## COURSES

### ACCOUNTING (ACC)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ACC 001A</td>
<td>Financial Accounting (4.0 Lecture)</td>
<td>4.0</td>
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<tr>
<td>ACC 001B</td>
<td>Managerial Accounting (4.0 Lecture)</td>
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<tr>
<td>ACC 021A</td>
<td>Basic Accounting I (2.0 Lecture)</td>
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<tr>
<td>ACC 022</td>
<td>Basic Accounting Principles and Procedures (5.0 Lecture)</td>
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<tr>
<td>ACC 031</td>
<td>Practical Accounting Procedures (1.0 Lecture)</td>
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<tr>
<td>ACC 033</td>
<td>Forecasting Financial Statements Using Excel (1.5 Lecture)</td>
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<tr>
<td>ACC 034</td>
<td>Business Financial Planning Using Excel (1.5 Lecture)</td>
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<tr>
<td>ACC 040</td>
<td>Introduction to Personal Financial Planning (1.0 Lecture)</td>
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<tr>
<td>ACC 041</td>
<td>Insurance Planning (1.0 Lecture)</td>
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<tr>
<td>ACC 042</td>
<td>Investment Planning (1.0 Lecture)</td>
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<tr>
<td>ACC 043</td>
<td>Tax Planning (1.0 Lecture)</td>
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<td>ACC 044</td>
<td>Retirement Planning (1.0 Lecture)</td>
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<tr>
<td>ACC 045</td>
<td>Estate Planning (1.0 Lecture)</td>
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<tr>
<td>ACC 051A</td>
<td>Taxation of Individuals (4.0 Lecture)</td>
<td>4.0</td>
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<tr>
<td>ACC 052</td>
<td>Payroll and Business Tax Accounting (3.0 Lecture)</td>
<td>3.0</td>
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<tr>
<td>ACC 053A</td>
<td>Volunteer Income Tax Assistance (VITA) I (3.0 Lecture)</td>
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<tr>
<td>ACC 053B</td>
<td>Volunteer Income Tax Assistance (VITA) II (0.5 Lecture/0.5 Lab)</td>
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<tr>
<td>ACC 053C</td>
<td>Volunteer Income Tax Assistance (VITA) III (0.5 Lecture/0.5 Lab)</td>
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<tr>
<td>ACC 057A</td>
<td>Cost Accounting (4.0 Lecture)</td>
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</table>

This course introduces fundamental insurance concepts, then uses these concepts to determine the amount and type of insurance needed. Life insurance (term and cash value), health, disability, property (homeowners' and automobile) and liability insurance will be studied, then students will prepare their own personal insurance plans.

This course introduces fundamental investment concepts such as risk, return, diversification, and how financial markets work. The course covers common stock, fixed-income securities, mutual funds and other investments. Students prepare their own personal statement of net worth and use asset allocation to design an investment portfolio.

This course covers calculation of the federal income tax and strategies to help save federal income taxes or defer them to later years. Students will calculate their own federal income tax liability, then use at least one method to plan a reduction in taxes for the next year. Use of tax software is optional.

This course covers company pension and retirement plans, individual retirement plans and social security benefits. Students use a retirement savings worksheet to estimate their own savings needs for retirement.

This course covers estate planning techniques and terminology such as wills, probate, joint tenancy with right of survivorship, trusts, contractual transfers, the federal gift tax and estate tax, federal income taxes on the estate, and inheritance taxes. Students will determine the best way to hold title to property, and they will calculate the federal gift and estate tax.

This course covers Federal and California tax laws and preparation for individuals and small businesses. Eligibility for ENGL 001A and READ 054 Advisory ACC 001A Advisory MAT 903

This course covers Federal and California tax laws and preparation for individuals and small businesses. Eligibility for ENGL 001A and READ 054 Advisory ACC 001A Advisory MAT 903

This course allows students to receive training in the preparation of tax returns. Following this course students can enroll in ACC 053B where they may assist low-income individuals in the preparation of their tax returns.

This course allows students who have successfully passed ACC 053A to apply their tax knowledge by assisting low-income individuals and families with their tax preparation through the VITA program for the current year.

This course allows students who have successfully passed ACC 053A to apply their tax knowledge by assisting low-income individuals and families with their tax preparation through the VITA program for the current year.

This course allows students who have successfully passed ACC 053B to work on advanced tax situations, focus on quality control procedures, and develop the additional leadership skills needed to run a tax center.

This course covers cost accounting terminology, techniques and systems for managerial decision making. Topics include various costing systems, activity-based costing, budgeting and variance analysis, cost volume profit analysis, pricing decisions, the balanced scorecard, capital budgeting, and ethics.
ACC 058A  Intermediate Accounting I (4.0 Lecture)  4.0 UNITS
Advisory: MATH 903 Prerequisite: ACCTG 001A. This course is a review of financial accounting with in-depth analysis of balance sheet accounts, time value of money, and accounting theory.

ACC 058B  Intermediate Accounting II (4.0 Lecture)  4.0 UNITS
Advisory: ACC 058A Advisory: MAT 903 Prerequisite: ACC 001A This course covers principles, control and theory of accounting for liabilities and equities, preparation and analysis of cash flow statements, and financial statement analysis.

ACC 059A  Financial Auditing (4.0 Lecture)  4.0 UNITS
Prerequisite: ACC 001A Advisory: ACC 058A Advisory: ACC 058B The course covers auditing and its environment including ethics, legal issues, fraud, auditing procedures, work paper preparation and report writing.

ACC 060  Computerized Accounting: QuickBooks (3.0 Lecture)  3.0 UNITS
Advisory: ACC 001A It is recommended that students have completed, or be concurrently enrolled in, ACC 001A or have previous accounting experience. Students use QuickBooks software to set up, enter transactions, and produce reports.

ACC 065  Computerized Accounting: Sage 50 (3.0 Lecture)  3.0 UNITS
Advisory: ACC 001A It is recommended that students have completed, or be concurrently enrolled in, ACC 001A or have previous accounting experience. Eligibility for ENG 001A and REA 054. Students use Sage 50 software to set up, enter transactions, and produce reports. It is recommended that students have completed, or are concurrently enrolled in, ACC 001A or have previous accounting experience.

ACC 070  Ethics in Accounting (3.0 Lecture)  3.0 UNITS
Prerequisite ACC 001A This course involves the study of ethical problems which arise within accounting and corporate management. The focus is on ethical issues in corporate case studies such as Enron, Worldcom, Sunbeam, and Madoff.

ACC 071  Advanced Accounting (4.0 Lecture)  4.0 UNITS
Prerequisite: ACCTG 058B or equivalent. This course covers the following advanced accounting topics: preparation of consolidated financial statements using the equity method of accounting and accounting for foreign transactions and operations. In addition, the following topics may be covered: accounting for state and local governmental entities and accounting for not for profit non governmental entities. The course requires access to the Internet and knowledge of how to use spreadsheets. Grade Only.

