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 listed below. 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 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	ts
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	3
OR	
MGMT 193 Human Resource Management	3
Total Units	21
Supporting Courses (for the A.S.)*	ts
ACCT 001 Principles of Accounting - Financial	4
OR	
ACCT 002 Principles of Accounting - Managerial	4
BUS 018 Legal Environment of Business	3
ECON 001 Principles of Economics (Macroeconomics)	3
OR	
ECON 002 Principles of Economics (Microeconomics)	3
*Required for the A.S. degree	
Total Units	10

Recommended Electives

OCED 090 Occupational Work Experience

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 30-31-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 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
Recommended sequence
ACCT 001 Principles of Accounting - Financial4
BUS 092 Business Communication
BUS 181 Business Mathematics
CIS 050 Microcomputer Applications
MGMT 050 Principles of Management
MKT 171 Introduction to Marketing
MKT 174 Retail Merchandising
MGMT 191 Human Relations3
MGMT 055 Management/Leadership Skills
MGMT 193 Human Resource Management3
Total Units

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.

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 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
Recommended sequence
BUS 005 Introduction to Business
BUS 018 Legal Environment of Business
BUS 181 Business Mathematics
BUS 182 Small Business Mathematics
BUS 092 Business Communication
MGMT 184 Small Business Management and Planning . 3
MGMT 186 Small Business Marketing
MGMT 188 Computers in Small Business
Electives selected from list of Recommended Electives 6
Total Units

Recommended Electives

ACCT 001 Principles of Accounting - Financial ACCT 002 Principles of Accounting - Managerial

ACCT 180 Introduction to Accounting

BUS 060 Introduction to International Business

ECON 001 Principles of Economics (Macroeconomics)

ECON 002 Principles of Economics (Microeconomics)

MGMT 055 Management/Leadership Skills

MGMT 191 Human Relations

MKT 173 Principles of Selling

MKT 174 Retail Merchandising

OCED 090 Occupational Work Experience

OCED 091 General Work Experience

OT 054A Beginning Keyboarding A

OT 054B Beginning Keyboarding B

OT 055A Intermediate Keyboarding/Word Processing A

OT 055B Intermediate Keyboarding/Word Processing B

MGMT 050 3 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 Units Management/Leadership Skills

Course Advisory: Eligibility to enroll in 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 184 3 Units Small Business Management and Planning Course Advisory: Eligibility to enroll in ENGL 001. Introduction to the principles of management and planning and how they apply to any small business. Principles discussed include the development of a business strategy, how to finance a small business, financial management, risk management and insurance, developing a business plan, budgeting, credit and collections, recruiting and selecting staff, employee relations, business expansion, buying a business, franchising, and the role of small business in the community and the economy. All students will prepare a business plan. Three hours lecture.

MGMT 186 3 Units Small Business Marketing

Course Advisory: SCC minimum English and Math standards. Students will learn how to apply the principles of marketing to any small business, enabling the business to attract and keep customers and increase sales. This course is intended to familiarize students with the major elements of marketing, including market research, test marketing, developing a marketing strategy and implementing that strategy by means of advertising, sales, direct mail, telemarketing, public relations, publicity, customer relations, etc. Three hours lecture.

MGMT 188 3 Units

Computers in Small Business

Course Advisory: SCC minimum English and Math standards. Students will learn the five most common applications of computers to small business situations: document, form, and correspondence preparation; accounting/financial statements/budgeting; tracking of customers and prospective customers in sales and marketing; graphic design of flyers, brochures, advertisements, etc. This course does not cover programming and systems analysis. Three hours lecture, one hour lab.

MGMT 191 3 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 Units Human Rescource 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.

MGMT 194 3 Units Personal Finance

Course Advisory: SCC minimum English and Math standards. Study of the everyday problems associated with allocating personal income and the management of personal finance. Emphasizes financial principles associated with planning, decision-making, and budgeting. The course explores the financial concerns of individuals in an economic environment. Topics include financial planning, credit, investments, taxes, risk management, and other current financial issues. Three hours lecture.

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.

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 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	nits
BUS 005 Introduction to Business	3
BUS 018 Legal Environment of Business	3
BUS 181 Business Mathematics	3
CIS 050 Microcomputer Applications	3
OR	
CIS 001 Introduction to Computer Science	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	20

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

MKT 170 3 Units Advertising

Course Advisory: SCC minimum English and Math standards. A comprehensive study of the principles of advertising as applied to the marketing process. *Three hours lecture*.

MKT 171 3 Units 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.

MKT 172 3 Units 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.

MKT 173 3 Units 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.

Marketing

MKT 174 3 Units

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.

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 an Associate Degree will be able to:

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

REQUIRED COURSES
MATH 020 Analytic Geometry and Calculus I 5
MATH 021 Analytic Geometry and Calculus II5
MATH 022 Analytic Geometry and Calculus III 4
MATH 023 Differential Equations 4
OR
MATH 011 Elementary Statistics 4
OR
MATH 012 Mathematical Ideas
MATH 040 Introduction to Linear Algebra
Total Units

Associate in Science in Mathematics for Transfer

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 this AS-T degree, students must:

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

Program Outcomes

Students who complete an Associate Degree will be able to:

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

These will be assessed using techniques employed by individual instructors in the capstone courses of MATH 022 and MATH 040.

REQUIRED COURSES
MATH 020 Analytic Geometry and Calculus I 5
MATH 021 Analytic Geometry and Calculus II5
MATH 022 Analytic Geometry and Calculus III 4
MATH 023 Differential Equations 4
OR
MATH 011 Elementary Statistics
MATH 040 Introduction to Linear Algebra
Total Units

NOTE: Specific graphing calculators are required in some math courses.

MATH 002 3 Units Algebra for Calculus (College Algebra)

Prerequisite: A grade of C or better in MATH 104. 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. Lab hours may be scheduled or TBA depending on section. Students are expected to complete both the lecture and lab portions of the course. Three hours lecture, one hour lab.

MATH 004 5 Units Precalculus Mathematics

Prerequisite: A grade of C or better in MATH 103 and 104. NOTE: Not open to students who have completed MATH 051 or MATH 002 with a grade of C or better. 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. 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. Five hours lecture, one hour lab.

MATH 011 4 Units Elementary Statistics

Prerequisite: A grade of C or better in MATH 104. 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. Lab hours may be scheduled or TBA, depending upon the section. Students are expected to complete both the lecture and lab portions of the course. Four hours lecture, one hour lab.

MATH 012 3 Units Mathematical Ideas

Prerequisite: A grade of C or better in MATH 104. 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 018 2 Units Exploring Math and Science Teaching

Prerequisite: Math 104 with a grade of C or better. Course Advisory: SCC minimum English standard. This course is an education-based field experience in mathematics and science. Weekly seminars will explore how children learn and develop understanding in math and science. Students will be assigned to area schools to assist in the classroom and work in structured one-on-one or group settings for a minimum of two hours per week. Two hours lecture.

MATH 020 5 Units Analytic Geometry and Calculus I

Prerequisite: Grades of C or better in MATH 002 and 051, or MATH 004. Course Advisory: SCC minimum English standard. MATH 020, 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. 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. Five hours lecture, one hour lab.

MATH 021 5 Units Analytic Geometry and Calculus II

Prerequisite: A grade of C or better in MATH 020. Course Advisory: SCC minimum English standard. Math 021, 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. 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. Five hours lecture, one hour lab.

MATH 022 4 Units Analytic Geometry and Calculus III

Prerequisite: A grade of C or better in MATH 021. Course Advisory: SCC minimum English standard. Math 022, 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.

MATH 023 4 Units Differential Equations

Prerequisite: A grade of C or better in MATH 021. 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. Four hours lecture.

MATH 030 3 Units Analytic Geometry and Calculus

Prerequisite: A grade of C or better in MATH 104. NOTE: Not open to students who have completed MATH 020 with a grade of C or better. Course Advisory: SCC minimum English standard. MATH 030 and 031 is a twosemester 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. Lab hours may be scheduled as TBA depending upon the section. Students are expected to complete both the lecture and lab portions of the course.

Three hours lecture, one hour lab.

MATH 031 3 Units

Analytic Geometry and Calculus

Prerequisite: MATH 030 with a grade of C or better. 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. Lab hours may be scheduled or TBA depending on the section. Students are expected to complete both the lecture and lab portion of the course. Three hours lecture, one hour lab.

MATH 040 3 Units

Introduction to Linear Algebra

Prerequisite: A grade of C or better in MATH 020 or 030. NOTE: A relatively high degree of mathematical maturity is required for this course. Course Advisory: SCC minimum English standard and MATH 021. 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. Three hours lecture.

MATH 051 3 Units Trigonometry

Prerequisite: A grade of C or better in MATH 103 and 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. Lab hours may be scheduled or TBA depending on the section. Students are expected to complete both the lecture and the lab portions of the course. Three hours lecture, one hour lab.

MATH 103 3 Units Plane Geometry

Prerequisite: A grade of C or better in 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. Lab hours may be scheduled or TBA depending on the section. Students are expected to complete both the lecture and lab portions of the course. Three hours lecture, one hour lab.

MATH 104 5 Units Intermediate Algebra

Prerequisite: A grade of C or better in 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. Lab hours may be scheduled or TBA depending on section. Students are expected to complete both the lecture and lab portions of the course. Five hours lecture, one hour lab.

MATH 112 4 Units Algebraic Reasoning

Prerequisite: MATH 330 or MATH 330B with a grade of C or better. Course Advisory: SCC minimum English *standard.* In this course students will develop their ability to solve problems with algebraic reasoning. Topics include ratios, rates, proportional reasoning using fractions, decimals, and percents, evaluating expressions, functions, use of linear and exponential functions to model bivariate data, use of logarithms and logarithmic scales, financial math, probability, and graphical descriptive statistics. This course is designed for students who DO NOT plan to major in math, science, computers, engineering, or business. Students who plan to transfer will need to take MATH 104 in preparation for transfer math courses. Lab hours may be scheduled or TBA depending on the section. Students are expected to complete both the lecture and the lab portions of the course. Four hours lecture, one hour lab.

MATH 114 3 Units Math for Health Occupations

Prerequisite: Math 330 or Math 330B with a grade of C or better. Course Advisory: SCC minimum English standard. This course is designed for A.S/A.A health occupation students to prepare them for math topics encountered in their chemistry, biology, and health occupation courses. Topics include metric system, dimensional analysis, counting techniques, linear models, exponential models, and common logarithms. Three hours lecture.

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

MATH 310 3 Units Arithmetic

NOTE: Not open for credit to students who have completed MATH 304. *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. *Three hours lecture.*

MATH 320 4 Units Pre-Algebra

Prerequisite: Grade of C or better in MATH 310, or 3 units of credit in MATH 304, or 3 units of BUS 181 with a grade of C or better. 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.

MATH 330 5 Units Elementary Algebra

Prerequisite: A grade of C or better in MATH 320. 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. Lab hours may be scheduled or TBA depending on section. Students are expected to complete both the lecture and lab portions of the course. Formerly MATH 102. Five hours lecture, one hour lab.

MATH 330A 3 Units Elementary Algebra Part I

Prerequisite: A grade of C or better in MATH 320. 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. Lab hours may be scheduled or TBA depending on the section. Students are expected to complete both the lecture and the lab portions of the course. Formerly MATH 107. Three hours lecture, one hour lab.

MATH 330B 3 Units Elementary Algebra Part II

Prerequisite: A grade of C or better in MATH 330A. 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. 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. Formerly MATH 108. Three hours lecture, one hour lab.

MATH Special Topics

These courses, numbered 048, 098, 148 or 198 depending upon their transferability, are courses of contemporary interest centered on changing knowledge and important issues in the field. Announcements of Special Topics courses appear in the Schedule of Classes.

