSYC 005 Abnormal Psychology	3
PSYC 006 Developmental Psychology	3
PSYC 007 Cross-Cultural Psychology	3
PSYC 020 Personal and Social Behavior	3
PSYC 030 Introduction to Social Psychology	3
PSYC 034 Human Sexual Behavior	3
PSYC 040 Drugs, Society, & Behavior	3
HS 051 Introduction to Human Services	3

Updated in
Addendum

Psychology

Associate in Arts in Psychology for Transfer (ADT: A.A.-T)

Program Description

The psychology program provides academic instruction in basic psychological concepts, theories, terminology, and research methods, and promotes life skills, personal growth, and interpersonal effectiveness.

Associate in Arts in Psychology for Transfer

The Associate in Arts for Transfer is especially appropriate for students who plan to complete a bachelor's degree in Psychology at a CSU campus. Students completing an A.A.-T 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 A.A.-T will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree also prepares students for psychology 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 the Associate in Arts in Psychology for Transfer degree, students must:

1. Complete 60 semester units that are eligible for transfer to the California State University, including both of the following:
 - a. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements
 - b. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
2. Obtain a minimum grade point average of 2.0.

Program Outcomes

Students who complete the Associate in Arts in Psychology for Transfer degree will be able to:

1. Demonstrate an understanding of psychology as a science, in regard to major theories, method, and applications.
2. Students will successfully complete required psychology (major) program.

REQUIRED COURSES	Units	PSYC 006 Developmental Psychology	3
PSYC 001 Introduction to Psychology	3	PSYC 007 Cross-Cultural Psychology	3
PSYC 004 Research Methods in Behavioral Science.....	3	PSYC 020 Personal and Social Behavior	3
MATH 011 Elementary Statistics	4	PSYC 030 Introduction to Social Psychology	3
Two Courses from List A.....	3-4	PSYC 034 Human Sexual Behavior	3
One course from List B.....	3	PSYC 040 Drugs, Society & Behavior.....	3
List A (select two courses).....	Units	Required Major Total Units	19-20
PSYC 002 Biological Psychology.....	3	CSU General Education or IGETC Pattern Units .	37 - 39
BIO 015 Introduction to Biology	4	CSU Transferable Electives (as needed to reach 60	
BIO 016 Introduction to Human Biology.....	3	transferable units)*	10 - 19
		Total Degree Units	60

List B (select one course).....	Units
Any List A course not already used	
PSYC 005 Abnormal Psychology	3

* 9 - 15 units may be double counted toward both the major area of emphasis and CSU General Education or IGETC Pattern. Consult with a counselor for more information on completing this degree.

Psychology

PSYC 001 3.0 Units
Introduction to Psychology

Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standard. An introduction to psychology as the scientific study of human behavior and mental processes. Major topics include history of field, scientific method, sensation and perception, brain and nervous system, states of consciousness, development, learning, memory, cognition, motivation, emotion, personality, tests and measurements, health psychology, behavior disorders and treatment, and social psychology. C-ID PSY 110. *Three hours lecture.*

PSYC 002 3.0 Units
Biological Psychology

Prerequisite: PSYC 001 with a minimum grade of C. Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standards. This course focuses on the relationship of genetic and physiological factors to behavior. Topics include how the brain and nervous system influence behavior including perception, sexual behaviors, sleep, drug use, disorders, memory and learning. Current theories and research in biological psychology are reviewed. C-ID PSY 150. *Three hours lecture.*

PSYC 004 3.0 Units
Research Methods in Behavioral Science

Prerequisite: A minimum grade of C in both PSYC 001 and MATH 011. Course Advisory: Eligibility for ENGL 001. Introduction to basic methods in the behavioral sciences. Assumptions and goals of science are considered as well as several specific research techniques or designs. The ethics of research with human and animal subjects will be covered. C-ID PSY 200. *Three hours lecture.*

PSYC 005 3.0 Units
Abnormal Psychology

Prerequisite: PSYC 001. Course Advisory: ENGL 001, LR 010, ENGL 062, and SCC minimum Math standard. This course presents an overview of psychological disorders. It surveys selected disorders in the current version of the Diagnostic and Statistical Manual (DSM), including mood disorders (such as depression, bi-polar disorder), anxiety disorders, psychotic disorders (such as schizophrenia), personality disorders, eating disorders and others. It discusses historical and scientific approaches to explain and to treat these disorders from bio-psycho-social perspectives. *Three hours lecture.*

PSYC 006 3.0 Units
Developmental Psychology

Course Advisory: Eligibility for ENGL 001, SCC minimum Math standard, and PSYC 001. The course is a study of development from the prenatal period through the lifespan. Emphasis will be on current theories and research in developmental psychology. Physical, cognitive, social-emotional, intellectual and linguistic aspects of development will be examined. Included are influences of family, society and culture. This course does not fulfill the lifespan requirement for the nursing major. *Three hours lecture.*

PSYC 007 3.0 Units
Cross-Cultural Psychology

Course Advisory: Eligibility for ENGL 001, PSYC 001 with a minimum grade of C. This course is an overview of cross-cultural psychology with critical and comparative study of psychological topics such as ethnicity, gender, cognition, emotion, personality, health, and social interaction. Various ethnic populations within the United States, cultural values and individual beliefs will be examined in this class. Contemporary and historical research on the influence of culture on human psychology is reviewed. A service learning activity and/or field trip may be part of this class. *Three hours lecture.*

PSYC 012 3.0 Units
Psychology of Gender

Course Advisory: PSYC 001, ENGL 001, LR 010, and SCC minimum math standard. An examination of the research and theory from psychology and related fields to evaluate the behavioral, cognitive, psychological, biological, social, and cultural foundations in which women and men function. This course will explore classical and contemporary views of gender roles and the effects of gender roles on individual development and relationships. Open to all students. *Three hours lecture.*

PSYC 020 3.0 Units
Personal and Social Behavior

Course Advisory: SCC minimum English and Math standards. Study of human behavior in the process of adjusting to life's changes. The emphasis is on normal and abnormal adaptations to the various challenges which life presents. Issues related to the major schools of thought and their views towards a healthy personality, effective and ineffective behavior, behavioral disorders, psychotherapy, relationships, careers and personal growth will be examined. *Three hours lecture.*

Psychology

PSYC 030

3.0 Units

Introduction to Social Psychology

Course Advisory: PSYC 001; Eligibility for ENGL 001 and SCC minimum Math standard. This course will explore how thoughts, feelings, and behavior of individuals are influenced by the actual, imagined, or implied presence of others. Focus will be on the social factors that influence human behavior; other people, institutions, situations and the social and physical structures people have created. A review of the various perspectives unique to social psychologists and a variety of classical research in social psychology will be studied. *Same course as SOC 030. Three hours lecture.*

PSYC 034

3.0 Units

Human Sexual Behavior

Course Advisory: SCC minimum English standard. Objective exploration of the various issues pertaining to human sexual behavior from the perspective of the behavioral and social sciences. Some of the major topics to be discussed include history of sexuality, attitudes, behaviors, life styles, psychosexual development, role and identity, sexual dysfunctions, therapy and treatment. *Three hours lecture.*

PSYC 040

3.0 Units

Drugs, Society and Behavior

Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standard. The course will cover the historical, sociological, psychological, physiological, pharmacological and legal aspects of drugs. Emphasis will be placed on the effects of stimulants, sedative-hypnotics, narcotics, hallucinogens, alcohol, marijuana and inhalants. Various education, prevention and treatment approaches will be discussed. *Three hours lecture.*

PSYC 049

1.0 to 3.0 Units

Psychology 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 minimum grade of B; an ability to work independently; permission of the School Dean based on instructor availability. Independent study designed for honor students who intend to major in psychology. Students may take this course up to the maximum number of units over multiple semesters. *Three to nine hours by arrangement.*

Real Estate

Real Estate

Program Description

This program offers courses needed to qualify for the state of California salesperson license examination as well as for the broker's examination. A full range of real estate courses is offered including real estate finance, appraisals, etc. The courses are taught by qualified real estate professionals.

Certificate of Achievement and Associate in Science Degree

A Certificate of Achievement can be obtained by completing the 24-unit major. The Associate in Science degree can be obtained by completing 60 units, including the major, general education requirements, and electives. The major consists of 18 units selected from the courses listed below plus 6 units selected from the list of recommended electives which have been approved by the California Department of Real Estate. All courses for this 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 Real Estate Certificate of Achievement/ Associate Degree will be able to:

1. Analyze common real estate problems, apply appropriate solutions, and interpret outcomes.
2. Meet career preparation goals, as well as prepare for a state licensing exam.
3. Explain the process for making home purchase or sale decisions and completing real estate transactions.
4. Students will demonstrate mastery of program-specific concepts and skills (e.g. understand theory and application in real estate finance, investments, property management and financial institutions).