ACC 073  Accounting Information Systems (4.0 Lecture)  4.0 UNITS
Prerequisite ACC 001A Using SAP, an enterprise resource system (ERP) adopted by the majority of Fortune 1000 companies, students will gain valuable and practical skills in Accounting Information Systems, common business processes, basic database designs, and systems controls. The skills built will be useful for individuals planning to take additional higher level business, accounting, and/or information systems classes; seeking careers in the accounting / finance department of organizations; or interested in becoming an auditor, analyst, or consultant.

ANT 001  Physical Anthropology (3.0 Lecture)  3.0 UNITS
The study of human origins, including evolution, genetics, variability, fossil evidence for human evolution, comparative primate anatomy and behavior. Transfers as a Biological Science.

ANT 001L  Physical Anthropology Lab  1.0 UNIT
Corequisite: ANTHR 001. This is an introductory laboratory course that includes methods and techniques of Physical Anthropology, including scientific method, anthropometry, determination and identification of skeletal materials, comparative osteology, and forensic anthropology. Pass/No Pass Option.

ANT 003  Introduction to Cultural Anthropology (3.0 Lecture)  3.0 UNITS
This course is the study of cultural and social behavior as developed through the anthropological study of contemporary peoples. It includes a comparative study of the range of cultures of the world with emphasis on social organization, economics, religion, kinship systems, cultural patterns, values and ethics, and ecology.

ANT 055  Magic, Witchcraft and Religion (3.0 Lecture)  3.0 UNITS
A cross-cultural study of beliefs and practices dealing with the supernatural pantheon. Practices that invite or demand individual experiences, such...
as altered states of consciousness, development of a "belief" system, and
revitalization are explored.

ARABIC (ARB)

ARB 001 First Semester Arab And Culture (5.0 Lecture) 5.0 UNITS
This course is an introduction to Modern Standard Arabic. All four basic
language skills (listening, speaking, reading, and writing) are introduced
within a cultural context.

ARB 002 Second Semester Arabic (5.0 Lecture) 5.0 UNITS
Prerequisite ARB 001 This course is a continuation of the introduction to
Modern Standard Arabic. All four basic language skills (listening, speaking,
reading, and writing) are reinforced and further built upon within a cultural
context.

ART (ART)

ART 001A Survey of Western Art I (3.0 Lecture) 3.0 UNITS
Survey of painting, sculpture, and architecture in Western world from
Prehistoric times through Medieval period.

ART 001B Survey of Western Art II (3.0 Lecture) 3.0 UNITS
A survey of painting, sculpture and architecture in Western world from
Renaissance to the 20th century.

ART 001D Art of the 20th Century (3.0 Lecture) 3.0 UNITS
A general survey of painting, sculpture, and architecture in the Western world
from the Impressionists to the present day.

ART 004 Art Appreciation (3.0 Lecture) 3.0 UNITS
A study of the themes and purposes and media and techniques of the visual
arts. Works of art from many different periods and cultures will be discussed.

ART 007 Survey of Asian Art (3.0 Lecture) 3.0 UNITS
This course is a general survey of painting, sculpture, architecture and the
minor arts from prehistoric times to the present day in India, China, Korea,
Japan, Indonesia and Southeast Asia, emphasizing aesthetic, cultural and
historical values.

ART 011 The History of Modern Design (3.0 Lecture) 3.0 UNITS
This introductory survey course focuses on the history, perception and
development of design as an art form during the Twentieth Century. The
students will also learn about the evaluation criteria of two-dimensional and
three dimensional design objects, while examining examples of architecture,
industrial design, graphic design and interior design.

ART 020A Museum/Gallery Internship 1.0 UNIT
Students will participate actively in the operation of a local museum/gallery
as an intern under the direction of museum/gallery professionals.

ART 020B Museum/Gallery Internship 2.0 UNITS
Students will participate actively in the operation of a local museum/gallery
as an intern under the direction of museum/gallery professionals.

ART 020C Museum/Gallery Internship 3.0 UNITS
Students will participate actively in the operation of a local museum/gallery
as an intern under the direction of museum/gallery professionals. Interview

ART 031A Drawing (2.0 Lecture/1.0 Lab) 3.0 UNITS
Beginning drawing course for students with no former drawing experience.
Drawing of natural and man-made forms from observation, directed toward
realistic rendering of objects and is an introduction to color drawing media; colored pencil, pen
and ink, watercolor, pastels and chalk.

ART 031B Intermediate Drawing (2.0 Lecture/1.0 Lab) 3.0 UNITS
Prerequisite ART 031A This intermediate course is for students with previous
college-level drawing experience and focuses on drawing from natural and
human-made forms from observation. It is directed toward realistic rendering

ART 033A Basic Design: Two-Dimensional (2.0 Lecture/1.0 Lab) 3.0 UNITS
Basic introductory course to principles & elements of 2-dimensional design.

ART 033B Basic Design: Three-Dimensional (2.0 Lecture/1.0 Lab) 3.0 UNITS
This course introduces students to the elements and principles of design of
three-dimensional forms.

ART 033C Basic Design: Color (2.0 Lecture/1.0 Lab) 3.0 UNITS
Prerequisite ART 033A This course is an introduction to the principles and
elements of color.

ART 034A Introduction to Digital Art (2.0 Lecture/1.0 Lab) 3.0 UNITS
This course is an introductory computer art course. The course introduces
students to microcomputers (Macintosh and PCs), their operating systems
and graphic software (Adobe Photoshop) for creating and manipulating
images. This course will introduce the student to Basic Design Elements and
Principles. Specific projects will be executed relating to visual awareness, line,
shape, form, space, and color. Students will learn drawing skills on a computer
and how to work with peripheral devices.

ART 034B Advanced Digital Art (2.0 Lecture/1.0 Lab) 3.0 UNITS
Prerequisite ART 034A This is an advanced design course combining
computer graphics and fine arts image processing.

ART 035A Life Drawing (2.0 Lecture/1.0 Lab) 3.0 UNITS
Prerequisite ART 035A This is a fundamental study of the human figure
as the main subject matter of drawings.

ART 035B Life Drawing (2.0 Lecture/1.0 Lab) 3.0 UNITS
Prerequisite ART 035B This course is a low intermediate study of the human
form and structure rendered in realistic terms.

ART 035C Life Drawing (2.0 Lecture/1.0 Lab) 3.0 UNITS
Prerequisite ART 035C This course is an advanced study of the human form
and structure. It emphasizes creative interpretation and use of the
human form for artistic expression. It focuses on drawing the live model in a
variety of styles and media.

ART 035D Life Drawing (2.0 Lecture/1.0 Lab) 3.0 UNITS
Prerequisite ART 035D This course is an advanced study of the human form
and structure. It emphasizes creative interpretation and use of the human
form for artistic expression. It focuses on drawing the live model in a
variety of styles and media.

ART 039A Survey of Printmaking (2.0 Lecture/1.0 Lab) 3.0 UNITS
A beginning course in printmaking media and techniques with an emphasis
on monotype and the intaglio press.

ART 047A Watercolor (2.0 Lecture/1.0 Lab) 3.0 UNITS
This course is an introduction to painting using various water base media with
a focus on color mixing, composition, and content.