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 an 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.UnitsMUSC 003 Advanced Theory4MUSC 004 Advanced Theory4MUSC 010 Concert Band2OR
MUSC 021 Chorus2MUSC 041A Music Majors Piano1.5MUSC 041B Music Majors Piano1.5Select One course from Selection One1 - 1.5Select seven units from Selection Two7Total Units21 - 21.5
Selection One (Select one course)UnitsMUSC 030 Intermediate Piano Part II1.5MUSC 032 Class Lessons in Brass1.5MUSC 033 Class Lessons in Strings1MUSC 034 Class Lessons in Percussion2MUSC 039 Class Lessons in Intermediate Guitar1.5
Selection Two (Select 7 units) Units MUSC 008 Music Appreciation 3 MUSC 010 Concert Band 2 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

^{*}MUSC 010 required first semester of enrollment

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 an 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

MUSC 003 Advanced Theory 4 MUSC 004 Advanced Theory 4 MUSC 010 Concert Band......2 MUSC 041A Music Majors Piano 1.5 MUSC 041B Music Majors Piano. 1.5 Select one course from Selection One 1 - 1.5 Selection One (Select One Course) Units MUSC 006 Composition, Arranging, Songwriting 3 MUSC 053 Advanced Sound Recording 2 MUSC 060 Computer Assisted Music Lab 1 - 3 MUSC 061 MIDI and Computer Music

^{*}MUSC 010 is required the first semester of enrollment

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 an 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	
MUSC 010 Concert Band	
OR	
MUSC 021 Chorus	2
MUSC 041A Music Majors Piano	1.5
MUSC 041B Music Majors Piano	
Select One course from Selection One	
Select seven units from Selection Two	7
Total Units	
Selection One (Select one course)	Units
MUSC 035A Beginning Voice I	
OR	1.0
MUSC 035B Beginning Voice II	1.5
MUSC 036A Intermediate Voice I	
OR	
MUSC 036B Intermediate Voice II	1.5
Selection Two (Select 7 units)	Linita
MUSC 008 Music Appreciation	
MUSC 013 Multicultural Music in America MUSC 020 Choir	
MUSC 024 Master Works Chorale	
MUSC 025 Chamber Choir	
MUSC 026 Vocal Jazz Ensemble	
MUSC 051 Jazz and Popular Solo Voice	1.5

^{*}MUSC 010 is required the first semester of enrollment

MUSC 001 4 Units Beginning Theory

Course Advisory: SCC minimum English and Math standards. Presents the basic principles of music theory including scales, intervals, modes, cadences, rhythmic and melodic construction and development, basic harmonic progressions, writing and analysis in four part texture in the Common Practice style, the principal triads in inversion, and the leading tone triad. Emphasis is on musicianship skills, including rhythmic and melodic dictation, intervals, chord progressions, sight singing, ear training. Recommended for all students interested in harmony, composition, sight reading and basic musical knowledge. Required for the music transfer student. Four hours lecture.

MUSC 002 4 Units Beginning Theory

Prerequisite: MUSC 001 or equivalent. Course Advisory: SCC minimum English and Math standards. Presents further investigation into the basic principles of music theory, including supertonic, mediant, sub-mediant triads, common chord progressions, non-harmonic tones, triad usage, dominant seventh and supertonic seventh chords and elementary modulation. Development of ear training skills continues with melodic and rhythmic dictation, recognition of harmonic progressions and non-harmonic tones, and sight singing. Recommended for all students interested in harmony, composition, sight reading, ear development and a continuation of basic concepts. Required for the music transfer student. Four hours lecture.

MUSC 003 4 Units Advanced Theory

Prerequisite: MUSC 002 or passage of acceptance exam. Presents the advanced principles of music theory including modulation, binary and ternary song forms, instrumental and lyric study, secondary dominants, supertonic, mediant, submediant and diminished seventh chords and introduction to altered chords, with description of advanced diatonic tonal procedures. Continues the development of ear training skills, including recognition of two, three and four part melodic dictation, rhythmic dictation, and realization of a chord progression. Techniques are presented through written examples, score analysis, and short vocal and instrumental projects. Recommended for all occupational music students. Required for the music transfer student and major. Four hours lecture.

MUSC 004 4 Units Advanced Theory

Prerequisite: MUSC 003 or passage of acceptance examination. Course Advisory: SCC minimum English and Math standards. Presents further investigation into the advanced principles of music theory, including ninth, eleventh, and thirteenth chords, the Neopolitan sixth sonorities, the augmented sixth chords, advanced modulation, non-dominant diatonic chords, tone rows, pandiatonicism, and the study of all chromatic procedures. Continues with the development of ear training skills including all forms of melodic, rhythmic, chordal and formal dictation. Investigation of 20th Century techniques are presented through written examples, score analysis and vocal and instrumental projects. Recommended for all occupational music students; required for the music transfer student and major. Four hours lecture.

MUSC 005 3 Units Music Fundamentals

Course Advisory: SCC minimum English and Math standards. A basic course including notation, rhythm, and major and minor scales, modes, sight reading, key signature, melody, and triads and ear training concepts. Traces the historical and cultural progress of music through the development of musical symbols and their application. No previous knowledge of music is required. Three hours lecture.

MUSC 007 3 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 Units Music Appreciation

Course Advisory: SCC minimum English standard. An introductory examination of how composers and songwriters exploit the various elements of music to heighten the expressive impact of a composition. Aspects of melody, rhythm, harmony, tone, and structure will be studied through focused listening of works from Medieval to today's avante-garde and popular styles. Three hours lecture.

MUSC 009 2 Units Wind Ensemble

Course Advisory: SCC minimum English standard; play a band instrument. This course offers the study and performance of various styles of wind ensemble literature. Wind ensemble literature, rehearsal technique, and performance practices are examined. Public performances and/or field trips are required. Repeatable 3 times. One hour lecture, two hours lab and one hour weekly by arrangement.

MUSC 010 2 Units **Concert Band**

Course Advisory: SCC minimum English standard; play a band instrument. This course offers the study and performance of various styles of concert band literature. Concert band literature, rehearsal technique, and performance practices are examined. Public performances and/or field trips are required. Repeatable 3 times. One hour lecture, two hours lab and one hour weekly by arrangement.

MUSC 011 2 Units Symphonic Band

Course Advisory: SCC minimum English standard; play a band instrument. 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. One hour lecture, two hours lab and one hour weekly by arrangement.

MUSC 013 3 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. Repeatable 3 times. Three hours lecture.

MUSC 014 2 Units Jazz Ensemble

Course Advisory: SCC minimum English standard; play a jazz instrument. An instrumental ensemble class analyzing and performing jazz music. This class requires public performance. Repeatable 3 times. One hour lecture, two hours lab and one hour weekly by arrangement.

MUSC 015 2 Units Stage Band

Course Advisory: SCC minimum English standard; play a jazz instrument. An instrumental ensemble class analyzing and performing stage band music. This class requires public performance. Repeatable 3 times. One hour lecture, two hours lab and one hour weekly by arrangement.

MUSC 016 0.50 or 1.00 Units Symphony Orchestra

Course Advisory: SCC minimum English standard; ability to play an orchestral instrument. An opportunity for qualified instrumentalists to perform as part of a symphony orchestra in public performances. A wide variety of musical literature is covered. Public performances and/or field trips are required. This is an open-entry, open-exit course. Repeatable 3 times. One and one-half to three hours lab.

MUSC 017 2 Units **Chamber Orchestra**

Course Advisory: SCC minimum English standard; play an orchestral instrument. An instrumental ensemble class analyzing and performing large quantities of chamber orchestra music. Public performances and/or field trips are required. Repeatable 3 times. One hour lecture, two hours lab and one hour weekly by arrangement.

MUSC 018 2 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 lab and one hour weekly by arrangement.

MUSC 019 2 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 lab.

MUSC 020 2 Units Choir

Study and performance of a variety of a cappella and accompanied choral literature. Attendance at public performances required. Repeatable 3 times. One hour lecture, two hours lab and one hour weekly by arrangement.

MUSC 021 2 Units Chorus

Designed to train students to sight sing, note read, use proper vocal production and perform a variety of standard choral literature. Open to anyone interested in choral singing. Highly recommended for theory students, vocal and instrumental musicians. Attendance at public performances required. Repeatable 3 times. *One hour lecture, two hours lab and one hour weekly by arrangement.*

MUSC 023 2 Units Handbell Ensemble

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 lab, and one hour weekly by arrangement.

MUSC 024 2 Units Master Works Chorale

Prerequisite: Audition of music and vocal skills. Study of choral music techniques and performance of 18th-21st century masterworks for the large ensemble. Both a cappella and symphonic literature to be studied. Designed for singers with previous choral experience. Public performance required. Repeatable 3 times. One hour lecture, two hours activity, and one hour weekly by arrangement.

MUSC 025 2 Units Chamber Choir

Prerequisite: Previous experience in choral ensembles. Audition and /or advisement by current instructor. Advanced study and performance of choral works for the small ensemble. Public performance required. Highly recommended for music majors, especially voice majors. Repeatable 3 times. One hour lecture, two hours lab and one hour weekly by arrangement.

MUSC 026 2 Units Vocal Jazz Ensemble

The study and performance of choral works in the jazz idiom, including development of reading and improvisation skills. Vocalists work with a jazz rhythm section and instrumentalists. Participation in public performance required. Repeatable 3 times. *One hour lecture, two hours lab and one hour weekly by arrangement.*

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

Course Advisory: SCC minimum English standard. 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 Unit

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 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 or equivalent skills. Course Advisory: SCC minimum English standard. A continuation of MUSIC 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 or evidence of equivalent skills. 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.

MUSC 036B 1.5 Units Intermediate Voice II

Prerequisite: MUSC 036A or equivalent skills. 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. **NOTE: Combined enrollments in MUSC 038, 039 and 062 may not exceed 4 units.** *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. NOTE: Combined enrollments in MUSC 038, 039 and 062 may not exceed 4 units. One hour lecture, two hours activity.

MUSC 041A 1.5 Units Music Majors Piano

Course Advisory: Note reading and 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

Prerequisite: MUSC 041A. Course Advisory: SCC minimum English standard. Instruction, practice and application of the techniques of piano performance at the intermediate level designed for music majors. Emphasis will be placed on continuation of keyboard skills including simple and complex modulation, harmonic progressions using seventh chords and larger sonorities, all major and minor scales plus other forms, exercises and drills, sight reading, rehearsal techniques, accompanying skills, arrangement and advanced ear-training. The class specifically relates to advanced theoretical concepts realized at the keyboard with a continued attention to performance and the use of the piano as a teaching tool. One hour lecture, one hour activity.

MUSC 042A 1.5 Units Jazz & 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 & 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 1.00 to 3.00 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 grade of B or better; an ability to work independently; permission of the Division 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. Three to nine hours weekly by arrangement.

MUSC 051 1.5 Units Jazz and Popular Solo Voice

Course Advisory: SCC minimum English standard; MUSC 035A or other solo voice experience. 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 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 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 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 weekly by arrangement.

MUSC 056 3 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 weekly by arrangement.

MUSC 060 1.00 to 3.00 Units Computer Assisted Music Lab

Course Advisory: MUSC 027. A self-paced course which introduces or further develops musicianship skills through computer-assisted instruction. The course is designed to enhance theory, performance and history study and may be taken to develop skills in specialized areas of composition, conducting, orchestration and arranging, and improvisation. This is an open entry/open exit course. One-half to one hour lecture, one and one-half to six hours weekly by arrangement.

MUSC 061 2 Units
MIDI and Computer Music Sequencing and Scoring
Course Advisory: SCC minimum English and Math
standards; MUSC 027. 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 activity.

Nursing, Registered

Program Description

The Registered Nursing Program at Solano Community College is a 2-year Associate Degree Program fully accredited 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 an 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 Degree must be completed with a letter grade of C or better.