REQUIRED COURSES Units

RE 164 Real Estate Principles 3

RE 171 Real Estate Economics 3

OR

ECON 001 Principles of Economics (Macroeconomics) . 3

OR

ECON 002 Principles of Economics (Microeconomics) .. 3

RE 172 Real Estate Practice 3

RE 173 Legal Aspects of Real Estate 3

RE 174 RE Finance 3

RE 175 Principles of Appraisal 3

6 units from Recommended Electives 6

Total Units 24

Recommended Electives: (select 6 units)..... Units

ACCT 001 Principles of Accounting - Financial 4

BUS 018 Legal Environment of Business 3

RE 176 Advanced Residential Appraisal Practice 3

RE 177 Income Property Appraisal and Analysis 3

This is a Gainful Employment Program. For additional information, please visit
http://www.solano.edu/gainful_employment/ and select "Real Estate."

Real Estate

RE 164 3.0 Units
Real Estate Principles

Course Advisory: SCC minimum English and Math standards. Study of the characteristics of real estate from physical, legal, and economic standpoints. Course material is designed to assist those preparing for the real estate salespersons and brokers license examination. *Three hours lecture.*

RE 171 3.0 Units
Real Estate Economics

Course Advisory: SCC minimum English and Math standards. Study of the economic aspects of real estate and their effects on real estate markets, urban growth and finance. Particular emphasis is made on governmental and agency controls on development of regional and local areas, past and future. *Three hours lecture.*

RE 172 3.0 Units
Real Estate Practice

Course Advisory: SCC minimum English and Math standards. A comprehensive study of the techniques used to successfully operate a real estate business. Includes office management administration, in-service training of associate licensees, legal and statutory compliance, and agency and other oversights. Designed for students needing course for continuing education as required by the Department of Real Estate. *Three hours lecture.*

RE 173 3.0 Units
Legal Aspects of Real Estate

Course Advisory: SCC minimum English and Math standards. Comprehensive study and analysis of California law as applied to the legal problems involved in real estate transactions. Includes contract, agency, and finance devices. *Three hours lecture.*

RE 174 3.0 Units
Real Estate Finance

Course Advisory: SCC minimum English and Math standards. Comprehensive study and analysis of money markets, interest rates, and financing as applied to real estate transactions. *Three hours lecture.*

RE 175 3.0 Units
Principles of Appraisal

Course Advisory: SCC minimum English and Math standards. Entry level appraisal course introducing students to basic appraisal principles, and the Uniform Standards of Professional Appraisal Practice. Content includes: Influences on value, legal considerations, economic principles, real estate markets and analysis, valuation process, property description, highest and best use analysis, appraisal statistics, sales comparison and cost approaches to value. *Three hours lecture.*

RE 176 3.0 Units
Advanced Residential Appraisal Practice

Prerequisite: RE 175. Course Advisory: SCC minimum English and Math standards. Advanced appraisal course covering the principles, procedures and techniques needed to appraise all types of residential properties up to four units. The contents include: Review of basic appraisal principles, use of all Federal National Mortgage Association (FNMA) forms, basic income and expense estimating, gross rent multipliers, appraisal ethics and the Uniform Standards of Professional Appraisal Practice (USPAP). Student will appraise a custom home, a condominium and a small income residential property. *Three hours lecture.*

RE 177 3.0 Units
Income Property Appraisal and Analysis

Prerequisite: RE 175. Advanced appraisal course covering the principles, procedures and techniques needed to appraise commercial property, including large apartment buildings. The course content will include review of basic appraisal principles, income and expense estimating, operating expense ratios, direct capitalization, cash flow estimates, measures of cash flow and discounted cash flow analysis. *The use of financial calculator will be required. Three hours lecture.*

Science, General

Science

Program Description

This program is designed to provide students with a basic science background, preparing them to move into a curriculum at a four-year institution leading to a degree in such fields as chemistry, biology, physics, geology, or health sciences. This program is a path for immediate entry into science-based technology careers.

Associate in Science Degree

The Associate in Arts Degree can be obtained by completing a total of 60 units, including a minimum of 18 units in the major, the general education requirements, and electives. The major consists of courses selected from the lists below and must include twelve (12) units in courses with laboratory work and at least one course in each of the areas Biological Science and Physical Science. All courses for this 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 Science, General Associate Degree will be able to:

1. Demonstrate analytical and/or conceptual problem solving skills.
2. Carry out experiments and critically assess their data.
3. Learn the role of hypotheses, measurement and analysis in the development of scientific theory as evidence by laboratory reports.
4. Learn how to write a laboratory report or give an oral presentation.

REQUIRED COURSES Units

12 units of Laboratory Courses*

Minimum one course from Biological Science

Minimum one course from Physical Science

Total Units Minimum of 18

Biological Science

BIO 002* Principles of Cell and Molecular Biology	5
BIO 003* Evolution, Ecology, & Biodiversity	5
BIO 004* Human Anatomy	5
BIO 005* Introductory Physiology	5
BIO 012 Environmental Science	3
BIO 012L* Environmental Science Laboratory	1.5
BIO 014 Principles of Microbiology	4
BIO 015* Introduction to Biology	4
BIO 016 Introduction to Human Biology	3
BIO 016L* Human Biology Laboratory	1.5
BIO 018 Biology of Sex	3
BIO 019 * Marine Biology	4
ANTH 001 Physical Anthropology	3

Physical Science

ASTR 010 General Astronomy	3
ASTR 020* Astronomy Laboratory	1
ASTR 030 The Solar System	3
ASTR 040 Stars, Galaxies, and Cosmology	3
CHEM 001* General Chemistry	5
CHEM 002* General Chemistry	5
CHEM 003* Organic Chemistry I	5
CHEM 004* Organic Chemistry II	5
CHEM 010* Intermediate Chemistry	4
CHEM 011* Basic Organic Chemistry and Biochemistry	4
CHEM 051 Chemistry for the Health Sciences	5
GEOG 001 Physical Geography	3
GEOG 001L* Physical Geography Laboratory	1
GEOL 001 Physical Geology	3
GEOL 002* Geology Laboratory	1
GEOL 005 Geology of California	3
PHSC 012* Introduction to Principles of Physical Science	4
PHYS 002* General Physics (Non-calculus)	5
PHYS 004* General Physics (Non-calculus)	5
PHYS 006* Physics for Science and Engineering	5
PHYS 007* Physics for Science and Engineering	5
PHYS 008* Physics for Science and Engineering	5
PHYS 010 Descriptive Physics	3

Social Science

Social Science

Program Description

This program offers students the opportunity to study aspects of the human experience and the intricate relationship among them.

Associate in Arts Degree

The Associate in Arts Degree can be obtained by completing a total of 60 units, including the 18-unit major, general education requirements and electives. The 18-unit major is composed of courses selected from six subject areas shown below. All courses for this 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 Social Sciences Associate Degree will be able to:

1. Be aware of the social and cultural aspects of human behavior.
2. Understand the relationship between individual/self, society and others.
3. Demonstrate understanding regarding diverse individuals and groups in society.
4. Understand diverse groups and the social and cultural aspects of relationships.
5. Think, read, and write critically with respect to the social sciences.
6. Apply the knowledge and skills to life experience, including employment, social and individuals.
7. Understand the purpose and value of social sciences across the curriculum.
8. Major in the Social Science field.

REQUIRED COURSES Units

ECON 001 Principles of Economics (Macroeconomics) ..	3
Any History OR American Studies Course	3
One course from List A	3
One course from List B	3
One course from List C	3
One course from List D	3
Total Units	18

List A (select one course)..... Units

ANTH 001 Physical Anthropology	3
ANTH 002 Cultural Anthropology	3

List B (select one course)..... Units

GEOG 001 Physical Geography	3
GEOG 002 Cultural Geography	3
GEOG 004 World Geography	3

List C (select one course)..... Units

PLSC 001 Introduction to American Government and Politics	3
PLSC 006 Basic Concepts in Political Thought	3
PLSC 016 The American Legal System	3

List D (select one course)..... Units

PSYC 001 Introduction to Psychology	3
SOC 001 Introduction to Sociology	3
Any Social Science Ethnic Studies course not already used	3

Social Science

SOCS 022 3.0 Units
Ethnic, Racial, and Minority Group Relations in Harmony & Conflict

Course Advisory: SCC minimum English standard.
Examination of the historical, economic, psychological, and sociological aspects of majority-minority group relationships (ethnic, racial and gender) in the United States and selected cross-cultural situations. *Three hours lecture.*

SOCS 023 3.0 Units
The African-American Family

Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standard. Analyze theory and research dealing with the modern African-American family, its structure, and functions. Course survey will include an examination of the historical changes, differing family patterns, and influences of contemporary society as it impacts the African-American family. Social policies will also be examined. *Three hours lecture.*

SOCS 025 3.0 Units
Mexican-American Experience

Course Advisory: SCC minimum English standard.
Interdisciplinary examination of the historical, economic, psychological, and sociological aspects of the Mexican-American experience. *Three hours lecture.*

SOCS 030 3.0 Units
Peace, Non Violence and Conflict Resolution

Course Advisory: Eligibility for ENGL 001. Introduces the student to the study of peace, non violence and peaceful conflict resolution. The course is designed for students interested in the fundamental issues of peace, justice and conflict resolution in our society. It offers students an opportunity to reflect on the peace writings of both past and contemporary authors and is an examination of justice, peace and peacemakers, in the U.S. and worldwide. *Three hours lecture.*

SOCS 049 1.0 to 3.0 Units
Social 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 minimum grade of B; an ability to work independently; permission of the School Dean based on instructor availability.
Independent study designed for honor students who intend to major in social sciences. Students may take this course up to the maximum number of units over multiple semesters. *Three to nine hours by arrangement.*

Sociology

Sociology

Program Description

Sociology is the study of society and human behavior. Students who obtain a degree in Sociology gain a fundamental understanding of culture, socialization, inequality, racial and ethnic relations, sex roles, deviance, social issues and problems, and the distribution of political and economic power. Sociology students prepare themselves for a job in the field of business, health, education, criminal justice, government/law, or social service, and a variety of other areas.