ART 047B Watercolor (2.0 Lecture/1.0 Lab) 3.0 UNITS
Prerequisite ART 047A This course provides continuing instruction in
watercolor techniques, exploration of watercolor styles, and personal
development of the student's artistic direction.

ART 047C Watercolor (2.0 Lecture/1.0 Lab) 3.0 UNITS
Prerequisite ART 047B This is a high intermediate level painting course with
various water base media.

ART 047D Watercolor (2.0 Lecture/1.0 Lab) 3.0 UNITS
Prerequisite ART 047C This course is advanced level painting with various
water base media.
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<th>COURSES</th>
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<tr>
<td>ART 048A Airbrush Painting (2.0 Lecture/1.0 Lab)</td>
<td>3.0</td>
</tr>
<tr>
<td>Prerequisite ART 031A or Prerequisite ART 033C This course is an introduction to the airbrush as a painting tool. Students explore water-based media, principles of color, transparency, masking techniques, and composition.</td>
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<tr>
<td>ART 048B Airbrush Painting (2.0 Lecture/1.0 Lab)</td>
<td>3.0</td>
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<tr>
<td>Prerequisite ART 048A This course is low intermediate studio practice which focuses on strengthening the basic skills learned in ART 048A.</td>
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<tr>
<td>ART 048C Airbrush Painting (2.0 Lecture/1.0 Lab)</td>
<td>3.0</td>
</tr>
<tr>
<td>Prerequisite ART 048B This course is high intermediate studio practice which focuses on strengthening the basic skills learned in ART 048B.</td>
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<tr>
<td>ART 048D Airbrush Painting (2.0 Lecture/1.0 Lab)</td>
<td>3.0</td>
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<tr>
<td>Prerequisite ART 048C This course is advanced studio practice which focuses on advanced techniques and portfolio development. Pass/No Pass Option.</td>
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<tr>
<td>ART 049A Painting (2.0 Lecture/1.0 Lab)</td>
<td>3.0</td>
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<tr>
<td>Basic introduction to traditional &amp; current painting techniques &amp; media.</td>
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<tr>
<td>ART 049B Painting (2.0 Lecture/1.0 Lab)</td>
<td>3.0</td>
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<tr>
<td>Prerequisite ART 049A This course is low intermediate studio practice which focuses on strengthening the basic skills learned in ART 049A. Emphasis is placed upon self-expression, composition, and color theory.</td>
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<tr>
<td>ART 049C Painting (2.0 Lecture/1.0 Lab)</td>
<td>3.0</td>
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<tr>
<td>Prerequisite ART 049B This course is high intermediate studio practice which focuses on mixed media, self-expression, composition, and content.</td>
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<tr>
<td>ART 049D Painting (2.0 Lecture/1.0 Lab)</td>
<td>3.0</td>
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<tr>
<td>Prerequisite ART 049C This course is advanced advanced studio practice which focuses on developing individual style and direction in painting.</td>
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<tr>
<td>ART 065A Ceramics-Handbuilding (2.0 Lecture/1.0 Lab)</td>
<td>3.0</td>
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<tr>
<td>Introductory course in ceramics emphasizing hand-building techniques.</td>
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<tr>
<td>ART 065B Ceramics-Handbuilding (2.0 Lecture/1.0 Lab)</td>
<td>3.0</td>
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<tr>
<td>Prerequisite ART 065A ART 065B is an advanced course in ceramics/hand-building techniques, firing kilns, clay body construction, and the creation of projects directed toward individualized self-expression.</td>
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<tr>
<td>ART 065C Ceramics-Handbuilding (2.0 Lecture/1.0 Lab)</td>
<td>3.0</td>
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<tr>
<td>Prerequisite ART 065B ART 065C focuses on different aspects of ceramics providing students with supervised participatory experience in which artistic skills are enhanced by repetition and practice.</td>
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<tr>
<td>ART 065D Ceramics-Handbuilding (2.0 Lecture/1.0 Lab)</td>
<td>3.0</td>
</tr>
<tr>
<td>Prerequisite ART 065C ART 065D focuses on different aspects of ceramics providing students with supervised participatory experience in which artistic skills are enhanced by repetition and practice.</td>
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<tr>
<td>ART 067A Ceramics-Potter's Wheel (2.0 Lecture/1.0 Lab)</td>
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<tr>
<td>Covers basic skills &amp; techniques using potter’s wheel. Pass/No Pass Option.</td>
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<tr>
<td>ART 067B Ceramics-Potter's Wheel (2.0 Lecture/1.0 Lab)</td>
<td>3.0</td>
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<tr>
<td>Prerequisite ART 067A This is an advanced course on the potter’s wheel directed toward refinement of throwing skills and ceramic design.</td>
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<tr>
<td>ART 067C Ceramics-Potter's Wheel (2.0 Lecture/1.0 Lab)</td>
<td>3.0</td>
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<tr>
<td>Prerequisite ART 067B This course focuses on advanced aspects of working with the potter's wheel.</td>
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<tr>
<td>ART 067D Ceramics-Potter’s Wheel (2.0 Lecture/1.0 Lab)</td>
<td>3.0</td>
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<tr>
<td>Focus on advanced aspects of working with potter’s wheel. Pass/No Pass Option.</td>
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<tr>
<td>ART 075A Metalsmithing (2.0 Lecture/1.0 Lab)</td>
<td>3.0</td>
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<tr>
<td>Advisory ART 033A and/or Advisory ART 033B This course is an introduction to the elements of design and metalsmith techniques.</td>
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<tr>
<td>ART 075B Metalsmithing (2.0 Lecture/1.0 Lab)</td>
<td>3.0</td>
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<tr>
<td>Prerequisite ART 075A This course continues to apply the elements of design to metal and introduces new metalsmith techniques.</td>
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<tr>
<td>ART 075C Metalsmithing (2.0 Lecture/1.0 Lab)</td>
<td>3.0</td>
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<tr>
<td>Prerequisite ART 075B This is an advanced course in metalsmithing that provides students with an opportunity to build on skills learned in previous course levels and explore new techniques. Topics may include advanced techniques in jewelry casting, metal sculpture construction, and color on metal.</td>
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<tr>
<td>ART 075D Metalsmithing (2.0 Lecture/1.0 Lab)</td>
<td>3.0</td>
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<tr>
<td>Prerequisite ART 075C This is an advanced course in metalsmithing which focuses on different aspects of course content from previous levels. Students are provided with supervised participatory experience.</td>
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<tr>
<td>ART 078A Furniture Design and Woodworking (2.0 Lecture/1.0 Lab)</td>
<td>3.0</td>
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<tr>
<td>Advisory ART 033B This course covers basic skills in furniture design, construction and finishing.</td>
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<tr>
<td>ART 078B Furniture Design and Woodworking (2.0 Lecture/1.0 Lab)</td>
<td>3.0</td>
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<tr>
<td>Prerequisite ART 078A This course introduces more advanced techniques for design and furniture construction. Students build on skills learned in ART 078A.</td>
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<tr>
<td>ART 078C Furniture Design and Woodworking (2.0 Lecture/1.0 Lab)</td>
<td>3.0</td>
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<tr>
<td>Prerequisite ART 078B ART 078C is an advanced woodworking class which involves furniture construction techniques and equipment not covered in previous levels. Topics include advanced cabinetry techniques and complex joinery.</td>
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<tr>
<td>ART 085A Sculpture (2.0 Lecture/1.0 Lab)</td>
<td>3.0</td>
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<tr>
<td>Advisory ART 031A or Advisory ART 033B This is an introductory course in sculpture emphasizing personal expression. A variety of materials and techniques will be explored.</td>
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<tr>
<td>ART 085B Sculpture (2.0 Lecture/1.0 Lab)</td>
<td>3.0</td>
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<tr>
<td>Prerequisite ART 085A ART 085B builds on skills and concepts learned in ART 085A, and introduces new techniques. Students explore the development of a personal style of sculpture design.</td>
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<tr>
<td>ART 085C Sculpture (2.0 Lecture/1.0 Lab)</td>
<td>3.0</td>
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<tr>
<td>Prerequisite ART 085B This is an advanced sculpture course which provides students with an opportunity to build on previous experience and explore new techniques. It focuses on different aspects of course content with supervised participatory experience.</td>
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<tr>
<td>ART 085D Sculpture (2.0 Lecture/1.0 Lab)</td>
<td>3.0</td>
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<tr>
<td>Prerequisite ART 085C This is an advanced course which focuses on different aspects of sculpture with supervised participatory experience.</td>
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<tr>
<td>ART 088A Metal Sculpture Casting (2.0 Lecture/1.0 Lab)</td>
<td>3.0</td>
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<tr>
<td>This is a basic course in metal sculpture casting.</td>
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</table>
ART 088B  Metal Sculpture Casting (2.0 Lecture/1.0 Lab)  3.0 UNITS
Prerequisite ART 088A This course is a study of the metal casting process which introduces new techniques and skill-building assignments, as well as development of a personal form.