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.

Admission Procedures

Prerequisites

All courses taken toward the Registered Nursing Degree must be completed with a letter grade of C or better. To be eligible to apply to the Registered Nursing Program, students must have completed the following four prerequisites.

Please note that these courses may also have prerequisites:

- 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)

NOTE: No online Anatomy, Physiology, or Microbiology courses will be accepted.

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.

Other required courses in the Nursing Major include

- NUTR 010 Nutrition (3 units)
- CDFS 070 Lifespan Human Development (3 units)
- NURS 052 Pharmacology (3 units)
- PSYC 001 General Psychology (3 units)

OR

- SOCS 022 Minority Group relations (3 units)
- COMM 001 or approved communications class. It is also highly recommended that English 062 or the College reading requirement be met prior to entering the program as well as all SCC Local District General Education requirements.

Application Steps:

1. Letter grades of at least "C" or better must be officially posted to a transcript to verify COMPLETION of the following prerequisite courses in order to apply for the RN Waitlist.

ENGL 001 College Composition

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

BIO 005 Physiology w/Lab (4 semester units minimum)

BIO 014 Microbiology w/Lab (4 semester units minimum)

Note: No ONLINE Anatomy, Physiology, or Microbiology courses will be accepted.

- **2. APPLY** for admission to SCC online at *www.solano.edu* (*if not already a current/continuing student*).
- 3. We RECOMMEND that you attend a RN Information Workshop
 For the RN Information Workshop schedule go to www.solano.edu (Click the A-Z index, then "N" for Nursing)
- 4. APPLY in person at the Admissions and Records (A&R) Office located in the 400 Building at the Fairfield Main Campus (Monday Thursday 9am 3pm)

PLEASE BRING

- 1. Your 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.)
- 3. 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 our Nursing Program, we still need ALL transcripts.

FAILURE TO LIST ALL COLLEGES OR UNIVERSITIES, AND SUBMIT ALL TRANSCRIPTS, WILL VOID THIS APPLICATION.

- 5. WAIT 90 BUSINESS DAYSDuring this time, A &R will evaluate your transcripts and calculate 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. At the end of the 90 days, you will receive a letter by mail from the School of Health Sciences with your results. IMPORTANT: Completion timeline may be extended beyond 90 days depending on volume of applications received.
- **6.** Once on the waitlist, you will be invited to take the TEAS V test and you must earn a 62 or higher. For more information, see: https://www.atitesting.com/Solutions.aspx. You will also be required to meet with a Counselor once you have been on the waitlist one year to review ADN degree requirements.

*International college or university transcripts are also required, but may be unofficial photo copies along with an official international evaluation service summary in a sealed, unopened envelope from an approved credential evaluation service** and must include:

- A detailed report which distinguishes lower division from upper division courses
- ullet A-F letter grade values
- Course descriptions for any RN science prerequisites (Anatomy, Physiology, Microbiology) that were completed at an international institution.

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

Prior to First Class Meeting, Students Accepted into the Nursing Program 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 a mandatory orientation meeting with nursing faculty to be arranged by Health Sciences.
- 4. Taken the reading assessment test or have met the reading requirement for graduation.
- 5. Provided a clear criminal background check and drug screen.
- 6. Achieved a score of 62 or greater on the TEAS V test.

^{**} A list of acceptable evaluation service companies is available from A&R.

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.

REQUIRED COURSES
Nursing courses must be taken in sequence because one course is prerequisite to another.
NURS 058 Mediated Skills Development 0.5 -1.5
(Concurrent enrollment in NURS 058 is required for each of the following Nursing courses except NURS 052 & 065.)
First Year Courses
NURS 050A Fundamentals of Nursing 5
NURS 050B Basic Human Needs 6
HUDV 070 * Lifespan Human Development3
NUTR 010 * Nutrition
NURS 052 * Pharmacology for Nursing
NURS 054 Maternal-Child Nursing5
NURS 055 Nursing of Adults I5
PSYC 001 ** Introduction to Psychology3
OR
SOCS 022 Ethnic, Racial and Minority Group
Relations in Harmony and Conflict3
*Course must be completed prior to entry into NURS 054
**Course must be completed prior to entry into NURS 060/061
Second Year Courses
NURS 060 Nursing of Adults II/
Medical-Surgical Nursing5
NURS 061 Psychiatric and Mental Health Nursing5
NURS 063 Advanced Medical Surgical
and Community Nursing7
NURS 064 Issues and Leadership
in Health Care Today
NURS 065 Role Transition in Practice
NORO 000 Note Hunbiton in Fluctice
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
OR .
meet the reading requirement
Communications course other than ENGL 001

Some courses may not be offered. Please contact the Dean of Health Sciences for alternate courses if necessary.

Career Mobility

The Career Mobility 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 accredited 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 career mobility options:

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 Career Mobility 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 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.

Prerequisites

- 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 NUTR 010 Nutrition

BIO 004 Human Anatomy w/Lab (4 sem. units minimum) CDFS 070* Lifespan Human Development

BIO 005 Physiology w/Lab (4 sem. units minimum) NURS 052 Pharmacology

BIO 014 Microbiology w/Lab (4 sem. units minimum) PSYC 001 or SOCS 022 Ethnic Race Relations

NOTE: NO ONLINE ANATOMY, PHYSIOLOGY, OR MICROBIOLOGY COURSES WILL BE ACCEPTED

- 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 A 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. Your 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 our Nursing Program, we still need ALL transcripts.

Failure to list ALL colleges or universities, and submit ALL transcripts, will VOID this 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. AFTER 90 BUSINESS DAYS RETURN IN PERSON OR CALL** the Counseling Office (707-864-7101) to schedule a one-hour "LVN-RN Referral Appointment." *This is your responsibility.*

Your Application will be complete only after you have met with a counselor for your Referral.

- 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 V 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.

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. Achieved a score of 67 or greater on the TEAS V test.

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 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
NURS 200 Certified Nursing Assistant/
Home Health Aide
Total Units

Emergency Medical Technician I Job-Direct Certificate

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

REQUIRED COURSES	Units
EMT 112 Emergency Medical Technician (Basic)	7
Total Units	7

Emergency Medical Technician I

EMT Emergency Medical Technician (Basic) Prerequisite: EMT 128 with a minimum grade of C. Course Advisory: Minimum standards: Eligibility for English 001 and SCC minimum MATH standard. Based on state Emergency Medical Services Association regulations, the goal of the EMT (Basic) course is to acquire essential assessment & treatment skills for the delivery of prompt, efficient & safe pre-hospital emergency patient care. Application of these emergency care skills can minimize the risk of permanent disability to an individual. The course has lecture/discussion sessions & skills practice time. Students will attend a combined minimum of twenty-four (24) hours of observation time with an emergency department and an ambulance service. This clinical experience must include a minimum of ten (10) documented patient contacts wherein a patient assessment and other EMT skills are performed. Students successfully completing the course are eligible to take the National Registry Emergency Medical Technician (Basic) Exam as required by the state of California for certification. Certification enables students to qualify for employment with ambulance services, fire, or rescue services, search & rescue crews, ski patrol or related pre-hospital emergency care positions. NOTE: By law, applicants for certification must be at least 18 years of age. Students must present current Basic Life Support for Healthcare Providers course completion card at the orientation meeting in order to enroll in the course. Five hours lecture and six hours activity.

EMT 128 3 Units Emergency Medical Responder

Course Advisory: SCC minimum English and Math standards. Provides the student with the basic emergency care procedures for sick and injured victims as a first responder including but not limited to: cuts, abrasions, broken bones, trauma injuries, burns and respiratory/cardiovascular emergencies. Five hours lecture and three hours lab (8 week course).

EMT 213 1 Unit

Emergency Medical Technician (Basic) Refresher Prerequisite: EMT 212 or equivalent or previous EMT 213. Course Advisory: SCC minimum English and Math standards. Consists of review and update of EMT 212 course content and focuses on 'hands-on' practice of all pre-hospital emergency skills, meeting the education requirements for EMT renewal. Topics and skills include: legal issues (including HIPAA), trauma, triage, use of airway/ventilation equipment with CPR, automated external defibrillation (AED), patient exam (medical & trauma), assessments and treatments for breathing, cardiovascular, neurologic, musculoskeletal, soft tissue injury, childbirth & environmental emergencies. Students apply assessments and treatments during pre-planned patient care skills scenarios to meet EMSA requirements for skills verification. May repeat every 1-2 years, ad infinitum (as stipulated by EMSA regulations for EMT I refresher and renewal). Four and one half hours lecture, four and one half hours activity (3 week course).

Nursing

NURS 050A 5 Units Fundamentals of Nursing

Corequisite: NURS 058A. Prerequisite: ENGL 001, BIO 004, BIO 005, BIO 014, with grade of C or better; 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, selfstudy modules and small group seminars will be offered concurrently with theory. Internet access required. *Eight* hours lecture, six hours lab (8 week course).

NURS 050B 6 Units Basic Human Needs

Corequisite: NURS 058A Prerequisite: NURS 050A with grade of C or better. 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. Internet access required. Seven lecture hours and fifteen lab hours (8 week course).

NURS 052 3 Units Pharmacology for Nursing

Prerequisite: BIOSC 5 with a grade of C or better. Course Advisory: SCC minimum English and Math standards. Nursing or Pre-nursing Students. Basic Computer navigation skills and frequent internet access is required. 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 Units Maternal-Child Nursing

Corequisite: Concurrent enrollment in NURS 058B. Prerequisite: NURS 050A & 050B, NURS 052, NUTR 010, and HUDV 070 with grades of C or better. 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 grade of C or better to advance in the nursing program. Five hours lecture, fifteen hours lab (8 week course).

NURS 055 5 Units Nursing of Adults I

Corequisite: Concurrent enrollment in NURS 058B or 058E. Prerequisite: Completion of NURS 050A & 050B, NURS 052, NUTR 010, and HUDV 070 with grades of C or better. 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 selfevaluation 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).

NURS 058A Skills Lab I

Corequisite: NURS050A with a minimum grade of C. Concurrency. 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 moderatedinclude:applying a dry, sterile dressing, administering enteral feedings, administering and managing primary intravenous line therapy and insertion, irrigation and discontinuing a nasogastric tube. Other peer evaluated skills include application of cold/heat therapy, use of compression devices, incentive 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 Course. Three hours lab.

1 Unit

NURS 058B 1 Unit Skills Lab II

Corequisite: NURS 055 or enrollment in NURS 054 -Concurrency. Prerequisite: NURS 058 or Successful completion of 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, content and 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 programing, 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 Course. Three hours lab.

NURS

hours lab.

058E

NURS 058C 0.5 Unit Skills Lab III

Corequisite: NURS 060 or concurrently enrolled in NURS 061. Prerequisite: NURS 058 or successful completion of 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 previouly 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 course. *One and one-half hours lab.*

NURS 058D 0.5 Unit Skills Lab IV

Corequisite: NURS 063. Prerequisite: Successful completion of 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, content 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 course. *One and one-half hours lab.*

Skills Lab for LVN Transition Students Corequisite: NURS 159 or enrollment in NURS 055 concurrency. This is a 1.0 unit course that is required for students who are enrolled in the LVN to RN Transition Course, NURS 159. Course Advisory: Basic Computer navigation skills and frequent internet access is required. Students will continue to build on previously learned concepts, content 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, maintainance and discontinuance of nasograstric 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 administration. 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 puchase a Nursing Skills Lab kit, stethoscope,

white lab coat and uniform per the Registered Nursing Student Handbook. This is a Pass/No Pass course. *Three*

1 Unit

NURS 060 5 Units Nursing of Adults II/Medical-Surgical Nursing Corequisite: Concurrent enrollment in NURS 058C. Prerequisite: NURS 054 & NURS 055 and either PSYC 001, PSYC 002 or SOCS 022 with grades of C or better. 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 Units **Psychiatric and Mental Health Nursing** Prerequisite: NURS 054 & NURS 055 and either PSYC 001, PYSC 002 or SOCS 022 with grades of C or better. 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. Internet access required. Five hours lecture, fifteen hours lab (8 week course).