Associate in Arts Degree

The Associate in Arts Degree can be obtained by completing a total of 60 units, including the 18-19-unit major, general education requirements and electives. The 18-19-unit major is composed of courses selected from the three (3) subject areas shown below. All courses for this 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 Sociology Associate Degree will be able to:

1. Gain a basic knowledge of the history of the development of sociology as a separate discipline.
2. Become more aware of cultural, social, political, environmental, and economic forces within the world they live.
3. Critically think, in addition to increase reading, writing and basic research skills.

REQUIRED COURSES	Units
SOC 001 Introduction to Sociology	3
SOC 002 Social Issues and Problems	3
PSYC 004 Research Methods in Behavioral Science	3
6 units from List A	6
Minimum 3 units from List B	3 - 4
Total Units	18 - 19

List A: (select 6 units)	Units
SOC 023 Sociology of African Americans	3
SOC 040 Sociology of the Family	3
SOC 045 Sociology of Religion	3
SOC 075 Introduction to Sociology of Sport	3

List B: (select at least 3 units)	Units
ANTH 002 Cultural Anthropology	3
MATH 011 Elementary Statistics	4
PLSC 019 Human Rights and Sexual Orientation	3
PSYC 030 Introduction to Social Psychology	3
SOCS 022 Ethnic, Racial and Minority Group Relations in Harmony and Conflict	3

Recommended Electives:

ENGL 036 Multi-Ethnic Literature in America
ENGL 012 Modern Women Writers
GEOG 002 Cultural Geography
IR 001 Global Interdependence
PHIL 001 Introduction to Critical Thinking and Reasoning
SOCS 030 Peace, Non Violence and Conflict Resolution
SOC 049 Sociology Honors

Sociology

Associate in Arts in Sociology for Transfer (ADT: A.A.-T)

Program Description

Sociology is the study of society and human behavior. Students who obtain a degree in Sociology gain a fundamental understanding of culture, socialization, inequality, racial and ethnic relations, sex roles, deviance, social issues and problems, and the distribution of political and economic power. Sociology students prepare themselves for a job in the field of business, health, education, criminal justice, government/law, or social service, and a variety of other areas.

Associate in Arts in Sociology for Transfer

The Associate in Arts for Transfer (A.A.-T) in Sociology is intended for students who plan to complete a bachelor's degree in Sociology at a CSU campus. Students completing this degree (A.A.-T in Sociology) are guaranteed admission to the CSU system, but not to a particular campus or major.

To earn the Associate in Arts in Sociology for Transfer degree, student must:

1. Complete 60 semester units that are eligible for transfer to the California State University, including both of the following:
 - a. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements
 - b. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
2. Obtain a minimum grade point average of 2.0.

Program Outcomes

Students who complete the Associate in Arts in Sociology for Transfer degree will be able to:

1. Become more aware of cultural, social, political, environmental, and economic forces within the world they live.
2. Raise their ethnic consciousness to a higher level of understanding and acceptance.
3. Build skills in critical thinking, reading and writing.
4. Improve skills cited above to provide an excellent base for transfer and success at four-year institutions.

REQUIRED COURSES	Units
SOC 001 Introduction to Sociology	3
Select 6-7 units from List A	6 - 7
6 units from List B	6
3 units from List C.....	3

List A: (select 6-7 units)	Units
SOC 002 Social Issues and Problems	3
PSYC 004 Research Methods in Behavioral Science	3
MATH 011 Elementary Statistics	4

List B: (select 6 units)	Units
Any List A course not already used	
SOC 030 Introduction to Social Psychology	3
SOC 040 Sociology of the Family	3
SOC 022 Ethnic, Racial and Minority Group Relations in Harmony and Conflict	3

List C: (select 3 units)	Units
Any List A or B course not already used	
SOC 045 Sociology of Religion	3
SOC 075 Introduction to Sociology of Sport	3
SOC 049 Sociology Honors	1 - 3
SOCS 030 Peace, Non Violence and Conflict Resolution.	3

Required Major Total Units	18 - 19
CSU General Education or IGETC Pattern Units	37 - 39
CSU Transferable Electives (as needed to reach 60 transferable units)*	11 - 14
Total Degree Units.....	60

* 9 units may be double counted toward both the major area of emphasis and CSU General Education or IGETC Pattern. Consult with a counselor for more information on completing this degree.

Sociology

SOC 001 3.0 Units
Introduction to Sociology

Course Advisory: Eligibility for ENGL 001. Introduction to sociology with analysis of a variety of concepts and theories in relation to culture, socialization, social inequality, race relations, sex roles, deviance, and the distribution of political and economic power. C-ID SOCI 110. *Three hours lecture.*

SOC 002 3.0 Units
Social Issues and Problems

Course Advisory: SOC 001, Eligibility for ENGL 001. Analysis of selected social problems, including race relations, urban decay, suburban sprawl, crime, population problems, environment, and changes in the familial, economic and political institutions. *Three hours lecture.*

SOC 023 3.0 Units
Sociology of African Americans

Course Advisory: SOC 001 or SOC 022; Eligibility for ENGL 001. An introductory sociological study of African Americans. Emphasis will be on culture, community, social institutions, social relationships and social problems. *Three hours lecture.*

SOC 030 3.0 Units
Introduction to Social Psychology

Course Advisory: PSYC 001; Eligibility for ENGL 001 and SCC minimum Math standard. This course will explore how thoughts, feelings, and behavior of individuals are influenced by the actual, imagined, or implied presence of others. Focus will be on the social factors that influence human behavior; other people, institutions, situations and the social and physical structures people have created. A review of the various perspectives unique to social psychologists and a variety of classical research in social psychology will be studied. *Same course as PSYC 030. Three hours lecture.*

SOC 040 3.0 Units
Sociology of the Family

Course Advisory: SOC 001 and Eligibility for ENGL 001. A comparative cultural view of the family, the history of the family and its present role in our society with special emphasis on kinship relations, sex roles, ethnic variations of the family and alternative family styles. *Three hours lecture.*

SOC 045 3.0 Units
Sociology of Religion

Course Advisory: Eligibility for ENGL 001. An introduction to the sociological study of religion in the United States, with an emphasis on the origins of religion, theoretical perspectives on religion, religious conflict, and the future of religion. This course also covers the absence of religion and alternative forms of religion. *Three hours lecture.*

SOC 049 1.0 to 3.0 Units
Sociology 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 minimum grade of B; an ability to work independently; permission of the School Dean based on instructor availability. Independent study designed for honor students who intend to major in sociology. Students may take this course up to the maximum number of units over multiple semesters. *Three to nine hours by arrangement.*

SOC 075 3.0 Units
Introduction to Sociology of Sport

Course Advisory: SCC minimum English and Math standard; SOC 001. Sociology of Sport examines the nature, position, functions, and growing importance of sports in contemporary industrial society. Particular emphasis is given to the relationships between structure, variety, and extent of sports activity and other sectors of society, such as schools, churches, and the work place. *Three hours lecture.*

Theatre Arts

Theatre Arts

Program Description

The Theatre Arts Major is designed for students who are furthering their theatre education, as well as those seeking a career in the entertainment industry. In terms of university degrees, the curriculum of all core Solano College Theatre courses have been designed to equal courses offered in the UC and CSU system. Whether choosing the Acting or Technical emphasis, the major will provide a basic theatre foundation which will include “hands on experiences” in Acting, Stagecraft, Lighting and Costuming, as well as the historical and cultural background necessary for understanding the craft. Individuals interested in this major may also be seeking a foundation for lifelong learning.

Associate in Arts Degree

The Associate in Arts Degree in Theatre Arts can be obtained by completing a total of 60 units, including the 30-31-unit major in one of the listed emphasis areas listed below, the general education requirements, and electives. All courses for this 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 Theatre Arts Associate Degree will be able to:

1. Read and analyze written materials for context, theme and dramatic intent.
2. Demonstrate comprehension of vocal and physical performance techniques.
3. Demonstrate comprehension of technical and artistic production elements including; stagecraft, scenery, costumes, lighting and sound.
4. Utilize and apply current theatrical technology.