ART 088C  Metal Sculpture Casting (2.0 Lecture/1.0 Lab)  3.0 UNITS
Prerequisite ART 088B This course covers different aspects of metal sculpture casting along with supervised participatory experience.

ART 088D  Metal Sculpture Casting (2.0 Lecture/1.0 Lab)  3.0 UNITS
Prerequisite ART 088C This course focuses on different aspects of metal sculpture casting along with supervised participatory experience.

ART 091  Directed Studies (1.0 Lab)  1.0 UNIT
Prerequisite: An interview to determine objectives & a written contract must be made by the instructor.

ASTRONOMY (AST)

AST 001  Astronomy (3.0 Lecture)  3.0 UNITS
This course covers the entire panorama of the universe including early human observations, the solar system, stars, galaxies and cosmology. Grade Only.

AST 002  Astronomy Laboratory  1.0 UNIT
Advisory: Eligibility for ENGL 001A and READ 053 Prerequisite/Corequisite ASTRO 001 This course covers astronomical projects using lab equipment and computers, reinforcing the concepts introduced in ASTRO 001. Grade Only.

AST 003  Astronomy With Lab (3.0 Lecture/1.0 Lab)  4.0 UNITS
This course covers the entire panorama of the universe including the observations of the night sky, the solar system, stars, galaxies and cosmology. Grade Only.

AST 003H  Astronomy With Lab - Honors (3.0 Lecture/1.0 Lab)  4.0 UNITS
This course covers the entire panorama of the universe including the observations of the night sky, the solar system, stars, galaxies and cosmology. Students cannot get credit for both ASTRO 003 and ASTRO 003H. This section requires enrollment in the Honors Transfer Project. More information and the online application can be found at http://honors.missioncollege.edu.

AST 004  Astrobiology - Life in the Universe (3.0 Lecture)  3.0 UNITS
This course examines the astronomical influences on life on Earth and the possibility of life other places in the Universe. We study the chemical basis for life, the origin, evolution, and constraints of life on Earth, and the markers of life that may be seen in the Universe.

BIOLOGICAL SCIENCES (BIO)

BIO 001A  General Biology: Cells (3.0 Lecture/2.0 Lab)  5.0 UNITS
Prerequisite CHM 001A ; Prerequisite MAT 000C or any higher math ; and Prerequisite BIO 010 or Prerequisite BIO 011 ; Advisory CHM 001B This course is a comprehensive introduction to cell and molecular biology, and is designed for students intending to transfer to majors in the biological sciences as well as for those seeking to enter professional programs such as medicine or pharmacy. Grade Only.

BIO 001AH  General Biology: Cells-Honors (3.0 Lecture/2.0 Lab)  5.0 UNITS
This honors course is a comprehensive introduction to cell and molecular biology, and is designed for students intending to transfer to majors in the biological sciences as well as for those seeking to enter professional programs such as medicine or pharmacy. Students may not receive credit for both BIOSC 001A and BIOSC 001AH. This section requires enrollment in the Honors Transfer Project. More information and the online application can be found at http://honors.missioncollege.edu.

BIO 001B  General Biology: Organisms (3.0 Lecture/2.0 Lab)  5.0 UNITS
Prerequisite BIO 001A This course examines the unity and diversity of multicellular life, ecological and evolutionary principles, and form/function relationships in plants and animals. The course is designed for students majoring in the biological sciences or seeking entry to professional programs such as Medicine, Pharmacy, and Dentistry.

BIO 004  Microbiology (3.0 Lecture/2.0 Lab)  5.0 UNITS
Prerequisite CHM 001A or Prerequisite CHM 060 or Prerequisite CHM 030A or Prerequisite CHM 030B ; and Prerequisite BIO 010 and Prerequisite BIO 010L , or Prerequisite BIO 011 or Prerequisite BIO 022 or Prerequisite BIO 041 or Prerequisite BIO 043 or Prerequisite BIO 048 This course is intended for nursing and other health-science majors. Lecture topics include the morphology and physiology of the major groups of microorganisms, microbial genetics, mechanisms of infection and disease, and the human immune response to infection. Laboratory activities focus on the culture and identification of bacteria of medical importance.

BIO 010  Introduction to Biology (3.0 Lecture)  3.0 UNITS
BIO 010 is an introductory course in biology designed for the non-biological sciences major. Topics include cell structure and function, energy exchange and life processes, taxonomy, ecology, heredity, diversification and evolution. This lecture course may be taken with or without BIOSC 010L, Introduction to Biology Lab.

BIO 010L  Introduction to Biology Lab (1.0 Lab)  1.0 UNIT
Corequisite BIO 010 or Prerequisite BIO 010 This is an introductory general biology laboratory course designed for non-science majors. All students who enroll in this lab course must also enroll in a BIO 010 lecture.

BIO 011  Human Biology (3.0 Lecture/1.0 Lab)  4.0 UNITS
This course is an introduction to biology concepts and principles, using humans as a model. BIOSC 011 satisfies the same general education requirement as BIOSC 010.

BIO 012  Emerging Infectious Diseases (3.0 Lecture)  3.0 UNITS
In this introductory biology course, learn how infectious agents cause disease, and what factors are leading to the emergence of new diseases such as mad cow, SARS, and drug-resistant tuberculosis.