NURS 063 7 Units **Advanced Medical Surgical and Community Nursing** Corequisite: Concurrent enrollment in NURS 058D. Prerequisite: NURS 060 and 061 with grades of C or better. 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).

NURS 2 Units Issues and Leadership in Health Care Today Corequisite: NURS 063 and/or NURS 065. Prerequisite: NURS 060 & 061 with grades of C or better. 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 nurses 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 grades of C or better. 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 laboratory* (5 week course).

NURS 100 2 Units Exploring Health Occupations

Course Advisory: SCC minimum English and Math standards. Basic Computer navigation skills and *frequent internet access is required.* Explores the diversity of health care occupations currently available and is intended for students considering a health care career. Examples of health occupations include: certified nursing assistant (CNA), respiratory therapist, physician & physician assistant, nursing (LVN & RN), biotechnology technician, emergency medical technician (EMT I), paramedic (EMT P), radiology technician, physical therapist & assistant, pharmacist & pharmacy technician. Students compare and contrast various health occupation(s) in terms of the personal and professional attributes for the job, specific job skills needed, basic educational preparation and potential for advancement. In addition to classroom discussions and library research, students interview people in health care jobs, go on field trips to health care facilities and evaluate the health occupations that most interest them. Four hours lecture (9 week course).

NURS 101 3 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 102 1.00 to 4.00 Units Nursing Work-Study

Prerequisite: NURSE 054, 055 and authorization by Dean to enroll. Course Advisory: Basic Computer navigation skills and frequent internet access is required. NOTE: One to four units of workstudy experience at a ratio of 1 unit=75 paid hours or 60 unpaid hours. No student will be allowed to enroll for more than four units per semester. Course Advisory: SCC minimum English and *Math standards.* This work-study course is offered through Solano Community College Associate Degree Nursing Program in cooperation with selected clinical agencies. Students apply previously learned nursing theory and clinical skills in assigned patient care settings under the direct supervision of selected RN nurse preceptors. The work experience is supervised by a Solano Community College Nursing Instructor and the clinical agency coordinator. Student functions will include clinical skills in which previous training and competency in skill performance has already been demonstrated and documented on the student's skills competency checklist. This course is a credit/no credit course. Combined units for all work experience courses shall not exceed 12. Five to nineteen hours by arrangement.

NURS 111 3 Units Medial Terminology

Course Advisory: SCC minimum English and Math standards. Basic Computer navigation skills and frequent internet access is required. Study of the language of medicine. An introduction to terms, word roots and abbreviations related to medical practice and the functioning of the systems of the body. Three hours lecture.

NURS 148M 5 Units

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 a C or better to pass the class. *Five* hours lecture, fifteen hours lab. (8 week course).

NURS 159 3.5 Units

Career Mobility Transition

Prerequisite: Current LVN Licensure and acceptance into the ADN Program; authorization to enroll. Co-requisite: NURS058E. Course Advisory: SCC minimum English and Math standards. Basic Computer navigation skills and *frequent internet access is required.* This course is designed to facilitate the transition of the Career Mobility student into the Associate of Science Degree in Registered Nurse (RN) program at Solano Community College. This course focuses on theory and skills needed for successful transition from the student's current role to the role of the Registered Nursing student. This course presents the major theoretical concepts (i.e., role transition, homeostasis, fluid and electrolytes, asepsis, critical thinking, nursing process, therapeutic communication, medication calculations as well as professional legal / ethical issues) that are the foundation for the Registered Nursing curriculum. This course encompasses both classroom activities and opportunities to apply theoretical knowledge in the clinical/simulated setting. Four hours lecture, nine hours lab per week (8 week course).

NURS 200 6 Units

Certified Nursing Assistant/Home Health Aide 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. Upon completion, the student is eligible to take the state CNA examination. Five hours lecture, fifteen hours lab (10 week course).

NURS 219 2 Units 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 per week (8 week course).

NURS 223 4 Units

Critical Care Nursing

Prerequisite: RN or LVN Licensure and NURSE 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.

NURS 230 4 Units

Emergency Care Nursing

Prerequisite: RN or LVN licensure and NURSE 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.

Nutrition

NUTRITION

NUTR 010 3 Units Nutrition

Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standards. Study of the basic principles 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. Three hours lecture.

NUTR 012 0.50 to 2.00 Units Evaluating Current Topics in Nutrition

Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standards. 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.

NUTR 054 3 Units Child Health, Safety and Nutrition

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

Occupational Education

Program Description

OCED 090 and 091 are work experience courses available to all occupational education certificate and degree programs students. 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.

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.

OCED 090 1 - 8 Units • Occupation Work Experience

Corequisite: Student must be enrolled in 7 units (including Occupational Work Experience). Student must be available to work 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 available to work from 5 to 40 hours per week for a licensed business in a job directly related to the declared major. Student will attend a weekly coordination seminar, develop job-oriented objectives and remain currently enrolled in at least 7 units including Occupational Work Experience. Includes all occupational education certificate and degree programs. Qualified students who are not working 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. Students enrolled in OCED 090 may not enroll in OCED 091 during the same semester. Combined units in all work experience courses shall not exceed 16. NOTE: CSU will accept up to 12 units for transfer. To determine the correct course length and number of units in which to enroll, refer to the following formula for paid employment*:

Full Semester Sections	12-Week Sections	8-Week Sections
1 unit = 5 hours per week	1 unit = 7 hours per week	1 unit = 10 hours per week
2 units = 10 hours per week	2 units = 14 hours per week	2 units = 19 hours per week
3 units = 15 hours per week	3 units = 19 hours per week	3 units = 28 hours per week
4 units = 20 hours per week	4 units = 25 hours per week	4 units = 38 hours per week
5 units = 25 hours per week	5 units = 32 hours per week	
6 units = 30 hours per week	6 units = 38 hours per week	
7 units = 35 hours per week		
8 units = 40 hours per week		*unpaid work requires fewer hours per week

OCED 091 1 - 6 Units • General Work Experience

Corequisite: Student must be enrolled in 7 units (including Work Experience). 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. Course Advisory: SCC minimum English and Math standards. To qualify for General Work Experience credit, the student must be available to work from 5 to 30 hours per week at a job with a licensed business. Student will attend a weekly coordination seminar, develop job-oriented objectives and remain currently enrolled in at least seven units, including General Work Experience. Includes all occupational education certificate and degree programs. Qualified students who are not working 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 6 units per semester. Students enrolled in OCED 091 may not enroll in OCED 090 during the same semester. Combined units in all work experience courses shall not exceed 16. NOTE* CSU will accept up to 12 units for transfer. To determine the correct course length and number of units in which to enroll, refer to the following formula for paid employment *:

Full Semester Sections 1 unit = 5 hours per week	12-Week Sections 1 unit = 7 hours per week	8-Week Sections 1 unit = 10 hours per week
2 units = 10 hours per week 3 units = 15 hours per week 4 units = 20 hours per week	2 units = 14 hours per week 3 units = 19 hours per week 4 units = 25 hours per week	2 units = 19 hours per week 3 units = 28 hours per week
5 units = 25 hours per week 6 units = 30 hours per week		

*unpaid work requires fewer hours per week

Occupational Education

OCED 101 1 Unit

Occupational Soft Skills

Advisory: Minimum SCC Math and English requirements. Covers the critical tools to help occupational students develop the employability or soft skills needed for a smooth transition to the work force. Topics include practical elements required to meet employer expectations, create cooperative co-worker interactions and development of positive personal characteristics. Etiquette and work ethics are stressed along with practical job hunting skills such as resumes and interviews. This is not a work experience course. One hour lecture (8 week course).

Program Description

Students may select from four programs in Office Technology: Administrative Assistant, Legal Specialist, or Medical Office Specialist. These programs are designed to develop a management support person with technical and communication skills. Time-management and problem-solving abilities are emphasized along with a "team member" approach for a career in today's business environment.

Certificate of Achievement and Associate in Science Degree

A Certificate of Achievement in Administrative Assistant, or Medical Office Specialist can be obtained upon completion of the courses in the selected major. The Associate in Science Degree in Office Technology can be obtained upon completion of 60 units, including the required courses in the selected 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.

Administrative Assistant

Program Outcomes

Students who complete the 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	
BUS 181 Business Mathematics	
CIS 001 Introduction to Computer Science	
OR	
CIS 050 Microcomputer Applications	3
CIS 066 Microsoft Word	
CIS 073 Microsoft Excel	
CIS 090 Introduction to PowerPoint	1.5
CIS 091 Microsoft Outlook	1.5
OCED 090 Occupational Work Experience	
OT 054A Beginning Keyboarding A	1.5
OT 054B Beginning Keyboarding B	
OT 055A Intermediate Keyboarding/	
Word Processing A	1.5
OT 055B Intermediate Keyboarding/	
Word Processing B	1.5
OT 056 Advanced Keyboarding/Word Processing.	
OT 151 Office Systems & Procedures	
OT 162 Ten-Key	
Total Units:	

Medical Office and Coding Specialist

Program Outcomes:

Students who complete the 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 Advanced Keyboarding/	
Word Processing	3
OT 059 Medical Keyboarding and	
Computer Applications	
OT 060 Administrative Medical Assistant	
OT 061 Health Insurance	
OT 063 * Introduction to ICD-9-CM Coding	
OT 064 Intermediate ICD-9-CM Coding	
OT 066 ** CPT-IV Coding	3
OT 101 Study of Human Diseases	
for Medical Assistants	
OT 151 Office Systems & Procedures	
Total Units	. 48 - 50

Recommended Electives:

ACCT 180 Introduction to Accounting

CIS 001 Introduction to Computer Science

OR

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

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

General Office Assistant Job-Direct Certificate

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

REQUIRED COURSES	. Units
BUS 100 Work Readiness	1.5
CIS 066 Microsoft Word	3
CIS 073 Microsoft Excel	3
CIS 091 Microsoft Outlook	1.5
CIS 090 Introduction to PowerPoint	1.5
OT 054 Beginning Keyboarding	3
OT 162 Ten-Key	1
Total Units	14.5

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

Medical Front Office Clerk Certificate of Achievement

The goal of this program is to prepare students to enter the health care industry at an entry level position in two semesters. The program requires students to successfully complete 21.5 units during two consecutive semesters. Students enroll as a group and progress through each class in the program together.

Certificate of Achievement

A Certificate of Achievement can be obtained upon completion of the 26-unit major below.

Program Outcomes

Students who complete a 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 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

Semester 1Units
CIS 066 Microsoft Word
CIS 091 Microsoft Outlook1.5
NURS 111 Medical Terminology
OT 054A Beginning Keyboarding A1.5
OT 054B Beginning Keyboarding B 1.5
OT 060 Administrative Medical Assistant
Total Units
Semester 2
BUS 100 Work Readiness
OT 056 Advanced Keyboarding/Word Processing2
OT 059 Medical Keyboarding and
Computer Applications
OT 061 Health Insurance3
OT 101 Study of Human Diseases
for Medical Assistants
Total Units

^{*}Courses should be taken in sequence.

OT 054A 1.5 Units

Beginning Keyboarding A

OT 054A in 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 054 with a grade of C or better, or OT 054A with a grade of C or CR, or instructor recommendation. Students may register in both OT 054A and OT 054B concurrently, but must successfully complete OT 054A before starting OT 054B. 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. Students are required to attend 1 hour of lab per week in the Office Technology lab. Successful completion (C or better) OT 054A is required or OT 54 Unit 2. Students may test out of OT 54B if they can meet a minimum of 30 wpm with proper technique. Students are expected to complete both the lecture and lab portions of the course. Three hours lecture (8 week course).