REQUIRED CORE: Units

THEA 001 Acting 1..... 3

THEA 003 Stagecraft 3

THEA 006 Introduction to Theatre 3

THEA 010 Theatre History 1..... 3

THEA 011 Theatre History 2..... 3

One Production course..... 3-4

Choose Acting or Technical Emphasis 6

6 units from Recommended Electives..... 6

Total Units30-31

Recommended Electives: (select 6 units).....Units

THEA 005 Applied Drama 3

THEA 008 Stage Make-Up 3

THEA 009 Script Analysis..... 3

THEA 021 Introduction to Theatre Design 3

THEA 032B Fundamentals of Costume Design 3

THEA 040 Acting for the Camera 3

THEA 055 Advanced Theatre Touring Company 1

Production courses: (select one)..... Units

THEA 024 Rehearsal and Performance Production 4

THEA 047 Technical Theatre in Production 3

Acting Emphasis: (both courses required) Units

THEA 002 Acting 2 3

THEA 035 Fundamentals of Musical Theatre: Acting 3

Technical Emphasis: (both courses required) Units

THEA 020 Introduction to Stage Lighting 3

THEA 032A Fundamentals of Costume Design 3

Theatre Arts

Associate in Arts in Theatre Arts for Transfer (ADT: A.A.-T)

Program Description

Theatre teaches practical skills, performance techniques, and creativity. It is the goal of this department to provide students with the tools needed to pursue a university degree or a career in the performing arts. In terms of university degrees, the curriculum of all core Solano College Theatre courses have been designed to equal courses offered in the UC and CSU system. In terms of careers in the performing arts, a wide range of academic and professional opportunities exists. These job opportunities include work in stage performance, television/film acting, lighting, sound, stage makeup design, costume design, house management, theatre education, theatre for youth, stage management, and even sporting event production.

Associate in Arts in Theatre Arts for Transfer Degree

The Associate in Arts in Theatre Arts for Transfer (A.A.-T) is intended for students who plan to complete a bachelor's degree in performance theatre or technical theatre. Students completing this degree (A.A.-T in Theatre) are guaranteed admission to the CSU system, but not to a particular class or major.

To earn the Associate in Arts in Theatre Arts for Transfer degree, students must:

1. Complete 60 semester units that are eligible for transfer to the California State University, including both of the following:
 - a. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements
 - b. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
2. Obtain a minimum grade point average of 2.0.

Program Outcomes

Students who complete the Associate in Arts in Theatre Arts for Transfer degree will be able to:

1. Demonstrate comprehension of technical elements and design processes.
2. Provide evidence of vocal and physical performance techniques.
3. Assess written materials for context, theme, structure, and technical requirements.
4. Express the relationship between culture and dramatic art, using scholarly sources to analyze the performing art persuasively and thoroughly.

REQUIRED COURSESUnits

THEA 006 Introduction to Theatre	3
THEA 001 Acting 1.....	3
3 – 4 units of a Performance/Production Course.....	3 – 4
Three courses from List A (9 units).....	9

Performance/Production Courses

(select 3 – 4 units)Units

THEA 024A Rehearsal and Performance in Production Comedy	4
THEA 024B Rehearsal and Performance in Production Drama	4
THEA 024C Rehearsal and Performance in Production Classical	4
THEA 024D Rehearsal and Performance in Production Musical	4
THEA 047A Technical Theatre in Production – Comedy	3
THEA 047B Technical Theatre in Production – Drama.....	3
THEA 047C Technical Theatre in Production – Classical	3
THEA 047D Technical Theatre in Production – Musical	3

List A (select 3 courses).....Units

THEA 002 Acting 2.....	3
THEA 003 Stagecraft.....	3
THEA 008 Stage Make-Up.....	3

THEA 009 Script Analysis.....	3
THEA 020 Introduction to Stage Lighting.....	3
THEA 021 Introduction to Theatre Design.....	3
THEA 032A Fundamentals of Costume Design – Comedy	3
THEA 032B Fundamentals of Costume Design – Drama	3
THEA 032C Fundamentals of Costume Design – Classical.....	3
THEA 032D Fundamentals of Costume Design – Musical	3

Required Major Total Units	18 - 19
CSU General Education or IGETC Pattern Units	37 - 39
CSU Transferable Electives (as needed to reach 60 transferable units)*	4 - 9
Total Degree Units	60

* 3 - 6 units may be double counted toward both the major area of emphasis and CSU General Education or IGETC Pattern. Consult with a counselor for more information on completing this degree.

Theatre Arts

THEA 001**3.0 Units****Acting 1**

Course Advisory: Eligibility for ENGL 001 and SCC minimum MATH standards. This course prepares a student to apply basic acting theory to performance and develops the skills of interpretation of drama through acting. Special attention is paid to skills for performance: memorization, stage movement, vocal production, and interpretation of text. C-ID THTR 151. Three units lecture.

THEA 002**3.0 Units****Acting 2**

Prerequisite: THEA 001 with a minimum grade of C. Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standard. Continued study of theories and techniques used in preparation for the interpretation of drama through acting. The emphasis will be placed on deepening the understanding of the acting process through character analysis, monologues, and scenes. C-ID THTR 152. Three hours lecture

THEA 003**3.0 Units****Stagecraft**

Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standard. An introduction to the backstage aspects of live theatre and the creation of technical elements. Includes basic concepts of scene design, scene painting techniques, set construction, set movement, prop construction, backstage organization and career possibilities. May include stage management, lighting, and or sound techniques. Lecture, reading, projects, and hands on practical experience. Students will participate in the planning, design, set construction, and painting of a main college theatrical event as determined by the instructor. Repeatable 1 time. C-ID THTR 171. Two hours lecture, three hours lab.

THEA 005**3.0 Units****Applied Drama**

Prerequisite: Audition for actors. A minimum grade of C in both THEA 001 and THEA 003. Course Advisory: SCC minimum English standard. The study and rehearsal of dramatic, comedic and musical works for the stage which includes: classical plays, contemporary dramas and comedies, revues, musicals and one-acts. Students participate as actors, ensemble members, directors, production designers and/or technicians. Repeatable 3 times. Ten hours lab.

THEA 006**3.0 Units****Introduction to Theatre**

Course Advisory: Concurrent enrollment in or successful completion of English 001, and SCC minimum Math standard. This course focuses on the relationship of theatre to various cultures throughout history, and on the contributions of significant individual artists. This course introduces students to elements of the production process including playwriting, acting, directing, design, and criticism. Students will also survey different periods, styles and genres of theatre through play reading, discussion, films and viewing and critiquing live theatre, including required attendance of theatre productions. This is an audience oriented, non-performance course. Field trips will be required. C-ID THTR 111. Three hours lecture.

THEA 008**3.0 Units****Stage Make-Up**

Course Advisory: Eligibility for ENGL 001. Students will receive instruction and practice in a lecture/ laboratory setting in all phases of makeup specifically designed for theatrical use. C-ID THTR 175. Two hours lecture, three hours activity.

THEA 009**3.0 Units****Script Analysis**

Course Advisory: Successful completion of (minimum grade of C) or concurrent enrollment in ENGL 001. Fully explore an in-depth methodology of reading, analyzing and understanding play scripts in a variety of genres and styles intended for production. Investigate techniques used to determine how to read a play for its' structure, scrutinizing the playwright's methods of creating theatre through plot, character and imagery, and understanding what scripts mean to the professional theatre artist and audience as distinct from other forms of literature. C-ID 114. Three hours lecture.

THEA 010**3.0 Units****Theatre History 1**

Course Advisory: Successful completion of ENGL 001 and SCC minimum Math standard. The study of the history of theatre from the Origins of Theatre through the 17th Century. The history and development of theatre and drama are studied in relationship to cultural, political and social conditions of the time. Plays are read for analysis of structure, plot, character and historical relevance. Field trip may be required. Three hours lecture.

Theatre Arts

THEA 011

3.0 Units

Theatre History 2

Course Advisory: Successful completion of ENGL 001 and SCC minimum Math standard. The study of the history of theatre from the 17th Century to contemporary times. The history and development of theatre and drama are studied in relationship to cultural, political and social conditions of the time. Plays are read for analysis of structure, plot, character and historical relevance. Contemporary multicultural theatre will be emphasized. *Three hours lecture.*

THEA 013

3.0 Units

Diversity in American Theatre: A Contemporary Focus

Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standard. Introduction to American cultural diversity in theatrical performance, this course will study African-American, Asian-American and Latino (a) theatres, and theatrical representations including TV and film, supplemented by consideration of the social and political conditions impacting these works. Journals, exams, and scene performance or readings and oral reports or critical papers are required. *Three hours lecture.*

THEA 020

3.0 Units

Introduction to Stage Lighting

Course Advisory: SCC minimum English and Math standards. This course involves the study and execution of stage lighting with an emphasis on equipment, control, color and their relationship to design. This course discusses the methods and materials utilized in designing lighting for the stage. Focus on the practical skills needed to complete a light design project. C-ID THTR 173. *Two hours lecture, three hours lab.*

THEA 021

3.0 Units

Introduction to Theatre Design

Course Advisory: Successful completion of ENGL 001 with a minimum grade of C and SCC minimum Math standards. Prerequisite: THEA 003 with a minimum grade of C. Students will be offered a survey of scenery, lighting, sound, costumes, make up, properties, theatrical equipment and construction techniques through demonstration and laboratory experience. Information will be applicable to all formal theatrical applications. C-ID THTR 172. *Two hours lecture, three hours lab.*

THEA 024

4.0 Units

Rehearsal and Performance in Production

Course Advisory: SCC minimum English Standard. This course provides instruction and supervised participation in theatre rehearsal and performance. Instruction will be focused upon the unique elements and demands of a live stage production. The production(s) can be: Comedy, Drama, Classical and Musical. Before enrolling in this course, students are required to audition for a role. Auditions take place during the second week of the semester. Details about auditions will be posted in the theater. Repeatable 3 times. *Three hours lab, sixteen hours lab by arrangement. (10-week course).*