BIO 014  Introductory Neuroscience (3.0 Lecture)  3.0 UNITS
This course is an introduction to the organization and functions of the nervous system. The physiology of the brain and senses are discussed. Emotions, sleep, language, attention, memory, and a survey of nervous system disorders are explored.

BIO 016  Marine Biology (3.0 Lecture/1.0 Lab)  4.0 UNITS
This four unit course introduces students of all disciplines to ocean ecology and marine life. Topics are explored through classroom learning and seven required field trips to local marine habitats and research facilities in the San Francisco and Monterey Bays. Some field trips may extend beyond regularly scheduled class meeting time. Students arrange their own transportation to the field sites.

BIO 017  Genetics and Society (3.0 Lecture)  3.0 UNITS
This course is a broad survey of genetics, with a focus on the societal impacts of topics in genetics such as human genetic disease, biotechnology, reproductive technologies, and evolution. This course is a broad survey of genetics, with a focus on the societal impacts of topics in genetics such as human genetic disease, biotechnology, reproductive technologies, and evolution. It is designed for the general education student.

BIO 017H  Genetics and Society - Honors (3.0 Lecture)  3.0 UNITS
This course is a broad survey of genetics, with a focus on the societal impacts of topics in genetics such as human genetic disease, biotechnology, reproductive technologies, and evolution. The honors component involves an in-depth analysis of specific topics, using current information from research journals. Students cannot get credit for both BIOSC 017 and BIOSC 017H. This section requires enrollment in the Honors Transfer Project. More information and the online application can be found at http://honors.missioncollege.edu.
### COURSES

**BIO 019**  
Oceans: Life in the Sea (3.0 Lecture)  
This non-majors course surveys the biological principles of marine science. It provides an overview of the ocean environment, diversity of marine life, basic ecological principles and types of marine ecosystems. The relationship between humans and the ocean is emphasized, focusing on conservation biology and sustainability.

**BIO 022**  
Anatomy & Physiology for Allied Health Workers (3.0 Lecture/1.0 Lab)  
4.0 UNITS  
This course is an overview of the normal structure and function of the human body and is designed to provide a foundation for the study of disease and dysfunction in the clinical setting. BIOSC 022 is designed to meet the state board requirements for VN and PT programs.

**BIO 025**  
Environmental Biology (3.0 Lecture)  
3.0 UNITS  
This course is designed for student of all disciplines to introduce a wide range of contemporary biological topics that will affect their lives; e.g., population growth and control, environmental problems, genetic manipulation, nutrition, energy issues, etc.

**BIO 030**  
Tropical Ecology (3.0 Lecture)  
3.0 UNITS  
The amazing diversity of life in the tropics is the subject of this introductory level class. Students explore rainforest inhabitants and their relationships, and learn about their value and conservation. This lecture course may be taken with or without BIOSC 030L, Tropical Ecology Lab.

**BIO 030L**  
Tropical Ecology Field Studies (1.0 Lab)  
1.0 UNIT  
In this introductory level class, students carry out research methods that ecologists use to observe and investigate tropical ecosystems. This lab course may be taken with or without BIOSC 030, Tropical Ecology.

**BIO 032**  
California Plants and Animals (3.0 Lecture/1.0 Lab)  
4.0 UNITS  
This field course explores the ecology of California flora and fauna through studies of plants and animals in terrestrial and aquatic ecosystems within the San Francisco Bay region.

**BIO 041**  
Principles of Evolution and Animal Biology (3.0 Lecture/2.0 Lab)  
5.0 UNITS  
Prerequisite MAT 000C (or any higher level mathematics course), Prerequisite CHM 002 (or any higher level chemistry course); and Prerequisite BIO 010 or Prerequisite Equivalent High School or College Biology course with lab. This course is intended for students majoring in biology and related fields. The course introduces the principles of animal biology and evolutionary theory to the biology major. Topics include animal phylogeny, diversity, principles of evolution, natural history, morphology, physiology, and development.

**BIO 042**  
Principles of Plant Biology (3.0 Lecture/2.0 Lab)  
5.0 UNITS  
Prerequisite High School or College biology course and Prerequisite MAT 000C and Prerequisite CHM 001A. This is a course for biology majors that examines principles of botany through comprehensive studies of the major plant, fungi and algal phyla, with emphasis on structure, function and evolution of vascular plants. Ecological principles are also discussed.

**BIO 043**  
Principles of Cell and Molecular Biology (3.0 Lecture/2.0 Lab)  
5.0 UNITS  
Prerequisite BIO 010 and Prerequisite BIO 010L ; or Prerequisite BIO 011 or Prerequisite BIO 041 or Prerequisite BIO 042 or Prerequisite equivalent course in College Biology; and Prerequisite CHM 001A and Prerequisite MAT 000C Advisory CHM 001B. This course is a comprehensive introduction to cell and molecular biology and completes the general biology sequence required for transfer students in the biological sciences and for those seeking to enter Pharmacy and other professional programs.

**BIO 043H**  
Principles of Cell and Molecular Biology - Honors (3.0 Lecture/2.0 Lab)  
5.0 UNITS  
This course is a comprehensive introduction to cell and molecular biology, and completes the general biology sequence required for transfer students in the biological sciences and for those seeking to enter Pharmacy and other professional programs. This section requires enrollment in the Honors Transfer Project. More information and the online application can be found at http://honors.missioncollege.edu.

**BIO 047**  
Human Anatomy (3.0 Lecture/2.0 Lab)  
5.0 UNITS  
Prerequisite BIO 010 and Prerequisite BIO 010L ; or Prerequisite BIO 011, or Prerequisite BIO 022, or Prerequisite BIO 041, or Prerequisite BIO 043 This course is a detailed lecture and laboratory study of the gross and microscopic structures of the human body in preparation for careers in nursing, physical therapy, occupational therapy, kinesiology, etc.

**BIO 048**  
Human Physiology (3.0 Lecture/2.0 Lab)  
5.0 UNITS  
Prerequisite BIO 047; and Prerequisite CHM 001A or Prerequisite CHM 030A or Prerequisite CHM 060; Advisory MAT 000C or Advisory MAT 000CM. This course provides students with a basic understanding of the physiological mechanisms underlying body function, including the chemical and cellular basis for the workings of the nervous, muscular, cardiovascular, respiratory, renal and digestive systems. The laboratory portion familiarizes students with scientific analysis and research techniques.

**BIO 048H**  
Human Physiology - Honors (3.0 Lecture/2.0 Lab)  
5.0 UNITS  
This course provides students with a basic understanding of the physiological mechanisms underlying body function, including the chemical and cellular basis for the workings of the nervous, muscular, cardiovascular, respiratory, renal and digestive systems. The laboratory portion familiarizes students with scientific analysis and research techniques. The honors component involves an in-depth analysis of specific topics, using current information from research journals. Students cannot get credit for both BIOSC 48 and BIOSC 48H. This section requires enrollment in the Honors Transfer Project. More information and the online application can be found at http://honors.missioncollege.edu.