OT 055A 1.5 Units

Intermediate Keyboarding/Word Processing A Prerequisite: OT 054 with a minimum grade of C, or OT 054A and 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. Three hours lecture (8 week course).

OT 055B 1.5 Units

Intermediate Kayboarding/Word Processing B Prerequisite: OT 055 with a minimum grade of C and instructor recommendation, or OT 055A with a grade of C or CR or better. 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 1 Unit

Advanced Keyboarding/Word Processing

Prerequisite: Completion of all modules of OT 055 with a grade of C or CR or better; or pass placement test. Course Advisory: SCC minimum English and Math standards. This advanced, individualized applications course is designed to prepare students for professional work in the secretarial field with a heavy emphasis on word processing applications using a microcomputer. Speed will be built to a minimum of 50 words per minute. This is an open entry / open exit course. Three hours lecture, two hours lab.

OT 059 3 Units

Medical Keyboarding and Computer Applications
Prerequisite: Completion of all modules of OT 054 with a
grade of C or CR or better or passing the OT 059
placement test; and Nursing 111 (or concurrent
enrollment). 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 Units

Administrative Medical Assistant

Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standards. This course introduces the student to the responsbilities 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 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 proceedures 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.

OT 063 3 Units Introduction to ICD-9-CM Coding

Prerequisite: OT 101; NURSE 111. Course Advisory: SCC minimum English standard. Introductory course in the basic principles of coding disease and procedures using the International Classification of Disease, 9th Edition Clinical Modification (ICD-9-CM) and ICD-9-CM coding handbook for entry-level coders. Current ICD-9-CM books only will be utilized in this course. The impact of coding on reimbursement will be discussed. Three hours

OT 064 3 Units Intermediate ICD-9-CM Coding

lecture.

Prerequisite: OT 063 (or successful completion of a challenge test). Course Advisory: SCC minimum English standard. This course will build on the previous knowledge gained in OT 063 and address more complex issues related to ICD-9-CM Coding. Class lectures and practical applications will focus on using actual medical records and applying higher level coding skills. The Prospective Payment System and Diagnosis Related Groups (DRGs) will be introduced. Three hours lecture.

OT 066 3 Units CPT-IV Coding

Prerequisite: NURSE 111, OT 101. Course Advisory: 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 and its relationship to the Health Care Financing Administration Common Procedure (HCPCS) Coding System. Three hours lecture.

OT 100 1 Unit 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. This is an open entry/open exit course. One hour lecture, one half hour lab.

OT 101 3 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 Units

Office Systems & Procedures

Prerequisite: Typing rate of 50 words per minute and microcomputer word processing skills. Corequisite: One unit of OCCED 90. 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 Unit 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. This is an open entry / open exit course. One hour lecture, one-half hour lab.

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 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 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 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 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.

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 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
ART 002 Art History
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 & Exterior4
PHOT 156 Portfolio Development
PHOT 070 Beginning Digital Imaging
Select three units from List A
Total Units
List A - Select 3 units from one of the following Units
PHOT 030 Photojournalism &
Documentary Photography
PHOT 031 Intermediate Photography3
PHOT 052 Alternative Photography
PHOT 056 Photojournalism &
Documentary Photography3
PHOT 071 Digital Imaging 1
0 0 0
PHOT 155 Professional Photography
PHOT 155 Professional Photography: Travel Photography

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

Photography

Camera equipment for photography classes is not provided by the College. Students registering for these courses must have available a 35 mm camera or equivalent. Material costs are approximately \$100 per course.

PHOT 030 3 Units Beginning Photography

Course Advisory: Eligibility for ENGL 001, SCC minimum Math standard and PHOT 035, ART 11. 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. This course is prerequisite to the Professional Photography program and most other photography courses. Camera equipment for photography classes not provided by the college. SLR 35mm film camera and related materials are required. Two hours lecture, three hours lab

PHOT 031 3 Units Intermediate Photography

Prerequisite: PHOT 030 or PHOT 070. Course Advisory: PHOT 035, SCC minimum English and Math standards. 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 per week.

PHOT 035 3 Units Art of Photography

Course Advisory: ENGL 001, ART 011. Learn to make better photographs through the survey of historical and contemporary photographers as a vehicle for the development of student's own photographs. Camera equipment is not provided by the college. Students registering for this class should have a film or digital camera. Film or digital camera required. Three hours lecture.

PHOT 051 0.50 or 1.00 Units

Photography Laboratory

Corequistie: Concurrent Enrollment in any SCC Photography course excluding PHOT 035. Course Advisory: SCC minimum English and Math standards. 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. Formerly PHOT 148. This is an open entry/open exit, Pass/No Pass only course. One and one-half to three hours lab.

PHOT 052 3 Units

Alternative Photogrphy

Prerequisite: PHOT 030 or PHOT 070. Course Advisory: PHOT 035, ART 038, SCC minimum English and Math standards. Students experiment with alternative photographic and non-photographic materials to create visual images and statements. Camera equipment is not provided by the college. SLR Film or SLR Digital camera is required. Two hours lecture, three hours lab.

PHOT 056 3 Units

Photojournalism & Documentary

Prerequisite: PHOT 030 or PHOT 070. Course Advisory: Eligibility for ENGL 001. Covers aspects of the camera as a editorial, journalistic and documentary tool. To be applied to various media outlets including newspaper, magazine and world wide web. A camera is not provided by the College for this course. SLR Film or SLR Digital camera is required. Two hours lecture, three hours lab.

PHOT 057 3 Units Special Projects

Prerequisite: PHOT 052 or advanced class. Courses in special projects that are of historical and contemporary interest. Application through assignments to develop technical skills in subject areas not normally covered in other photography classes. *Two hours lecture, three hours lab.*

PHOT 070 3 Units

Beginning Digital Photography

Course Advisory: SCC minimum English and Math standards. PHOT 030 or PHOT 035. 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 lab.

Photography

PHOT 071 3 Units Digital Imaging I

Prequisite: PHOT 070. Course Advisory: Eligibility for ENGL 001and SCC minimum Math standards. 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.

PHOT 072 3 Units Digital Imaging II

Prequisite: PHOT 071. This course expands on the digital concepts and skills of Digital Imaging I through advanced usage of the latest industry software. *Two hours lecture, three hours activity.*

PHOT 099 1.00 to 3.00 Units Photography Honors

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

PHOT 151 4 Units Professional Photography: Introduction

Prerequisite: PHOT 030 or PHOT 070. Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standards. 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. A SLR Film or SLR Digital camera is required. Two hours lecture, six hours lab.

PHOT 152 4 Units Professional Photography: Portraiture

Prerequisite: PHOT 030 or PHOT 070. Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standards. This course focuses on varied applications of portrait work in the applied and fine art environments. A SLR Film or SLR Digital camera is required. Two hours lecture, six hours lab.

PHOT 153 4 Units

Professional Photography: Product and Advertising Prerequisite: PHOT 030 or PHOT 070. Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standards. 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). A SLR Film or SLR Digital camera is required. Two hours lecture, six hours lab.

PHOT 154 4 Units

Professional Photography: Interior & Exterior Prerequisite: PHOT 030 or PHOT 070. Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standards. This course provides the student with skills to photograph architecture in the rural and urban landscape. A SLR Film or SLR Digital camera is required. Two hours lecture, six hours lab.

PHOT 155 1.50 to 3.00 Units Professional Photography: Travel Photography Course Advisory: PHOT 030, 035 or 070; SCC minimum English and Math standards. This course will explore the boundaries of location photography.

Lecture/demonstrations are designed to provide technical and creative support for your location project. The final project will encompass the realm of documentary, photojournalistic, editorial and personal work. A SLR Film or SLR Digital camera is required. Student will pay for travel arrangements for this course prior to enrollment. Eight to nine hours lecture, forty-eight hours activity earns 1.5 units (1 week course), or sixteen to eighteen hours lecture, ninety-six hours activity earns 3 units (two week course).

PHOT 156 3 Units Portfolio Developmt

Prerequisite: PHÔT 151 and one of the following: PHOT 031, 058, 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 35 mm analog camera is required. Two hours lecture, three hours lab.

Physics

For Physical Education, see Kinesiology

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 an 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
PHYS 006 Physics for Science and Engineering5
PHYS 007 Physics for Science and Engineering5
PHYS 008 Physics for Science and Engineering5
MATH 020 Analytic Geometry and Calculus I 5
MATH 021 Analytic Geometry and Calculus II5
MATH 023 Differential Equations 4
Biological Science
Course selected from the following list 3 - 5
Biological Science:
BIO 001, 002, 005, 006, 012, 014, 015, 016, 018
Physical Science
Course selected from the following list3-5
Physical Science:
ASTR 010, 020, 030, 040
CHEM 001, 002, 003, 004, 010, 011
GEOG 001, 001L
GEOL 001, 002, 005
PHSC 012
Total Units

Physics

PHYS 002 5 Units General Physics (Non-calculus)

Prerequisite: MATH 051 or MATH 004 with a grade of C or better. 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. Four hours lecture/discussion, three hours lab.

PHYS 004 5 Units General Physics (Non-calculus)

Prerequisite: PHYS 002 with a grade of C or better. 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. 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. Four hours lecture, three hours lab.

PHYS 006 5 Units Physics for Science and Engineering

Prerequisite: MATH 021 (may be taken concurrently). Course Advisory: Eligibility for ENGL 001 and Hiigh School Physics, or PHYS 002 with a grade of C or better. 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 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. Four hours lecture, three hours lab.

PHYS 007 5 Units Physics for Science and Engineering

Prerequisite: A grade of C or better 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. 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. Four hours lecture, three hours lab.

PHYS 008 5 Units Physics for Science and Engineering

Prerequisite: A grade of C or better 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. Four hours lecture, three hours lab.

PHYS 010 3 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. 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

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 makes 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 Degree

The Associate in Arts Degree may be obtained upon completion of 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 an Associate 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
PLSC 001 Introduction to American Government
and Politics
OR
PLSC 049 Political Science Honors
Select 15 units from the courses in Selection One 15
Total Units
Selection One:
IR 001 Global Interdependence
PLSC 002 Introduction to Comparative Government3
PLSC 005 Constitutional Rights in a
Multicultural Society
PLSC 006 Basic Concepts in Political Thought
PLSC 016 The American Legal System
PLSC 019 Human Rights and Sexual Orientation 3
PLSC 048G Human Rights: A Global Perspective 3
PLSC 049 Political Science Honors 1
PLSC 050 Student Leadership

Political Science

PLSC 001 3 Units

Introduction to American Government

Course Advisory: ENGL 001 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. Three hours lecture.

PLSC 002 3 Units

Introduction to Comparative Government Course Advisory: PLSC 001; ENGL 001; 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. Three hours

PLSC 005 3 Units

lecture.

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. Crosscultural 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 Units Basic Concepts in Political Thought

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. Three hours lecture.

PLSC 016 3 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 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 Units

Human Rights: A Global Perspective

Course Advisory: Completion of ENGL 001, SCC minimum Math standards. 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.

PLSC 049 1.00 to 3.00 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 grade of B or better; an ability to work independently; permission of the division Dean based on instructor availability. Independent study project which results in a critical examination of government, politics, or law. Three to nine hours weekly by arrangement.

PLSC 050 1 Unit 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 weekly by arrangement.

Psychology

Program Description

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

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 an Associate Degree will be able to:

- 1. Demonstrate an understanding of major theories and applications of psychology.
- 2. Successfully complete required psychology (major) program courses.