THEA 024A

4.0 Units

Rehearsal and Performance in Production - Comedy

Course Advisory: SCC minimum English standard. This course provides instruction and supervised participation in theatre rehearsal and performance. Instruction will be focused upon the unique elements and demands of comedy. Before enrolling in this course, students are required to audition for a role. Auditions take place during the second week of the semester. Details about auditions will be posted in the theater. C-ID THTR 191. *Three hours activity, sixteen hours by arrangement (10-week course).*

THEA 024B

4.0 Units

Rehearsal and Performance in Production - Drama

Course Advisory: SCC minimum English standard. This course provides instruction and supervised participation in theatre rehearsal and performance. More specifically, this class is designed to approach the unique requirements of producing contemporary drama. Before enrolling in this course, students are required to audition for a role. Auditions take place during the second week of the semester. Details about auditions will be posted in the theater. C-ID THTR 191. *Three hours lab, sixteen hours by arrangement (10-week course).*

THEA 024C

4.0 Units

Rehearsal and Performance in Production - Classical

Course Advisory: SCC minimum English standard. This course provides instruction and supervised participation in a classical theatre production. Scripts selected may include classical Greek, Roman, medieval, renaissance, and restoration dramas. Before enrolling in this course, students are required to audition for a role. Auditions take place during the second week of the semester. Details about auditions will be posted in the theater. C-ID THTR 191. *Three hours lab, sixteen hours by arrangement (10-week course).*

Theatre Arts

THEA 024D 4.0 Units

Rehearsal and Performance in Production - Musical

Course Advisory: SCC minimum English standard. This course provides instruction and supervised participation in musical theatre rehearsal and performance, including operas, operettas, and musicals. Students will participate as vocalists, musicians, dancers and accompanists. Before enrolling in this course, students are required to audition for a role. Auditions take place during the second week of the semester. Details about auditions will be posted in the theater. C-ID THTR 191. *Three hours lab, seventeen hours by arrangement (10-week course).*

THEA 032A 3.0 Units

Fundamentals of Costume Design

Course Advisory: Eligibility for ENGL 001. Students will study costume history, design, and basic construction techniques as an introduction to theatrical costuming. Subject material can cover a variety of theatre genres, including: Musical Theatre, Drama, Comedy, and Classical works. Emphasis on illustration and design elements, including story boards and renderings. Students will analyze and examine scripts and research items related to costuming. Students will explore and learn how stock characters and their costumes can support an exaggerated theme and how these characters can have multiple costumes. C-ID THTR 174. *One hour lecture, six hours lab. Repeatable one time.*

THEA 032B 1.5 Units

Fundamentals of Costume Design

Course Advisory: Eligibility for ENGL 001. This lab course is oriented for the student to work with the Costume requirements used in a production. The type(s) of production can be: Comedy, Drama, Classical and Musical. Students will gain practical experience in the application of Costume responsibilities in any of the following: Assistant Designer, Tailor, Milliner, Cobbler, Cutter, Draper, Dyeing and painting, and alterations. Students will be given an increasing level of responsibility in accordance with their individual abilities. *One hour lecture, four and one half hours lab. Repeatable 3 times.*

THEA 032C 3.0 Units

Fundamentals of Costume Design - Classical

Course Advisory: Eligibility for ENGL 001. Students will learn how to research costuming from historical Western eras such as: Greek, Roman, Medieval, and the Renaissance. Students will also study ancient Eastern, African, or other historical costumes, depending upon the semester's theatre production. Tailoring, heirloom sewing, theatrical closures, alterations and sewing shortcuts will also be included in instruction. C-ID THTR 174. *One hour lecture, six hours lab.*

THEA 032D 3.0 Units

Fundamentals of Costume Design - Musical

Successful completion (minimum grade of C) or enrollment in ENGL 001. Students will study musical costume history, design, and basic construction techniques as an introduction to musical theatre costuming. Fabrics and their various uses will be investigated. Students will learn how to design costumes for large musical casts with multiple costume changes. Students will also learn how music and dance influence costume construction. Each student will be given an increasing level of responsibilities in accordance with individual abilities. Successful completion of the costume production process may culminate in the areas of : Co-Costume Designer, Assistant Designer, Cutter, Tailor, First Hand, Stitcher, Milliner, Cobbler, Crafts Artisan, Wardrobe Supervisor or Dresser. Repeatable to a maximum of 12 units, including initial enrollment. C-ID THTR 174. *One hour lecture, six hours lab.*

THEA 035 3.0 Units

Fundamentals of Musical Theatre: Acting

The study, rehearsal, and class performance of musical works for the stage. Students will participate as performers, singing and moving but with an emphasis on acting. *Repeatable 2 times. One hour lecture, six hours lab.*

THEA 040 3.0 Units

Acting for the Camera

Course Advisory: Minimum Standards: Eligibility for ENGL 001. A professional approach to the basics of on-camera acting. Areas of concentration include commercials, public service announcements, corporate videos, news reporting, and feature films. The course includes an in-depth approach to careers in media with concentration on agents, casting directors, resumes, pictures and the necessary tools for building a life as an actor. *Three hours lecture.*

THEA 047 3.0 Units

Technical Theatre in Production

Course Advisory: SCC minimum English standard. This course is oriented for the student to work with the technical requirements used in a production. The type(s) of production can be: Comedy, Drama, Classical and Musical. Students will gain practical experience in the application of production responsibilities in any of the following: Set Construction, Scenic painting, properties, costume, lighting, sound, live show running crews, stage management and house management. Students are given an increasing level of responsibility in accordance with their individual abilities. Repeatable 3 times. *Nine hours lab weekly by arrangement.*

Theatre Arts

THEA 047A 3.0 Units
Technical Theatre in Production - Comedy

Course Advisory: SCC minimum English standard. This course is oriented for the student to work with the unique technical requirements used in a Comedy production, such as abstract and whimsical scenic design elements, comic color pallets and special property elements that are designed specifically to 'get a laugh'. Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews. Students are given an increasing level of responsibility in accordance with their individual abilities. C-ID THTR 192. *Nine hours lab.*

THEA 047B 3.0 Units
Technical Theatre in Production - Drama

Course Advisory: SCC minimum English standard. This course is oriented for the student to work with the unique technical requirements used in a Drama production, such as Realistic and period scenic design elements: Architecture as well as natural settings. The student will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews. Students are given an increasing level of responsibility in accordance with their individual abilities. C-ID THTR 192. *Nine hours lab.*

THEA 047C 3.0 Units
Technical Theatre in Production - Classical

Course Advisory: SCC minimum English standard. This course is oriented for the student to work with the unique technical requirements used in a Classical production, such as Historical and renaissance period design pieces and accurate stage properties of the time. The students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews. Students are given an increasing level of responsibility in accordance with their individual abilities. C-ID THTR 192. *Nine hours lab.*

THEA 047D 3.0 Units
Technical Theatre in Production - Musical

Course Advisory: SCC minimum English standard. This course is designed for the student to work with the unique technical requirements used in a Musical Theatre Production: Such work can involve use of Scenery that has multiple settings, set pieces that employ special rigging, scenic wagons as well as special live audio and lighting effects. Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews. Students are given an increasing level of responsibility in accordance with their individual abilities. C-ID THTR 192. *Nine hours lab.*

THEA 048A 3.0 Units
Theatre Appreciation

Course Advisory: SCC minimum English and Math standards. Students will be required to purchase tickets for live performances. An introduction to methods of evaluating theatre in performance. Students will attend several plays each semester (approximately six to be determined by instructor), producing a written analysis/critique of each. Lectures will focus on the elements of a play in production and critical analysis and writing techniques. *Two and one half hours lecture, one and one half hours by arrangement.*

THEA 055 1.0 Units
Advanced Theatre Touring Company

Advanced Theatre Touring Company students will gain experience touring throughout Solano County. Travel is required to various Solano County schools and venues for performances. *One hour lab, nine hours by arrangement. (5-week course).*

Tutoring

Program Description

These courses are designed for students using tutoring services on a drop-in basis or for students wishing to serve as tutors.

Associate Degree

Not offered in this discipline

TUTR 050

Tutoring Practicum

Prerequisite: Completion with a minimum grade of B in the subject to tutor, instructor recommendation, permission of Tutoring Center personnel after verification of prerequisites, 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).

0.5 Units

TUTR 500

Supervised Tutoring

Prerequisite: Recommendation by the course instructor or a counselor or permission of the TUTR 500 instructor of record. Corequisite: concurrent enrollment in course or courses in which tutoring assistance is being requested. This course provides students tutorial support with instructional aids and student tutors to develop learning skills that enhance classroom achievement. In addition, Critical Skills for College Success Workshops are offered in many instructional areas. Tutor-supported computer labs are provided for academic use. This is an Open Entry/Open Exit, ungraded course.