**BIO 081H**  
Honors Seminar in Biology Studies (1.0 Lecture)  
1.0 UNIT  
This course is an honors course involving discussion and analysis of current and significant research work in the field of biological science. Students develop an in-depth understanding of the application of the scientific method to research areas such as cell and molecular biology, genetics, cancer, neuroscience, ecology, sustainability, etc. The course includes presentations by students and invited guests. This section requires enrollment in the Honors Transfer Project. More information and the online application can be found at http://honors.missioncollege.edu.

**BIO 092E**  
Special Projects in Environmental Studies  
2.0 UNITS  
Advisory/BIOSC 025. Under the guidance of a faculty member, student groups carry out research projects that address global problems by applying local solutions on topics such as vermiculture, sustainable aquaponics, habitat enhancement, or burrowing owl conservation. This course is also listed as GLOBL 092E. Pass/No Pass Option.

### BUSINESS (BUS)

**BUS 010**  
Global Business (3.0 Lecture)  
3.0 UNITS  
This course provides a comprehensive overview of global business including international management, finance, law, global strategy and marketing.

**BUS 021**  
Introduction to Business Computing (3.0 Lecture)  
3.0 UNITS  
This course provides an overview of computer information systems and their use in business and society.

**BUS 021L**  
Introduction to Business Computing Laboratory (1.0 Lab)  
1.0 UNIT  
This course provides hands-on training in business applications.

**BUS 022**  
Principles of E-Business (3.0 Lecture)  
3.0 UNITS  
This course introduces students to the basics of electronic business and commerce. Eligibility for ENGL 001A and READ 054 Advisory BUS 051.

**BUS 023**  
Social Media Marketing (3.0 Lecture)  
3.0 UNITS  
This course provides an overview of social media marketing tools. Students complete hand-on activities using and relating to social media marketing. Eligibility for ENGL 001A and READ 054 Advisory BUS 056A.
BUS 028A  Business Law I (3.0 Lecture)  3.0 UNITS
This course provides an introduction to the laws in the United States with an emphasis on matters relating to the conduct of business and commerce.

BUS 028B  Business Law II (3.0 Lecture)  3.0 UNITS
This course is a continuation of BUS 028A, an introduction to law relating to the conduct of business, and covers laws governing sales and leases, debtor-creditor relations, negotiable instruments, international law and governmental regulation.

BUS 037  Fundamentals of Project Management (3.0 Lecture)  3.0 UNITS
This course focuses on the fundamentals of project management.

BUS 038  Applied Project Management (3.0 Lecture)  3.0 UNITS
In this course, students apply project management skills to real life project situations.

BUS 040  Professional Selling (3.0 Lecture)  3.0 UNITS
This course is a study of sales principles and strategies. Topics include advanced sales techniques, high impact questioning methodologies, closing techniques and managing objections, account and territory planning and management, resource planning and management. The course explores in detail the "selling cycle." Students taking this course explore how to succeed in sales.

BUS 050  Administrative Office Procedures  4.0 UNITS
Advisory: Eligibility for ENGL 108A and READ 053. This course explores procedures and skills required for today's automated office. The latest trends in managing global or virtual offices are discussed. The course also includes planning and job preparation for office careers. Pass/No Pass Option.

BUS 051  Introduction to American Business (3.0 Lecture)  3.0 UNITS
In this survey course, students are introduced to career opportunities available in business. This is a required first course for all business majors, and should be taken within their first year as a business major.

BUS 052  Fundamentals of Financial Investing (3.0 Lecture)  3.0 UNITS
This course provides students with the fundamentals to make sound financial investment decisions. Study involves learning about the investment environment and the risks and returns associated with different types of financial investments.

BUS 054  Small Business Start Up and Management (3.0 Lecture)  3.0 UNITS
This course offers methods of research and planning to start a small business and is recommended for persons who want to explore the opportunities and requirements of creating and managing their own business enterprise.

BUS 055  Business Strategy for Success  3.0 UNITS
Advisory: Eligibility for ENGL 108A and READ 053. This course is designed to provide an overview of business strategy and its impact on organization success. Pass/No Pass Option.

BUS 055A  Industry and Competitive Analysis  1.0 UNIT
Advisory: MATH 903, Eligibility for ENGL 108A and READ 053. This course is designed to provide an overview of industry and competitive analysis and the impact on organization success. Pass/No Pass Option.

BUS 056A  Marketing Principles (3.0 Lecture)  3.0 UNITS
This course gives students an overall understanding of marketing functions and their society. The course covers the fundamentals of marketing, including: product planning and development; buyer behavior; pricing strategies; marketing channels; and methods of marketing research.

BUS 060  International Marketing  3.0 UNITS
Advisory: Eligibility for ENGL 001A and READ 053 AND BUS 056A. This course focuses on marketing management techniques, and strategies necessary to incorporate the marketing concept when doing business in international markets. Pass/No Pass Option.

BUS 061  Business and Society (3.0 Lecture)  3.0 UNITS
This course is a study of business and its impact on society and society's influence on business. Ethics, business and government in a global society, managing environmental issues and societal challenges, and the benefits of business activity are covered.

BUS 064A  Basic Business Arithmetic  3.0 UNITS
Advisory: MATH 903, Eligibility for ENGL 108A and READ 053. This course focuses on the application of arithmetic skills to business problems and the principles of problem solving. Pass/No Pass Option.

BUS 064B  Business Math (4.0 Lecture)  4.0 UNITS
This course is designed for all business majors to review the fundamental math principles. It emphasizes methods of problem interpretation and the solving of common business calculation problems.

BUS 064D  Business Mathematics Prep  0.5 UNITS
This course allows students to review basic business math skills in preparation for taking BUS 064B. Pass/No Pass Option.

BUS 074  Purchasing & Supply Chain Management (3.0 Lecture)  3.0 UNITS
This course is an introduction to the basic principles of supply chain management.

BUS 077A  Customer Relationship Management  1.0 UNIT
This course provides an overview of customer relationship management (CRM) including identifying the benefits of loyal customers. Pass/No Pass Option.

BUS 078A  Business Communications (3.0 Lecture)  3.0 UNITS
Prerequisite: ENG 001A. This course develops writing skills to improve communication ability in the business environment.

BUS 078B  Business Report Writing  3.0 UNITS
Advisory: BUS 078A. This course covers the practical aspects of report writing for business. Pass/No Pass Option.

BUS 078C  Business Report Writing  3.0 UNITS
Advisory: Eligibility for ENGL 108A and READ 053. This course covers the practical aspects of grant writing. Pass/No Pass Option.

BUS 078D  Persuasive Business Writing  1.0 UNIT
Advisory: Eligibility for ENGL 108A and READ 053. This course covers the practical aspects of persuasive business writing. Pass/No Pass Option.

BUS 078H  Writing Effective E-Mail for Business  1.0 UNIT
This course covers the practical aspects of writing effective e-mails for business. This section requires enrollment in the Honors Transfer Project. More information and the online application can be found at http://honors.missioncollege.edu.

BUS 079  Human Relations Applied in Business  3.0 UNITS
This course covers patterns of behavior, motivation, perception, value clarification, coping with change, and leadership styles in business organizations.