REQUIRED COURSES
PSYC 001 Introduction to Psychology
AND
PSYC 002 Biological Psychology
PSYC 004 Research Methods in Behavioral Science 3
OR
PSYC 030 Introduction to Social Psychology
PSYC 020 Personal and Social Behavior
OR
PSYC 005 Abnormal Psychology
OR
PSYC 034 Human Sexual Behavior
PSYC 010 Psychology of Woman
OR
PSYC 024 Psychology of African Americans
OR
SOCS 022 Ethnic, Racial and Minority Group
Relations in Harmony and Conflict3
One other course from the list
Total Units

Recommended Electives (Select three units)
ANTH 002 Cultural Anthropology
BIO 005 Introductory Physiology5
BIO 004 Human Anatomy5
MATH 011 Elementary Statistics
PSYC 040 Drugs, Society & Behavior
PSYC 049 Psychology Honors1-3
SOC 001 Introduction to Sociology
SOCS 023 The African-American Family

PSYC 001 3 Units Introduction to Psychology

Course Advisory: Eligibility for ENGL 001and SCC minimum Math standards. 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. Three hours lecture.

PSYC 002 3 Units Biological Psychology

Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standards. Presents the relationship of genetic and physiological factors to behavior. Topics include neural mechanisms underlying sensory and perceptual processes, emotions, motivation, mental disorders, states of consciousness, learning and memory. Three hours lecture.

Psychology

PSYC 004 3 Units

Research Methods in Behavioral Science

Prerequisite: PSYC 001 or PSYC 002 or SOC 001. Course Advisory: Eligibility for ENGL 001; MATH 011. 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. Three hours lecture.

PSYC 005 3 Units

Abnormal Psychology

Prerequisite: PSYC 001. Course Advisory: ENGL 062, eligibility for ENGL 001, and SCC minimum Math standard. Theoretical approaches to the explanation of psychological disorders. Survey of selected disorders in DSM IV, including psychoses, anxiety disorders, and depression. Survey of major therapeutic methods. Three hours lecture.

PSYC 006 3 Units

Developmental Psychology

Course Advisory: Eligibility for ENGL 001, SCC minimum Math standard, and Psychology 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 010 3 Units

Psychology of Woman

Course Advisory: PSYC 001. Study of contemporary women from a biological, psychological and sociological perspective. Theory and research pertaining to female development will be presented and critically examined. Open to all students. Three hours lecture.

PSYC 020 3 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, relationship, careers and personal growth. Three hours lecture.

PSYC 024 3 Units

Psychology of African Americans

Course Advisory: SCC minimum English standard. Examination of the principles and findings of psychology as they relate to the behavior and experience of African Americans. Emphasis upon theories and dimensions of personality, self-concept, normality, and the psychological effects of racism. Three hours lecture.

PSYC 030 3 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. Three hours lecture.

PSYC 034 3 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 Units

Drugs, Society & 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 1.00 to 3.00 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 grade of B or better; an ability to work independently; permission of the division Dean based on instructor availability. Independent study designed for honor students who intend to major in psychology. Three to nine hours weekly by arrangement.

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 Arts

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 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
RE 164 * Real Estate Principles
RE 171 Real Estate Economics
OR
ECON 001 Principles of Economics (Macroeconomics)3
OR
ECON 002 Principles of Economics (Microeconomics) 3
RE 172 Real Estate Practice
RE 173 Legal Aspects of Real Estate
RE 174 RE Finance
RE 175 Principles of Appraisal
Electives selected from the list of
Recommended Electives
Total Units
Calcut 6 waits from this list of Decommon ded Flortings.
Select 6 units from this list of Recommended Electives:
ACCT 001 Principles of Accounting - Financial 4
BUS 018 Legal Environment of Business
RE 176 Advanced Residential Appraisal Practice 3
RE 177 Income Property Appraisal and Analysis 3

Real Estate

RE 164 3 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 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 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 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 Units

RE 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 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 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 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*.

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 Arts

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 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.

BIOLOGICAL SCIENCE

ANTH 001 Physical Anthropology

BIO 001 * Principles of Organismal Biology

BIO 002 * Principles of Cell and Molecular Biology

BIO 005 * Introductory Physiology

BIO 004 * Human Anatomy

BIO 012 Environmental Science

BIO 012L * Environmental Science Laboratory

BIO 014 Principles of Microbiology

BIO 015 * Introduction to Biology

BIO 016 Introduction to Human Biology

BIO 018 Biology of Sex

BIO 019 * Marine Biology

PHYSICAL SCIENCE

ASTR 010 General Astronomy

ASTR 020 * Astronomy Laboratory

ASTR 030 The Solar System

ASTR 040 Stars, Galaxies, and Cosmology

CHEM 001 * General Chemistry

CHEM 002 * General Chemistry

CHEM 003 * Organic Chemistry I

CHEM 004 * Organic Chemistry II

CHEM 010 * Intermediate Chemistry

CHEM 011 * Basic Organic Chemistry and Biochemistry

CHEM 051 Chemistry for the Health Sciences

GEOG 001 Physical Geography

GEOG 001L * Physical Geography Laboratory

GEOL 001 Physical Geology

GEOL 002 * Geology Laboratory

GEOL 005 Geology of California

PHSC 012 * Introduction to Principles of Physical Science

PHYS 002 * General Physics (Non-Calculus)

PHYS 004 * General Physics (Non-Calculus)

PHYS 006 * Physics for Science and Engineering

PHYS 007 * Physics for Science and Engineering

PHYS 008 * Physics for Science and Engineering

PHYS 010 Descriptive Physics

*Laboratory Class

Anthropology

ANTH 001 3 Units Physical Anthropology

Course Advisory: SCC minimum English standard. An introduction to physical anthropology covering evolutionary theory, human disease and genetics, human variation and adaptation, primatology, primate and hominid evolution. *Three hours lecture*.

ANTH 002 3 Units Cultural Anthropology

Course Advisory: SCC minimum English standard. Introduction to the study of human culture, with an emphasis on the changing relations between individual people, families, and other social groups, and various types of social inequality. We will also study cultural institutions from around the world, such as religion and magic, political and economic change, varieties of art forms, and the cultural future. Three hours lecture.

ANTH 007 3 Units Prehistoric Archaeology

Course Advisory: SCC minimum English and Math standards. An introduction to the theories and methods of anthropological archaeology, with an emphasis on and an overview of prehistory. This course will stress the evolution of social systems and technology. Case studies from around the world will illustrate the various ways archaeology deciphers past behavior. Three hours lecture.

ANTH 049 2 Units Anthropology Honors

Prerequisite: Completion of 24 units of college credit with a minimum GPA of 3.3; a minimum of 5 units in the discipline with a grade of B or better; an ability to work independently; and permission of the Division Dean based on instructor availability. Open to students qualified to do advanced work in the field. The program may include research, directed reading, field work, or other advanced study. Six hours weekly by arrangement.

Astronomy

ASTR 010 3 Units General Astronomy

Course Advisory: Eligibility for ENGL 001; SCC minimum Math standard. An introductory study of the universe, including the properties and evolution of galaxies, stars, pulsars, black holes, quasars, the sun, planets, and life in the universe. Field trip may be required. Three hours lecture.

ASTR 020 1 Unit

Astronomy Laboratory

Prerequisite: ASTR 010, 030, or 040 (they may be taken concurrently). Course Advisory: SCC Minimum Math standard, Eligibility for ENGL 001. Students will gain familiarity with the sky, telescopes, and other astronomical equipment. They will do experiments in Physics related to Astronomy. Topics will cover the moon, planets, stars, galaxies, and cosmology. Field trips may be required. Three hours lab.

ASTR 030 3 Units The Solar System

Course Advisory: Eligibility for ENGL 001; SCC minimum Math standard. An introductory study of solar system astronomy, the physics related to that astronomy, the planets and their moons, the sun, solar system debris, and the possibility of extraterrestrial life. Field trips may be required. Three hours lecture.

ASTR 040 3 Units Stars, Galaxies, and Cosmology

Course Advisory: Eligibility for ENGL 001; SCC minimum Math standard. An introductory study of stars, galaxies, the universe, and the physics related to these topics. This includes an examination of the facts relating to the sun, stellar lifetimes, supernovae, black holes, and cosmology. Field trip may be required. Three hours

Geography

lecture.

GEOG 001 3 Units Physical Geography

Course Advisory: SCC minimum English standard. An introductory study of the Earth's natural environment. The course includes a detailed analysis of weather, geologic landforms, climate, natural vegetation, the oceans and other natural environmental elements. Special emphasis is given to the human impact on the environment. Field trips may be required. Three hours lecture.

GEOG 001L 1 Units Physical Geography Laboratory

Prerequisite: GEOG 001 (may be taken concurrently). Course Advisory: SCC minimum English and Math standards. A lab course to supplement GEOG 1. Emphasis will be placed on using the skills and tools of modern physical geography and analyzing and interpreting geographic data. Maps, aerial photographs, satellite images, weather instruments and computer analysis are stressed. One or more field trips are required and may occur outside of class time. Three hours lab.

GEOG 002 3 Units Cultural Geography

Course Advisory: Eligibility for ENGL 001. Introduction to humans and their impact on the land. This course includes a detailed evaluation of man's cultural world with special emphasis given to man's religions, political states, population problems, and economic systems. A field trip may be required. However, if the student cannot attend the field trip, there will be an optional research paper assignment. Three hours lecture.

GEOG 004 3 Units World Geography

Course Advisory: Eligibility for ENGL 001. Geographic study of the world's major regions. Special emphasis is given to the major problems confronting humanity in these regions including an analysis of population growth, hunger and poverty, modification and destruction of the natural environment, and natural resource and energy problems. A field trip may be required with the course. However, if a student cannot attend the trip, there will be an optional research paper assignment. Three hours lecture.

GEOG 006 3 Units California Geography

Course Advisory: Eligibility for ENGL 001. This course examines the diversity in the physical and human landscapes of California. Major topics in the physical landscape include geology, biogeography, weather/climate, and hydrology; while the human landscape component includes culture, population issues, urbanization, and economics. A field trip is required. Three lecture hours.

GEOG 010 3 Units **Introduction to Geographic Information Systems** Course Advisory: SCC minimum English and Math standards. Eligibility for ENGL001. Basic computer literacy is recommended. Provides an in-depth introduction to the fundamentals of Geographic Information Systems (GIS). The course will include an introduction to basic cartographic principles including map scales, coordinate systems, and map projections. Various applications of GIS technology used in science, business, and government will also be presented. Specific topics covered in lectures will include an understanding of GIS terminology, raster and vector data structures, data sources and accuracy, methods of data acquisition, conversion and input, requirements for metadata, working with spatial data databases, and spatial analysis. The above topics will be reinforced in the laboratory with hands-on experience. Same as GEOL 010. Not open to students who have completed GEOL 010. Two hours lecture, three hours lab.

Geology

GEOL 001 3 Units Physical Geology

Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standard. Presents a study of the composition of the earth and the processes responsible for its present characteristics. Topics covered include plate tectonics, rocks and minerals, volcanism, metamorphism, sedimentation, weathering, erosion, landforms, earthquakes, glaciers, mineral resources. Field trips may be taken to areas of geological interest. A written research project, tests, and a comprehensive final examination will be used to evaluate student success. This course satisfies the physical science requirements for colleges and universities. Online work may be required. Three hours lecture.

GEOL 002 1 Unit Geology Laboratory

Prerequisite: GEOL 001 or 005 (either may be taken concurrently). Course Advisory: SCC minimum English and Math standards. Topics include the identification of rocks and minerals as hand specimen and the study of geologic maps, landforms, and structures. Field trips will be taken to areas of geologic interest. Laboratory projects, written assignments and reports, and examinations will be used to evaluate student success. Three hours lab and discussion, plus field trips by arrangement.