0.0 Units

University Studies

University Studies

Program Description

The Associate in Arts Degree in University Studies is designed for students who wish a broad knowledge of arts and sciences plus additional coursework in an area of academic interest. With proper planning, students will complete lower division major preparation and general education for transfer while simultaneously completing the University Studies Associate Degree. This major is an ideal choice for students planning to transfer to the University of California (UC), the California State University (CSU), or any other baccalaureate-granting college or university.

Students are encouraged to develop a transfer plan in consultation with a counselor and to refer to www.as-sist.org for current articulation of Solano Community College and university courses.

- Choose either Solano Community College Option B or C for the General Education pattern related to your educational goal.
- For both options: complete a Cross Cultural Studies Graduation Requirement.
- Complete at least 18 units in on Area of Emphasis from those listed below.
- Choose electives if necessary to complete the 60 units required for the Associate Degree.
- All courses for this 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.

General Education Units

I. Option B: IGETC Minimum 34 semester units

Complete units necessary to meet full IGETC certification requirements.

II. Option C: CSU/GE/Breadth Pattern Minimum 39 semester units

Complete units necessary to meet full CSU/GE-Breadth certification requirements.

Areas of Emphasis

- 18 units required from one Area of Emphasis: Arts and Humanities, Communication, Science and Quantitative Reasoning, Social Science or Liberal Studies for Education.
- Where appropriate, courses in the Area of Emphasis may also be counted for GE.
- Courses numbered 1-49 transfer to UC, CSU and most independent and out-of-state colleges and universities. Courses numbered 50-99 transfer to CSU and some independent and out-of-state colleges and universities. Courses numbered 100-199 are associate degree applicable but usually do not transfer to baccalaureate-granting institutions.

Program Outcomes:

Students completing the University Studies Associate Degree will be able to:

1. Develop a pattern of thinking and a knowledge base consistent with the scholarship required to pursue further study in a major at a university.
2. Discover the nature and common themes of the disciplines represented by an area of emphasis
3. Examine the relationship between personal perspective and evidence-based evaluation of information.

Arts and Humanities

These courses emphasize the study of cultural, literary and humanistic activities and the artistic expression of human beings. Students will evaluate and interpret the ways in which people through the ages in different cultures have responded to each other and the world around them through artistic and cultural creation.

Majors at a 4-year institution appropriate for this Area of Emphasis include but are not limited to: Classical Civilization, Design, Dramatic Arts, Film Studies, Literature, Music, and Philosophy.

REQUIRED COURSES

Minimum six units from ARTS

Minimum six units from HUMANITIES

*Maximum three units from studio/performance courses

Total units Minimum of 18

University Studies

ARTS (select at least 6 units)

ART 001, 002, 003, 010, 011, 012

ART Studio*: 004, 005, 006, 007, 008, 014, 015, 016, 017, 021, 022, 023, 026, 027, 030B, 031, 032, 033, 034, 038, 039, 040, 041, 042, 043

CINA 010, 011

CINA Performance*: 015

MUSC 001, 002, 003, 004, 005, 007, 008, 013

MUSC Studio*: 027, 028, 029, 030, 041A, 041B

PHOT 035

THEA 006, 010, 011, 013, 048A

THEA Performance*: 001, 002, 003, 020

TV 050

HUMANITIES (select at least 6 units)

COMM 015

ENGL 002, 006, 007, 012, 013, 014, 016, 018, 021, 023, 024, 025, 030, 031, 033, 036, 038, 040, 041, 044, 046, 047

FREN 001, 002, 003, 004, 011, 012, 031, 032

GRMN 001, 002, 003, 004, 011, 012, 031, 032, 033, 034

HIST 002, 003, 004, 005, 010, 017, 018, 028, 029, 030, 031, 037

ITAL 031, 032

LATN 001, 002, 003

PHIL 003, 004

SPAN 001, 002, 003, 004, 011, 012, 025, 031, 032, 033, 034

COMMUNICATION

These courses emphasize the content, understanding and production of verbal and written communication. Students will learn to evaluate and assess communication as a process of human symbolic interaction while developing skills in such areas as reason-ing, organization, accuracy, reading and effective listening.

Majors at a 4-year institution appropriate for this Area of Emphasis include, but are not limited to: Advertising and Public Relations, English, Journalism, Linguistics, Mass Communication, Rhetoric, and Speech.

REQUIRED COURSES

Minimum three units from each of three different disciplines

Total Units Minimum of 18

BUS 092

COMM 001, 002, 006, 008, 010, 012, 015, 060

COUN 062

ENGL 002, 004, 006, 007, 046, 047, 058, 062

FREN 001, 002, 003, 004, 031, 032

GRMN 001, 002, 003, 004, 031, 032, 033, 034

HS 054

ITAL 031, 032

JOUR 001, 002, 011, 060

LATN 001, 002, 003

PHIL 005

SPAN 001, 002, 003, 004, 025, 031, 032, 033, 034

SOCS 030, 051

TV 050, 060, 061

University Studies

Liberal Studies with Emphasis on Education

This Area of Emphasis is intended for students who plan to complete a baccalaureate degree and a California Multiple subject Teaching Credential. Most students pursue this credential with the goal of becoming elementary school or special education teachers. This degree is designed to accommodate the differing requirements of the California State University and the University of California campuses that offer majors preparing students for the multiple subject credentials.

REQUIRED COURSES

Minimum three units from each of four different disciplines

Total Units **Minimum of 18 units**

ANTH 002, 007
ART 001, 002, 003, 006, 010, 011, 012, 014, 017, 023, 031, 039
ASTR 010
BIO 003, 004, 005, 012, 014, 015, 016, 019
CDFS 038, 039, 070, 071
CHEM 010
CINA 010, 011
ECON 001
ENGL 012, 016, 030, 031, 032, 033, 034, 035, 036, 037, 038, 040, 041
GEOG 002, 004
GEOL 001, 002
HED 002
HIST 002, 003, 004, 005, 010, 017, 018, 028, 029, 037
HUMN 003
MATH 002, 004, 011, 012
MUSC 005, 007, 008, 013
PHIL 001, 003, 004, 005
PHYS 010
PHSC 012
PLSC 001, 005
PSYC 001, 002, 005, 010, 024
SOC 001, 002, 023, 040
SOCS 022
THEA 001, 010, 011, 013

Science and Quantitative Reasoning

These courses emphasize the natural sciences which examine the physical universe, its life forms and its natural phenomena. Courses in math emphasize the development of mathematical and quantitative reasoning skills beyond the level of intermediate algebra. Students will be able to demonstrate an understanding of the methodologies of science as investigative tools. Students will also examine the influence that the acquisition of scientific knowledge has on the development of the world's civilizations.

Majors at a 4-year institution appropriate for this Area of Emphasis include but are not limited to: Animal Science, Biology, Computer Science, Engineering, Geology, Nursing, and Physics.

Program Outcomes:

Students completing the Associate Degree will:

1. Learn how to write a laboratory report or give an oral presentation
2. Demonstrate analytical and/or conceptual problem solving skills
3. Learn to carry out experiments and critically assess their data. Students will learn the roles of hypotheses, measurement, and analysis in the development of scientific theory as evidenced by laboratory reports.

University Studies

REQUIRED COURSES

Minimum six units from Science

Minimum six units from Quantitative Reasoning

*Chemistry courses may be used as either Science or Quantitative reasoning but not in both.

Total Units Minimum of 18

SCIENCE

ANTH 001

ASTR 010, 020, 030, 040

BIO 002, 003, 004, 005, 012, 012L, 014, 015, 016, 018, 019

CHEM* 001, 002, 003, 004, 010, 011, 051

ENGR 017, 030, 045

GEOG 001, 001L

GEOLOGY 001, 002, 005

PHYS 002, 004, 006, 007, 008, 010

PHSC 012

PSYC 002

QUANTITATIVE REASONING

CIS 001, 015, 020, 022, 023, 035

CHEM* 001, 002, 010

DRFT 056

GEOG 010 (GEOLOGY 010)

MATH 002, 004, 011, 012, 020, 021, 022, 023, 030, 031, 040, 051

PSYC 004

SOCIAL SCIENCE

These courses emphasize the perspective, concepts, theories and methodologies of the vast variety of disciplines that comprise study in the Social Sciences. This emphasis examines people and their interactions with each other, within their social and political institutions and as members of the larger society. Course work will explore behavior - sometimes the behavior of an individual, other times the behavior of a system, society, or culture. Topics and discussion will stimulate critical thinking about ways people have thought and acted in response to their upbringing, environment and society.

Majors at a 4-year institution appropriate for this Area of Emphasis include but are not limited to: Anthropology, Child Development, Government, History, Psychology, and Social Work.

REQUIRED COURSES

Minimum three units from each of three different disciplines

Total Units Minimum of 18

ANTH 002, 007

CDFS 038, 039, 040, 050, 052, 053, 070

COMM 012

COUN 055, 058, 062, 083

CJ 001, 002, 011

ECON 001, 002, 010

GEOG 002, 004

HIST 002, 003, 004, 005, 010, 017, 018, 028, 029, 030, 031, 037

HS 051, 054, 053

IR 001

JOUR 011

PLSC 001, 002, 004, 005, 016, 019

PSYC 001, 002, 004, 005, 010, 020, 024, 030, 034

SOC 001, 002, 023, 030, 040

SOCS 022, 023, 025, 027, 030, 051, 053

TV 050

Water and Wastewater Technology

Water and Wastewater Technology

Program Description

A study of the principles of water and wastewater disposal and purification including municipal and industrial wastewater collection and treatment. The program will satisfy most of the requirements for certification of water and wastewater treatment personnel.