BUS 081A  Advertising Principles  3.0 UNITS
Advisory: Eligibility for ENGL 001A and READ 053 AND BUS 056A. This course is an introduction to the basic principles and techniques of advertising as applied to business and to media. Topics include: targeting customers, understanding consumer needs and motivations, identifying key consumer insights and benefits, setting advertising objectives, developing relevant messages, creative development, media planning, managing budgets and
timelines, and measuring the effectiveness of advertising campaigns. Pass/No Pass Option.

**BUS 084**  **Internet Marketing (3.0 Lecture)  3.0 UNITS**
This course introduces students to Internet marketing.

**BUS 086**  **Building Business Websites  3.0 UNITS**
Advisory: BUS 021 and BUS 021L. This course is an introduction to creating and managing business Web sites. Students will develop their own Web page and present them to the class. Pass/No Pass Option.

**BUS 086A**  **Building Business Web Sites: Basics  1.0 UNIT**
This course is an introduction to creating and managing business Web sites. Pass/No Pass Option.

**BUS 102**  **Leadership (3.0 Lecture)  3.0 UNITS**
This course guides students in developing life-long learning skills for leadership that apply to any organizational level in a wide variety of business environments. Both historical and cutting-edge leadership theory and practice are explored. Topics discussed include visioning, inspiring, motivating as well as the effective use of power. By taking an active leadership role in this course, students examine the issues, challenges, and practical skills of leadership in today's workplace. Presentations, team activities, reflection, interviewing, and feedback are core developmental components of this course.

**BUS 103**  **Functions of Management (3.0 Lecture)  3.0 UNITS**

**BUS 104**  **Project Risk Management (3.0 Lecture)  3.0 UNITS**
Advisory MAT 903 This course focuses on the fundamentals of project risk management. This course will be of particular value to program managers, project managers, project engineers, software systems engineers, and those responsible for the development of policies and processes.

**BUS 115**  **Operations Management (3.0 Lecture)  3.0 UNITS**
This course is an introduction to the field of operations management and addresses the design and management of the activities and resources that a firm uses to produce and deliver its products or services. Topics covered include applied forecasting and aggregate operation planning. Concepts are illustrated by using real world case studies.

**BUS 118**  **Human Resources Management (3.0 Lecture)  3.0 UNITS**
This course is designed as an overview of the Human Resource functions and the employment of human resources to achieve organizational strategic goals by working with and through people. Topics include HR legal environment, recruitment and selection, training and development, compensation and benefits, performance appraisals, workforce diversity, downsizing, outsourcing, and contracting.

**BUS 204**  **Project Management Practicum  1.0 UNIT**
Advisory: Eligibility for ENGL 001A and READ 053. This course allows students to apply concepts learned in the project management certificate program to a real world project situation. Grade Only.

**COMPUTER APPLICATIONS (CAP)**

**CAP 010A**  **Learning the Keyboard (1.0 Lab)  1.0 UNIT**
Advisory: Eligibility for ENGL 001A and REA 054. This course is designed for anyone who wants to learn the “touch” system of keyboarding on the computer. Proper techniques of keyboarding are emphasized to develop speed and accuracy. This course may be repeated one time. Pass/No Pass Only.

**CAP 010C**  **Computer Keyboarding Speed and Accuracy (1.0 Lab)  1.0 UNIT**
Advisory: CAP 010A This course provides students with practice on corrective drills to correct keyboarding technique and improve basic speed and accuracy.

**CAP 011**  **Beginning Keyboarding With Word Processing  3.0 UNITS**
This course is designed for anyone who wishes to learn the “touch” system of keyboarding on the computer and word processing.

**CAP 013**  **Ten-Key Numeric Keypad (1.0 Lab)  1.0 UNIT**
This course develops entry-level vocational proficiency in the use of 10-key numeric keypad.

**CAP 023**  **Distance Learning - How to Succeed  0.5 UNITS**
Advisory: CA 010A and CA 070. Be a successful distance learner! In this course students will learn how to register and take a class online. Topics will include: using a browser, email, plug-ins, using a course management system, communicating online, taking a test, and sending work. Pass/No Pass Only.

**CAP 033A**  **Word Processing - Course 1 (3.0 Lecture)  3.0 UNITS**
This course teaches word processing applications using Microsoft Word. Students learn basic word processing features.

**CAP 033B**  **Word Processing - Course 2 (3.0 Lecture)  3.0 UNITS**
Advisory CAP 033A and Advisory CAP 010A This course covers advanced word processing features using MS Word.

**CAP 036**  **Machine Transcription With Word Processing  3.0 UNITS**
Advisory CA 033A, CA 033B, Eligibility for ENGL 108A and READ 053. This course teaches keyboarding mailable copy from transcription machines using word processing. Pass/No Pass Option.

**CAP 037A**  **Skills for Success: Computers, Ms Office and the Internet  3.0 UNITS**
This course emphasizes word processing, spreadsheet, and database applications using an integrated software package. Hardware components, such as hard drives, CPU, and memory are also presented. Roles and duties of the IS department, and career opportunities in the information/word processing field are provided.

**CAP 045**  **Managing Projects with Microsoft Project  3.0 UNITS**
This is a comprehensive course on Microsoft Project covering introductory and advanced topics on Project Management and MS Project features such as assigning, modifying, and fine-tuning tasks, resources, views, and reports within the overall project plan. Students will use Microsoft Project software to successfully design, develop, manage and complete a project.

**CAP 045A**  **Introductory Microsoft Project (1.0 Lecture)  1.0 UNIT**
Students learn how to use Microsoft Project to manage the tasks, resources, scope, and time for a project.

**CAP 045B**  **Intermediate Microsoft Project (2.0 Lecture)  2.0 UNITS**
Students expand their knowledge of Microsoft Project to plan, manage, monitor and analyze the progress of a project.

**CAP 046D**  **Introduction to Microsoft Powerpoint (1.0 Lecture)  1.0 UNIT**
Advisory: CAP 010A. Students learn the basic features of PowerPoint. Students learn how to create presentations and how to format them.

**CAP 046E**  **Intermediate Microsoft Powerpoint (1.0 Lecture)  1.0 UNIT**
Students learn the advanced features of PowerPoint. They integrate MS Word and Excel with PowerPoint. Students create a presentation for use as a Web Page and customize a slide show.

**CAP 047**  **Visio for Visionaries (2.0 Lecture)  2.0 UNITS**
Visualize your world more with Microsoft Visio. Students learn how to use MS Visio to create organization charts, flow charts, floor and landscaping plans, and network and data diagrams. Students also learn to enhance shapes, design graphics and create visual reports.

**CAP 052**  **Computers Simplified for Beginning Learners (0.5 Lecture)  0.5 UNITS**
Build confidence in using a computer and take the mystery away from how a computer works. The course covers the operating system software and how it works with application software, how the CPU works, the difference between memory and storage, and how the computer records data on a disk.
**COURSES**

**CAP 062B** Introduction to Microsoft Excel (1.0 Lecture) 1.0 UNIT
Advisory: CAP 070. This course is an introduction to Microsoft Excel. Topics covered include entering and editing worksheet information, formatting and printing worksheets, creating charts, and using functions. This course is designed for students who are computer literate.