GEOL 005 3 Units Geology of California

Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standard. An introductory course on the geology of California covering its geologic provinces, minerals (including gold), rocks, geologic hazards including earthquakes, and the development of scenic landscapes. Field trips will be taken to areas of geologic interest. A field trip report will be required. If the student cannot attend the trip, they will have a research paper option. Three hours lecture.

GEOL 010 3 Units **Introduction to Geographic Information Systems** Course Advisory: SCC minimum English and Math standard. Eligibility for ENGL001. Basic computer literacy is desirable. Provides an in-depth introduction to the fundamentals of Geographic Information Systems (GIS). The course will include an introduction to basic cartographic principles including map scales, coordinate systems, and map projections. Various applications of GIS technology used in science, business, and government will also be presented. Specific topics covered in lectures will include an understanding of GIS terminology, raster and vector data structures, data sources and accuracy, methods of data acquisition, conversion and input, requirements for metadata, working with spatial data databases, and spatial analysis. The above topics will be reinforced in the laboratory with hands-on experience. Same as GEOL 010. Not open to students who have completed GEOL 010. Two hours

GEOL 049 1.00 to 3.00 Units Geology Honors

lecture, three hours lab.

Prerequisite: Completion of 24 units of college credit with a minimum GPA of 3.0; completion of GEOL 001, GEOL 005, or GEOL 010 with a grade of B or better; an ability to work independently; and permission of the Division Dean based on instructor availability. Course Advisory: Eligibility for ENGL 001. Requires students to engage in an independent student project. The project may be a laboratory or field study or a library study that leads to a thesis. In all cases, the final written product should show integration and synthesis of ideas. This project requires the approval of a faculty member sponsor. Three to nine hours weekly by arrangement.

Physical Science

PHSC 012 4 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.

Social Sciences

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 an 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
ANTH 001 Physical Anthropology	3
OR	
ANTH 002 Cultural Anthropology	3
ECON 001 Principles of Economics (Macroeconomic	
GEOG 001 Physical Geography	3
OR	
GEOG 002 Cultural Geography	3
OR	
GEOG 004 World Geography	3
Any History OR American Studies Course	3
PLSC 001 Introduction to American Government	
and Politics	3
OR	
PLSC 006 Basic Concepts in Political Thought	3
OR	
PLSC 016 The American Legal System	3
PSYC 001 Introduction to Psychology	3
OR	
SOC 001 Introduction to Sociology	3
OR	
Any Social Science Ethnic Studies course that	
is not used to complete the above	3
Total Units	

Social Sciences

SOCS 022 3 Units Ethnic, Racial and Minority Group Relations in Harmony and 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 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 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 027 3 Units

Native American Experience

Course Advisory: ENGL 001; SCC minimum Math standard. Introduction to the diverse cultures of the Native American people of North, Central and South America. Emphasis is on Native American voices in the expression of cultural views and in the experience of conflicting values. Three hours lecture.

SOCS 030 3 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 1.00 to 3.00 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 grade of B or better; an ability to work independently; permission of the division Dean based on instructor availability. Independent study designed for honor students who intend to major in social sciences. Three to nine hours weekly by arrangement.

SOCS 051 3 Units Mediation

Course Advisory: Eligibility for ENGL 001. Introduces the student to the study of Mediation. This course is designed to provide students with the framework and analytical skills needed to conduct mediation. Emphasis is placed on the mediation process, the role of the mediator, communication skills and listening skills and the human dynamics of conflict. Mediation is a process by which parties submit their dispute to a neutral third party who works with them to reach a mutually agreeable settlement of their dispute. This course is beneficial for those persons pursuing Human Services, Business, Social Services, Speech and other majors that require analytical communication skills. The mediators role is to assist disputing parties in reaching peaceful resolutions to conflict. Three hours lecture.

SOCS 053 3 Units Civil Rights, Non-Violence and Race Relations Course Advisory: SCC minimum English and Math standards. The Civil Rights Movement is one of the most significant sources of social change in the United States during the 20th century. This is a travel study course that will analyze the structure and dynamics of the Civil Rights Movement from a Social Science perspective. Students will be required to pay for the cost of travel. (2 week course).

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 an Associate Degree will be able to:

- 1. Have 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
PSYC 004 Research Methods in Behavioral Science 3
SOC 001 Introduction to Sociology
SOC 002 Social Issues and Problems
Select six units from Selection One
Select at least three units from Selection Two3 - 4
Total Units
Selection One: Select 6 units from the following:
SOC 023 Sociology of African Americans
SOC 040 Sociology of the Family
SOC 045 Sociology of Religion
SOC 075 Introduction to Sociology of Sport 3
Selection Two: Select at least 3 units from the following:
ANTH 002 Cultural Anthropology
MATH 011 Elementary Statistics
PLSC 019 Human Rights and Sexual Orientation 3
PSYC 030 Introduction to Social Psychology
SOCS 022 Ethnic, Racial and Minority Group
Relations in Harmony and Conflict3

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

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 (AA-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 (AA-T in Sociology) are guaranteed admission to the CSU system, but not to a particular campus or major.

To earn this AA-T degree, student must:

- 1. Complete the following 18-19-unit major requirements with grades of C or better
- 2. Complete a minimum of 60 CSU-transferable semester units with a minimum grade point average of 2.0
- 3. Complete either the California State University General Education Breadth pattern (CSU, GE), which requires 39 units, or the Intersegmental General Education Transfer Curriculum (IGETC), which requires 34-39 units. Students are not required to complete Solano Cross-Cultural Studies requirement.

Program Outcomes

- 1. To prepare students to become more aware of cultural, social, political, environmental, and economic forces within the world they live.
- 2. To help students to raise their ethnic consciousness to a higher level of understanding and acceptance.
- 3. To educate the students' skills in critical thinking, reading and writing.
- 4. To improve the students' skills cited above to provide an excellent base for transfer and success at four-year institutions.

REQUIRED COURSESUnitsSOC 001 Introduction to Sociology3Select 6-7 units from Area 16 - 7Select 6 units from Area 26Select 3 units from Area 33
Area 1 - Select 6-7 units from the following: Units
SOC 002 Social Issues and Problems
PSYC 004 Research Methods in Behavioral Science 3
MATH 011 Elementary Statistics
Area 2 - Select 6 units from the following Units
SOC 030 Introduction to Social Psychology
SOC 040 Sociology of the Family
SOCS 022 Ethnic, Racial and Minority Group
Relations in Harmony and Conflict
Area 3 - Select 3 units from the following Units
SOC 045 Sociology of Religion
SOC 075 Introduction to Sociology of Sport
SOC 049 Sociology Honors
SOCS 030 Peace, Non Violence and
Conflict Resolution
Total Units

Sociology

SOC 001 3 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. Three hours lecture.

SOC 002 3 Units

Social Issues and Problems

Course Advisory: SOC 001, Eligibility for ENGLISH 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 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 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. This course is the same as PSYC 030. Three hours lecture.

SOC 040 3 Units

Sociology of the Family

Course Advisory: SOC 001 and Eligibility for ENGLISH 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 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 1.00 to 3.00 Units Honors

Prerequisite: Completion of 24 units of college credit with a minimum GPA of 3.3; a minimum of 5 units in the discipline with a grade of B or better; an ability to work independently; permission of the division Dean based on instructor availability. Independent study designed for honor students who intend to major in sociology. Three to nine hours weekly by arrangement.

SOC 075 3 Units

Introduction to Sociology of Sport

Course Advisory: SCC minimum English and Math standards; 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.

For Speech see Communication Studies

Program Description

This program is designed to provide a foundation in theater arts for the student who wishes to enter the entertainment industry. Students may choose from two emphasis areas —Acting and Technical.

Associate in Arts Degree

The Associate in Arts Degree in Theatre Arts can be obtained by completing a total of 60 units, including the 18-unit major in one of the 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 an Associate Degree will be able to:

- 1. Read and analyze written materials for context, theme and dramatic intent.
- 1. Demonstrate comprehension of vocal and physical performance techniques.
- 1. Demonstrate comprehension of technical and artistic production elements including
- 1. Stagecraft, scenery, costumes, lighting and sound.

ACTING EMPHASIS
THEA 003 Stagecraft
THEA 004 Stage Movement
THEA 010 History of Theatre 1
THEA 011 History of Theatre 2
Select six units from Selection One or if selecting
THEA 001 and THEA 002, you must select
one unit from any course in Selection Two7
Total Units
Selection One: Select seven units in the following:
THEA 001 Principles and Theory of Acting
AND
THEA 002 Principles and Theory of Acting
Selection Two: One unit in any of the following Units
THEA 005 Applied Drama 2
THEA 047 Technical Production 1

TECHNICAL EMPHASIS	. Units
THEA 001 Principles and Theory of Acting	3
THEA 003 Stagecraft	3
THEA 010 History of Theatre 1	3
THEA 011 History of Theatre 2	3
THEA 020 Lighting	3
THEA 047 Technical Production	3
Total Units	18

Recommended Elective:

THEA 013 Diversity in American Theatre: A Contemporary Focus

THEA 001 3 Units

Principles and Theory of Acting

Course Advisory: SCC minimum English standard. Fundamentals of acting are presented and training is given in acting mechanics, pantomime, improvisation, and oral interpretation based on the comparison and analysis of plays and short scenes. Three hours lecture.

THEA 002 3 Units Principles and Theory of Acting

Prerequisite: THEA 001. Course Advisory: Eligibility for ENGL 001. Presents the fundamentals of acting in greater depth, with emphasis placed on specific style of acting and the interpretation of structure, form, and style of plays as they relate to characterizations. Three hours lecture.

THEA 003 3 Units Stagecraft

Course Advisory: SCC minimum English and Math standards. Presents a general introduction to the practices of theatre production, including costume, makeup, props, lighting, scenic and audio design and operation. Student will participate in the planning, design, construction and operation of a theatrical event as determined by the instructor. Repeatable 1 time. Two hours lecture, three hours lab.

THEA 004 2 Units Stage Movement

Course Advisory: SCC minimum English standard. Presents the fundamental principles of movement for the drama student including stage movement, character development and interrelationships, ensemble exercises and dramatic improvisation. Four hours activity.

THEA 005 2.00 to 3.00 Units Applied Drama

Prerequisite: Audition for actors only. 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, poetry presentations and one-acts. Students participate as actors, ensemble members and/or accompanists. This is an open-entry, open-exit course. Repeatable 3 times. Two unit option requires 19.3 hours lab, three unit option requires an additional 9.5 hours. (5 week course).

THEA 006 3 Units

Introduction to Theatre: Understanding Drama Course Advisory: SCC minimum English and Math standards. Understanding and appreciation of both the distinctive and collaborative contributions of playwright, actor, director, and designer to the total work of dramatic art. Study of the plays from the major periods of dramatic art in their cultural contexts. Written exams and a paper are required. Audience oriented, non-performance course. Three hours lecture.

THEA 007 3 Units Directing

Course Advisory: Eligibility for ENGL 001. Introduction to the theory and practice of play direction which will culminate in the first-hand direction of a one-act play, to be publicly performed, in which all of the requisite directorial elements are synthesized. Two hours lecture, three hours lab.

THEA 008 2 Units Stage Make-Up

Course Advisory: SCC minimum English standard. Instruction, practice, and application of techniques of stage make-up. Emphasis is placed on role analysis as a basis for make-up design, principles of light and shade as they relate to the creation of youth and aging effects, integration and application of the principles of color usage as they relate to stage lighting and costumes. Also included is a study and comparison of various types of make-up and equipment, development of a make-up kit, special effects, the creation of wigs and moustaches and a survey of make-up fashions to be used in period productions. Repeatable 2 times. One hour lecture, three hours lab.

THEA 010 3 Units History of Theatre 1

Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standards. Presents the history of theatre from ancient Greece up to the Restoration. Emphasizes the literature of theatre as affected by the society, culture, and politics during the period in which it was created. Field trip may be required. Three hours lecture.