Certificate of Achievement and Associate in Science

A Certificate of Achievement can be obtained upon completion of the 25 – 32-unit major. The Associate in Science Degree can be obtained upon completion of 60 units, including the major, the general education requirements, and electives. All courses for this 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 Water and Wastewater Technology Certificate of Achievement/ Associate Degree will be able to

1. Attain certification of plant operators.
2. Understand treatment methods and technology.
3. Understand technology laws and regulations.

REQUIRED CORE COURSES Units

WATR 100 Wastewater Treatment I 4

WATR 101 Basic Chemistry for Water
and Wastewater 4

OR

WATR 102 Sanitary Chemistry 4

WATR 104 Water Treatment I 3

WATR 106 Instrumentation and Controls 3

WATR 107 Mathematics of Water and
Wastewater Treatment 4

4-5 units from Specialty Courses 4-5

Select Option 1, 2 or 3 3-9

Total Units 25-32

Specialty Courses (select 4-5 units)

WATR 105 Wastewater Treatment II 3

WATR 108 Water Treatment II 2

WATR 120 Distribution Systems Maintenance 2

WATR 121 Collection Systems Maintenance 2

Select from the following options:

OPTION 1 (4 units)

BIOT 160 Basic Concepts/Methods in
Biotechnology 4

OPTION 2 (8-9 units)

BIO 014 Principles of Microbiology 4

Select one

CHEM 010 Intermediate Chemistry 4

CHEM 051 Chemistry for the Health Sciences 5

CHEM 001 General Chemistry 5

OPTION 3 (3 units)

WATR 103 Biological Principles of Water
and Wastewater 3

This is a Gainful Employment Program. For additional information, please visit
http://www.solano.edu/gainful_employment/ and select "Water & Wastewater Technology."

Water and Wastewater Technology

WATR 100 4.0 Units
Wastewater Treatment I

Course Advisory: SCC minimum English and Math standards. Study of municipal and industrial wastewater collection and wastewater treatment methods, protection of ground water and receiving waters, and effects of pollutants on receiving waters. *Four hours lecture.*

WATR 101 4.0 Units
Basic Chemistry for Water and Wastewater

Course Advisory: SCC minimum English and Math standards. Through lecture and demonstrations, the student will develop the ability to analyze and determine if proper levels of purification, content of acidity, alkalinity, hardness, and other water quality criteria have been achieved for water or wastewater treatment. *Four hours lecture.*

WATR 103 3.0 Units
Biological Principles of Water and Wastewater

Course Advisory: SCC minimum English and Math standards. This course examines the biological and ecological properties of the bacteria, protozoa, fungi, algae, viruses, and animals whose control is important to the provision of safe drinking water supplies and environmentally safe wastewater. The course emphasizes the microbiology of drinking water, wastewater, and activated sludge, and examines the microbial sampling, analysis, and treatment strategies important in this industry. *Three hours lecture.*

WATR 104 3.0 Units
Water Treatment I

Course Advisory: SCC minimum English and Math standards. This course examines the elementary engineering aspects of the design, operation, process control, and facilities of a plant designed to treat and purify drinking water. *Three hours lecture.*

WATR 105 3.0 Units
Wastewater Treatment II

Prerequisite: WATR 100. Course Advisory: SCC minimum English and Math standards. Study of the elementary engineering aspects of design, operation process control, and maintenance of wastewater treatment plants and facilities. *Three hours lecture.*

WATR 106 3.0 Units
Instrumentation and Controls

Course Advisory: SCC minimum English and Math standards. Study of pneumatic, mechanical and electronic control systems and components. Includes a basic description and explanation of the operation of instruments and controls for water and wastewater plants. Typical performance characteristics, accuracy, and applications of instruments are studied. *Three hours lecture.*

WATR 107 4.0 Units
Mathematics of Water and Wastewater Treatment

Course Advisory: SCC minimum English and Math standards. A study of calculations - hydraulics, chemicals, solids - used in the design, operation, process control, and maintenance of treatment plants and facilities. *Four hours lecture.*

WATR 108 3.0 Units
Water Treatment II

Prerequisite: WATR 104 with a minimum grade of C. Course Advisory: SCC minimum English and Math standards. This course covers advanced topics in the control of ions and disinfecting chemicals in drinking water. In addition it covers the issues of safety, regulation, administration, and maintenance of a water treatment plant. This course will often be taught at an off-campus site. *Three hours lecture.*

WATR 112 2.0 Units
Wastewater Treatment III

Prerequisite: WATR 105. Course Advisory: SCC minimum English and Math standards. This course will cover advanced topics appropriate to a wastewater treatment facility including activated sludge, residual solids management, solids removal from secondary effluents, phosphorus and nitrogen removal, enhanced biological (nutrient) control, wastewater reclamation and recycling, and odor control. This course is often taught off-site. *Two hours lecture.*

WATR 120 2.0 Units
Distribution Systems Maintenance

Course Advisory: SCC minimum English and Math standards. Study of the operation and maintenance of water distribution systems covering the design, construction and the functioning of these systems. *Two hours lecture.*

WATR 121 2.0 Units
Collection Systems Maintenance

Course Advisory: SCC minimum English and Math standards. Study of the operation and maintenance of wastewater collection systems covering the design, construction and functioning of these systems. *Two hours lecture.*

Water and Wastewater Technology

WATR 125

Water Conservation

Course Advisory: SCC minimum English and Math standards.

Water conservation includes the study of methods to reduce water use, loss, and waste, and methods to increase water efficiency in an effort to minimize the amount of water used to accomplish a function or task. This course combines subject matter lectures and planned learning experiences so students learn the principles involved in the conservation and efficient use of water resources for economic, environmental, and regulatory purposes. Students will learn about water supply and demand, utility water demand characteristics and water rates, residential, commercial, and landscape water use measurements, water management planning, and how to perform various types of water audits. *Two and one half hours lecture.*

2.5 Units

WATR 126

Pumps and Motors

Course Advisory: SCC minimum Math standard. This course examines the design and operation of pumps and motors with special emphasis on the types of pumps used in the water and wastewater industries. *Three hours lecture.*

3.0 Units

Welding

Welding, Industrial Technician

Program Description

Designed to upgrade the skills of persons employed as welders, providing advanced training in a variety of welding applications.

Certificate of Achievement and Associate in Science Degree

A Certificate of Achievement can be obtained upon completion of the 24-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 for this 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. Certification of students as "Code Welders" is available at a nominal cost to the student.

Program Outcomes

Students who complete the Welding, Industrial Technician Certificate of Achievement/ Associate Degree will be able to:

1. Demonstrate competency in major welding processes used in industry.
2. Apply welding processes and the use of hand tools and shop equipment to fabricate projects.
3. Recognize and interpret technical drawings in the planning and fabrication of projects.
4. Demonstrate appropriate workplace safety policies and procedures during welding and fabrication operations.
5. Apply mathematical concepts to solve problems related to an industrial/technical environment.

REQUIRED COURSES Units

DRFT 079 Blueprint Reading	3
IT 140 Industrial Materials	3
18 units from List A.....	18
Total Units	24

List A: (select 18 units) Units

WELD 120 Plate Welder (Basic)	3
WELD 121 Plate Code Welder (Advanced)	3
WELD 122 Pipe Welding (Basic)	3
WELD 123 Pipe Welding (Advanced)	3
WELD 124 Gas Tungsten Arc Welding (GTAW)	3
WELD 125 Gas Metal Arc Welding	3
WELD 126 Ornamental Iron Welding	3

Recommended Electives:

- OCED 070 Occupational Soft Skills
- OCED 090 Occupational Work Experience
- OCED 091 General Work Experience
- WELD 175 Welding Fabrication

This is a Gainful Employment Program. For additional information, please visit http://www.solano.edu/gainful_employment/ and select "Welding, Industrial Technician."

Welding

Welding Technician

Program Description

Designed to prepare the graduate for employment as a welder or a welder helper in the metal trades. The major types of welding covered are shielded arc, acetylene gas welding, metal inert gas, tungsten inert gas, automatic and semi-automatic welding machines.

Certificate of Achievement and Associate in Science Degree

A Certificate of Achievement can be obtained upon completion of the 49-unit major. The Associate in Science Degree can be obtained by completing a total of 70 units, including the major and the general education requirements. All courses for this 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. Certification of students as "Code Welders" is available at a nominal cost to the student.

Program Outcomes

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

1. Demonstrate competency in major welding processes used in industry.
2. Apply welding processes and the use of hand tools and shop equipment to fabricate projects.
3. Recognize and interpret technical drawings in the planning and fabrication of projects.
4. Demonstrate appropriate workplace safety policies and procedures during welding and fabrication operations.
5. Apply mathematical concepts to solve problems related to an industrial/ technical environment.