THEA 011 3 Units History of Theatre 2

Course Advisory: Eligibility for ENGL 001 and SCC minimum Math standard. Presents the history of theatre from the Restoration to the present. Emphasizes the literature of theatre as affected by the society, culture, and politics during the period in which it was created. Field trip may be required. Three hours lecture.

THEA 013 3 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 Units Lighting

Course Advisory: SCC minimum English and Math standards. An introductory course to the technical aspects of stage lighting. Instruction covers lighting equipment, color, electricity and the reading of lighting plots. Repeatable 2 times. Two hours lecture, three hours lab.

THEA 021 3 Units Introduction to Theatre Design

Course Advisory: SCC minimum English and Math standards. Overview of the field of design in the entertainment arts is presented. A brief history of design, as well as style, conception, composition, design communication, and design integration are studied. This course will involve the study of design as it relates to the interpretation of play text and director concept, as well as how design is used in the interpretation and support of other types of entertainment. Repeatable 1 time. Two hours lecture, three hours lab.

THEA 030 3 Units Voice and Speech for the Actor

Course Advisory: SCC minimum English standard. An intensive acting study course which concentrates on the body as an instrument of communication, the voice within the acting process, sensory experience, spontaneity, objectives, vocal relaxation and centering. Two hours lecture and three hours activity.

THEA 034 2.00 to 4.00 Units Musical Theatre

Prerequisite: Audition for actors only, no auditions for crew and other staff. Course Advisory: SCC minimum English standard. The study, rehearsal, and public performance of musical works for the stage including operas, operettas and musicals. Students participate as vocalists, musicians, dancers, and accompanists. Variable units: 48 hours of participation equals one unit of credit. This is an open entry / open exit class. Formerly MUSC 022. Repeatable 3 times. One hour lecture, three hours lab, and three to six hours weekly by arrangement.

THEA 047 1.00 to 3.00 Units Technical Production

Course Advisory: SCC minimum English standard. A production course for students interested in technical theatre. Students are given an increasing level of responsibility in accordance with their individual abilities. Areas of responsibility may include: stage manager, lead carpenter, master electrician, lead grip, assistant lighting designer, scenic designer, lighting designer, assistant scenic designer. This is an open entry/open exit course. Repeatable 3 times. Three hours lab, zero to six hours weekly by arrangement.

THEA 048A 3 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 plus one and one half hours by arrangement weekly.

THEA 048B 4 Units Theatre Lab-Comedy

Prerequisite: Admission by audition only. The rehearsal and performance of comedic roles for the stage which includes: classical and contemporary comedies, farces, commedia, and holiday pantos. The works may be full length, one act or sketch (improv) format. Students participate as actors, ensemble members or in certain works as solo performers.

Three hours lab, nineteen hours by arrangement (9 week course).

THEA 048C 1 Unit

Musical Theatre Performance

Prerequisite: THEA 034 with a minimum grade of C. The dress rehearsal and public performance of musical works for the stage including operas, operettas, and musicals. Students will participate as vocalists, musicians, dancers and accompanists. Four hours lab, eight hours by arrangement (4 week course).

THEA 048D 4 Units Theatre Lab-Drama

Course Advisory: Entrance by audition only. The rehearsal and performance process for dramatic works for the stage, including classical, contemporary and experimental dramas, both full-length and one acts. Students participate as performers in principal, features and/or ensemble roles. Three hours lab, nineteen hours by arrangement (9 week course).

THEA 050 3 Units Performance for the Camera

Course Advisory: SCC minimum English standard. 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 indepth 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 062 1.00 to 3.00 Units

Theatrical Costume Practicum

Course Advisory: SCC minimum English and Math standards. A practicum course that covers the fundamentals of costume construction and its integration into the theatre process. Each student will be given an increasing level of responsibilities in accordance with individual abilities. Areas of responsibility may include: Co-Costume Designer, Assistant Designer, Cutter, Tailor, First Hand, Stitcher, Millner, Cobbler, Crafts Artisan, Wig/Hair Stylist, Make-up Artist, Wardrobe Supervisor, or Dresser. Successful completion of the costume production process may culminate in a crew assignment. This is an open entry/open exit course. Repeatable 3 times. Three hours lab, zero to six hours weekly by arrangement.

THEA 108 2 Units
Advanced Theatre Touring Company
Prerequisite: THEA 106 with a minimum grade of C,
THEA 034/048C may be substituted for THEA 106.
Entrance by audition. Advanced Theatre Touring
Company students will gain experience touring
throughout Solano County, performing from the
American Musical Theatre repertoire. Travel is required
to various Solano County venues for performances. One
hour lecture, two hours lab, one hour by arrangement.

University Studies with Emphasis

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.assist.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 GE 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 listed below.
- 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.

Elective Units

Electives may be necessary to meet the 60-unit requirement for the Associate Degree.

Program Outcomes:

Students completing an 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

Minimum 18 units required

Minimum six units from the Arts and six units from Humanities

Maximum three units of credit for studio/performance courses

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.

ARTS

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

ART Studio: 004, 005, 006, 007, 008, 014, 015, 016, 017, 018, 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

AMST 001, 002

ENGL 002, 006, 007,012, 013, 014, 016, 018, 021, 023, 024, 025, 030, 031, 032, 033, 034, 035, 036, 037, 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, 032, 037

ITAL 031, 032

LATN 001, 002, 003

PHIL 003, 004

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

COMM 015

Communication

Minimum 18 units required

Minimum three units from each of three different disciplines

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 reasoning, 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.

BUS 092
COMM 001, 002, 006, 008, 010, 012, 015, 060
COUN 062
ENGL 002, 004, 006, 007, 046, 047, 058, 062, 064
FREN 001, 002, 003, 004, 031, 032
GRMN 001, 002, 003, 004, 031, 032, 033, 034
HS 052
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

Liberal Studies for Elementary Teacher Preparation

Minimum 18 units required

Minimum three units from each of four different disciplines

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.

AMST 001, 002

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

CHEM 010

CINA 010, 011

CDFS 038, 039, 070, 071

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

Minimum 18 units required

Minimum six units from Science and six units from Quantitative Reasoning Chemistry courses may be used as either Science or Quantitative reasoning but not in both.

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.

SCIENCE

ANTH 001
ASTR 010, 020, 030, 040
BIO 002, 004, 005, 012, 012L, 014, 015, 016, 018, 019
CHEM 001, 002, 003, 004, 010, 011, 051
ENGR 017, 030, 045
GEOG 001, 001L
GEOL 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 (GEOL 010) MATH 002, 004, 011, 012, 020, 021, 022, 023, 030, 031, 040, 051 PSYC 004

Social Science

Minimum 18 units required

Minimum three units from each of three different disciplines

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.

AMST 001, 002 ANTH 002, 007 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 CDFS 038, 039, 040, 050, 053, 070 HS 051, 052, 053 IR 001 **JOUR 011** PLSC 001, 002, 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 COMM 012 TV 050

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 by completing the 25-33-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 Certificate of Achievement/Associate Degree will have knowledge of:

- 1. Certification of plant operators
- 2. Treatment methods & technology
- 3. Technology, laws and regulations

REQUIRED CORE COURSES	Select from the following options:
WATR 100 Wastewater Treatment I 4	OPTION 1
WATR 101 Basic Chemistry for Water and Wastewater 4	BIOT 160 Basic Concepts/Methods in Biotechnology 4
OR	OPTION 2
WATR 102 Sanitary Chemistry 4	BIO 014 Principles of Microbiology 4
WATR 104 Water Treatment I	CHEM 010 Intermediate Chemistry4
WATR 106 Instrumentation and Controls	OR
WATR 107 Mathematics of Water and	CHEM 051 Chemistry for the Health Sciences5
Wastewater Treatment 4	OR
	CHEM 001 General Chemistry5
Specialty Courses - Select 4-6 Units	OPTION
WATR 105 Wastewater Treatment II	WATR 103 Biological Principles of Water
WATR 108 Water Treatment II	and Wastewater3
WATR 120 Distribution Systems Maintenance 2	Total Units
WATR 121 Collection Systems Maintenance 2	

WATR 103

WATR 100 4 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 Units
Basic Chemistry for Water and Wastewater
Course Advisoy: 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.

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

3 Units

WATR 104 3 Units Water Treatment I

important in this industry. *Three hours lecture*.

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.

Water and Wastewater Technology

WATR 105 3 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 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 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 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 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 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 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.

WATR 125 2.5 Units 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

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 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
DRFT 079 Blueprint Reading
IT 140 Industrial Materials
Electives selected from the list below
Total Units
Select 18 units from the following Units
WELD 120 Plate Welder (Basic)
WELD 121 Plate Code Welder (Advanced)
WELD 122 Pipe Welding (Basic)
WELD 123 Pipe Welding (Advanced)3
WELD 124 Gas Tungsten Arc Welding (GTAW) 3
WELD 125 Gas Metal Arc Welding
WELD 126 Ornamental Iron Welding

Recommended Electives:

ENGL 051 Technical Writing

OCED 090 Occupational Work Experience

OCED 091 General Work Experience

WELD 174 Welding Equipment Operation

WELD 175 Welding Fabrication

WELD 176 Shielded Metal Arc Certification

WELD 177 Wire Welding Certification

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 listed below. The Associate in Science Degree can be obtained by completing a total of 69 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 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	Recommended Electives:
WELD 100 Welding Technology10	IT 120 102 Electrical Safety
WELD 101 Welding Technology10	OCED 090 Occupational Work Experience
WELD 102 Welding Technology10	OCED 091 General Work Experience
WELD 103 Welding Technology0	WELD 174 Welding Equipment Operation
DRFT 079 Blueprint Reading	WELD 175 Welding Fabrication
IT 140 Industrial Materials	WELD 176 Shielded Metal Arc Certification
IT 150 Industrial Processes	WELD 177 Wire Welding Certification
Total Units 49	

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

Welding Equipment Operator Job-Direct Certificate

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

REQUIRED COURSES	Units
WELD 174 Welding Equipment Operation	2
WELD 175 Welding Fabrication	2
WELD 176 Shielded Metal Arc Certification	
WELD 177 Wire Welding Certification	2
OCED 090 * Occupational Work Experience	1
Total Units	9

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

WELD 100 10 Units Welding Technology

Course Advisory: SCC minimum English standard. Development of manual skills and related technical knowledge in arc and acetylene welding and burning; flat, horizontal, vertical and overhead positions; machine adjustments, rod identification and characteristics; joints metal expansion and contraction. Five hours lecture, fifteen hours lab.

WELD 101 10 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 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 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 Unit 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 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 earned. Two hours lecture, three hours lab.

WELD 121 3 Units Plate 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 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 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.

WELD 124 3 Units Gas Tungsten 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 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 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 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 174 2 Units Welding Equipment Operation

Course Advisory: SCC minimum English and Math standards. Designed to acquaint students with the equipment and techniques used to safely perform welding operations. Students will learn to perform basic welding methods. Four hours lecture, sixteen hours lab (4 week course).

WELD 175 2 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 176 2 Units Shielded Metal Arc Certification

Course Advisory: SCC minimum English and Math standards. Designed to increase student knowledge and tactile skills to the level they can pass a certification test to certain Welding Codes using the Shielded Metal Arc process. Four hours lecture, sixteen hours lab (4 week course).

WELD 177 2 Units Wire Welding Certification

Course Advisory: SCC minimum English and Math standards. Designed to increase student knowledge and tactile skills to the level they can pass a certification test to certain Welding Codes Specifications using wire processes. Four hours lecture, sixteen hours lab (4 week course).

WELD 500 Non-Credit Special Welding Problems

Prerequisite: Permission of the instructor to verify room for Special Welding Problems students. 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.