REQUIRED COURSES	Units
WELD 100 Welding Technology	3
WELD 101 Welding Technology	10
WELD 102 Welding Technology	10
WELD 103 Welding Technology	10
DRFT 079 Blueprint Reading	3
IT 140 Industrial Materials	3
IT 150 Industrial Processes	3
Total Units	42

Recommended Electives:

IT 160 Electrical Fundamentals
OCED 070 Occupational Soft Skills
OCED 090 Occupational Work Experience
OCED 091 General Work Experience
WELD 175 Welding Fabrication

Welding Equipment Operator Job-Direct Certificate

All courses must be completed with a grade of "C" or better.

Required Courses	Units
WELD 175 Welding Fabrication	2
OCED 090 * Occupational Work Experience	1-8
Total Units	3-10

*Students will be required to complete 80 hours of cooperative supervised work experience to receive credit.

This is a Gainful Employment Program. For additional information, please visit http://www.solano.edu/gainful_employment/ and select "Welding Technician."

Welding

WELD 100 3.0 Units
Introduction to Welding

Course Advisory: SCC minimum English standard. This course is an introduction to welding processes, including shielded metal arc, gas metal arc, flux-cored gas shield and self shield, gas tungsten arc, oxyacetylene cutting and welding on joint designs, and positions used in industry. Safety in arc welding, oxyacetylene, and plasma cutting is also covered. *Field trips may be required. Two hours lecture, three hours lab.*

WELD 101 10.0 Units
Welding Technology

Prerequisite: WELD 100 or comparable industry experience or training. Course Advisory: SCC minimum English standard. Designed to present the theory, procedures, and manipulative skills required to weld mild steel plate to code certification levels with the shielded metal arc and flux cored arc welding processes. A basic understanding of metallurgy, metals identification, layout, and welding of other metals is also presented. *Five hours lecture, fifteen hours lab.*

WELD 102 10.0 Units
Welding Technology

Prerequisite: WELD 101 or comparable industry experience or training. Course Advisory: SCC minimum English and Math standards. Designed to present the theory, procedures, and manipulative skills required to weld metals of various thicknesses with the gas metal arc welding process. Introduces the student to the theory, procedures, and manipulative skills required to weld mild steel pipe to industrial standards. *Five hours lecture, fifteen hours lab.*

WELD 103 10.0 Units
Welding Technology

Prerequisite: WELD 102 or comparable industry experience or training. Course Advisory: SCC minimum English standard. Designed to present the theory, procedures and manipulative skills required to weld metals of various thicknesses with the gas tungsten arc process, as well as the theory, procedures and manipulative skills required to weld and fit pipe in all positions. *Five hours lecture, fifteen hours lab.*

WELD 112 1.0 Units
Carpentry Apprentice Welding

Course Advisory: SCC minimum English and Math standards. Provides introductory safety instruction and manipulative practice in the setup and use of oxyacetylene and arc welding and cutting equipment. Manipulative and written tests are used to give students practice and to evaluate performance in applying techniques learned. *Twelve hours lecture, twenty-four hours lab (1-week course).*

WELD 120 3.0 Units
Plate Welder (Basic)

Course Advisory: Successful completion of IT 110 or prior welding experience; SCC minimum English standard. Presents the theory, procedure and manipulative skills required to meet certification standards on one-inch plate using low hydrogen electrodes in the vertical position. Manipulative and written tests are used to give students practice and to evaluate performance in applying techniques learned. *Two hours lecture, three hours lab.*

WELD 121 3.0 Units
Plate Code Welder (Advanced)

Course Advisory: Successful completion of IT 110 or prior welding experience; SCC minimum English standard. Develops the principles taught in WELD 120, expanding the student's ability to weld one-inch thick certification plates in all positions with low hydrogen electrodes. Manipulative and written tests are used to give students practice and to evaluate performance in applying techniques learned. *Two hours lecture, three hours lab.*

WELD 122 3.0 Units
Pipe Welding (Basic)

Course Advisory: Successful completion of IT 110 or prior welding experience; SCC minimum English standard. Presents the theory, procedure, and manipulative skills required to meet certification standards on schedule 80 steel pipe in the horizontal fixed position. Manipulative and written tests are used to give students practice and to evaluate performance in applying techniques learned. *Two hours lecture, three hours lab.*

WELD 123 3.0 Units
Pipe Welding (Advanced)

Course Advisory: Successful completion of IT 110 or prior welding experience; SCC minimum English standard. Develops the principles taught in WELD 122, expanding the student's ability to weld pipe in all positions. Manipulative and written tests are used to give students practice and to evaluate performance in applying techniques learned. *Two hours lecture, three hours lab.*

Welding

WELD 124 3.0 Units
Gas Tungsten Arc Welding (GTAW)

Course Advisory: Successful completion of IT 110 or prior welding experience; SCC minimum English standard. Presents the theory, procedures, and manipulative skills required to weld aluminum steel and stainless steel with the Gas Tungsten Arc process. Manipulative and written tests are used to give students practice and to evaluate performance in applying techniques learned. *Two hours lecture, three hours lab.*

WELD 125 3.0 Units
Gas Metal Arc Welding

Course Advisory: Successful completion of IT 110 or prior welding experience; SCC minimum English standard. Presents the theory, procedures, and manipulative skills required to weld steel and aluminum with the gas metal arc process. Includes the manipulative skills required to weld with the flux cored arc process. Manipulative and written tests are used to give students practice and to evaluate performance in applying techniques learned. *Two hours lecture, three hours lab.*

WELD 126 3.0 Units
Ornamental Iron Welding

Course Advisory: Successful completion of IT 110 or prior welding experience; SCC minimum English standard. Presents the theory, procedures, and manipulative skills required to fabricate and weld ornamental iron projects. Manipulative and written tests are used to give students practice and to evaluate performance in applying techniques learned. *Two hours lecture, three hours lab.*

WELD 130 4.0 Units
Beginning Shielded Metal Arc Welding (Stick 7018/6010 Basic)

Advisory: SCC minimum English and Math standards. This course is designed to build arc welding skills with an emphasis on flat and horizontal welding. Course activities prepare students for welding certification and advanced welding classes. Welding applications and parameters are discussed and applied throughout the class developing the student's ability to problem solve and develop welding skills. *One hour lecture, nine hours lab.*

WELD 131 4.0 Units
Intermediate Shielded Metal Arc Welding (Stick Welding)

Prerequisite: WELD 130 with a minimum grade of C. Advisory: SCC minimum English and Math standards. This course is designed to advance arc welding skills with an emphasis on vertical and overhead welding. Course activities prepare students for welding certification and employment. Welding applications and parameters are discussed and applied throughout the class developing the students ability to problem solve, develop and enhance welding skills. *One hour lecture, nine hours lab.*

WELD 132 4.0 Units
Advanced SMAW (Stick Welding)

Advisory: SCC minimum English and Math standards. This course is designed to advance arc welding skills with an emphasis on vertical and overhead welding. Course activities prepare students for welding certification and employment in the metal trades. Welding applications and parameters are discussed and applied throughout the class developing the students ability to problem solve and develop welding skills. This course is designed to enhance welding skills and employability in the field of structural iron working. This course also prepares the student for the American Welding Society plate code D1.1 unlimited thickness in all position certification. *One hour lecture, nine hours lab.*

WELD 136 4.0 Units
Beginning Structural Steel and Flux Core Arc Weld (FCAW)

Advisory: SCC minimum English and Math standards. This course emphasizes developing skills on structural steel and FCAW practices. Related instruction will include ferrous metal identification and welding characteristics, Flux core welding applications and variable, dual shield inert shielding gases and mixtures, troubleshoot FCAW equipment and welds completed in the flat and horizontal positions (1G and 2G). *One hour lecture, nine hours lab.*

WELD 137 4.0 Units
Advanced Structural Steel and Flux Core Arc Weld (FCAW)

Prerequisite: WELD 136 with a minimum grade of C. Advisory: SCC minimum English and Math Standards. This course emphasizes developing skills on structural steel and FCAW practices. Related instruction will include ferrous metal identification and welding characteristics, FCAW welding applications and variable, dual shield inert shielding gases and mixtures, troubleshoot FCAW equipment and welds completed in the vertical and overhead position (3G 4G positions). *One hour lecture, nine hours lab.*

Welding

WELD 145 4.0 Units

Intermediate Pipe Welding 7018 STK (SMAW)

Prerequisite: WELD 144 with a minimum grade of C or have comparable industry experience. This is an intermediate pipe welding course with an emphasis on API 1104 certification. Course instruction includes code, pipe classification and identification. Completion of the class does not guarantee certification unless welding procedure qualification tests are passed. Pipe welding is a skill that requires a great deal of hand-eye coordination. Hours of practice are needed to master skills to advance and become skilled for employment. *One hour lecture, nine hours lab.*

WELD 175 2.0 Units

Welding Fabrication

Course Advisory: SCC minimum English and Math standards. Designed to increase student knowledge and tactile skills with welding processes and related metal working equipment. *Four hours lecture, sixteen hours lab (4-week course).*

WELD 500 0.0 Units

Special Welding Problems

Prerequisite: Permission of the instructor. Designed to assist with vocational placement for advanced welding students who have sufficient background in welding fundamentals to pursue more independent studying in the area of their choice. The student works by arrangement with the instructor on an outlined program of study to achieve independent objectives. *This is an Open Entry/Open Exit course. Hours by arrangement as required.*