**CAP 063B** Intermediate Microsoft Excel (2.0 Lecture) 2.0 UNITS
Advisory: CAP 062B. This course is the second in a series of Excel courses designed to help students learn Excel features that are used in business decisions. They apply What-IF Analysis such as scenario tables, goal seek, and solver. Students also use advanced functions such as VLOOKUP, NestedIF's, Pivot tables and Pivot charts, macros and more. This course is designed for students who are computer literate and have a previous working knowledge of Excel formulas, functions, and charts.

**CAP 070** Using MS Windows (1.0 Lecture) 1.0 UNIT
Microsoft Windows provides a "graphical environment" for access to application programs and system functions through the use of a mouse and icon-oriented commands. The student is introduced to the use of Windows, its application programs and utilities.

**CAP 071E** Microsoft Outlook (1.0 Lecture) 1.0 UNIT
Advisory: CAP 070. Students learn how to manage email with rules and folders, enter appointments and events, create and manage a schedule, track tasks, and manage contacts and contact groups. Pass/No Pass Option.

**CAP 081B** Introduction to Microsoft Access (1.0 Lecture) 1.0 UNIT
Advisory: CAP 010A and CAP 070. Learn to create database tables and enter data, organize, and retrieve data from the tables. Create simple forms to enter data into a database and format reports from the data in the database. This course is for students who are computer literate and who would like to start working with a database.

**CAP 082B** Intermediate Microsoft Access 2.0 UNITS
Go to the next professional and personal step using Access. Learn Access features to enhance database table design, customize forms and reports, create more complex queries, and manage and secure a database. Create macros to automate database tasks. Learn to use Access with other applications. This course is designed for students who are computer literate and have some knowledge of Access. This course may be repeated 2 times.

**CAP 084** Oracle: Check It Out! 1.0 UNIT
Advisory: CA 010A, CA 070, CA 120, Eligibility for ENGL 108A and READ 053. Students receive an introduction to Oracle, a powerful relational database. They learn how to use Oracle to create a table, enter and modify data, retrieve and present information from a database file. May be repeated 2 times. Pass/No Pass Option.

**CAP 084A** Introduction to Database and SQL 3.0 UNITS
Advisory: CA 010A, CA 070, CA 120, Eligibility for ENGL 108A and READ 053. Students learn how to use Oracle Developer, a graphical user interface, to build, test and maintain forms, which work with Oracle database files. Pass/No Pass Option.

**CAP 086** Web Development With PHP and MySQL 3.0 UNITS
Advisory: CA 097A, Eligibility for ENGL 001A and READ 053. Learn to create dynamic web applications! This course includes basic PHP programming elements, mySQL database basics and how to create a database driven web application using PHP and mySQL. This course is cross listed as CIS 086. Pass/No Pass Option.

**CAP 088A** Introduction to Javascript for the Web (1.0 Lecture) 1.0 UNIT
This is an introductory course on Javascript programming for the web. Students learn to program interactive web pages using Javascript. This course covers Javascript basics, arrays, objects and web forms. This course is cross-listed with GDES*088A.

**CAP 088B** Intermediate Javascript for the Web (2.0 Lecture) 2.0 UNITS
Students learn to create interactive web pages using Javascript. This course builds upon the introductory course to cover web forms, events, dynamic content, cookies and AJAX. This course is cross-listed with GDES*088B.

**CAP 092A** Fundamentals of Web 2.0 & Cloud Technologies (2.0 Lecture) 2.0 UNITS
Want to learn more about Web 2.0 and cloud technologies? This course provides an introduction to Web 2.0 applications, such as social networking sites (SNS), video-sharing sites, wikis, blogs and mashups.

**CAP 092B** Google Apps for Personal Productivity (2.0 Lecture) 2.0 UNITS
This course introduces students to Google Drive and Google applications. Students learn to use GMail, Google Calendar, Document, Spreadsheet, Chrome and Presenter to achieve personal and professional productivity goals. Students also identify opportunities to utilize Google apps to communicate and collaborate within a virtual-social network.

**CAP 096A** Internet Use: Personal and Business 1 1.0 UNIT
Ever get frustrated using the Internet? This class will make the Internet work for you. Is there a difference between the Internet and the World Wide Web? This class will cover how the Internet works, some history, and then hands-on "magic carpet rides" through a few of the billions of meaningful web pages. Learn more about e-mail, Internet fraud, transferring files, protecting your computer from hackers, and more. Leave knowing the "basics" of using the Internet, basics that the casual user does not know at all. This course may be repeated one time. Pass/No Pass Option.

**CAP 096B** Internet Use: Personal and Business 2 1.0 UNIT
Advisory: CA 096A. Travel at warp speed through databases, stock markets, research sites, and government sites. View satellites in orbit as they circle earth live. Experience different web browsers live (Firefox and Opera) and then choose which one you like best. Learn to keep your personal data secure when ordering products over the net. Do in-depth research for business, real estate, or to find a lost relative. Learn to use some basic HTML. This course may be repeated one time. Pass/No Pass Option.

**CAP 097A** Creating Web Pages - Course 1 (1.0 Lecture) 1.0 UNIT
Advisory: CAP 010A. Take the first step in creating a web page for personal and business use. Students acquire basic HTML formatting commands and learn to add color, graphics, lists, and tables to their website. The final project is the creation and publication of a personal or business web page using HTML and/or content management systems.

**CAP 098A** Creating Web Pages using XML - Course 1 1.0 UNIT
CA 010A, CA 070, CA 097A, CA 120, Eligibility for ENGL 108A and READ 053. Students learn how to use XML to create Web pages whose content can be easily customized. Pass/No Pass Option.

**CAP 098B** Web Pages Using XML - Course 2 1.0 UNIT
Advisory: CA 010A, CA 070, CA 097A, CA 120, Eligibility for ENGL 108A and READ 053. Expand knowledge of using XML in Web pages! XML is used with the most popular applications 150 Microsoft Office and Oracle. In this course, create Web pages and learn more advanced XML features in a hands-on lab. Topics include: working with cascading and computational style sheets, element groups and the document object model. Pass/No Pass Option.

**CHILD DEVELOPMENT (CHD)**

**CHD 001** Child, Family, and Community (3.0 Lecture) 3.0 UNITS
This course examines the effect of family and community on a child's development. Families, their functions, and changing family structure are...
examined. The factors and resources for early interventions and inclusions for families with children with differing abilities are explored. Interactions among the child, family, school, peers, media and community are discussed.

CHD 003 Language and Literacy for the Young Child (3.0 Lecture) 3.0 UNITS
This course gives students an in-depth study of language development and the relationship to the reading process. Students develop a series of resource files which can be used as teaching aids in designing language activities and experiences.

CHD 004 Cognitive Experiences for Children (3.0 Lecture) 3.0 UNITS
Will examine theories of cognitive development through research review and observation. Students will use information to plan curriculum.

CHD 005 Music and Movement (3.0 Lecture) 3.0 UNITS
This course is a study of music and movement activities and how these activities affect the child's growth and development. Observation of children is required. Students develop a resource file of songs and music which they can use for curriculum design and lesson plans. Eligibility for ENG 001A and REA 054.

CHD 006 Supervision and Administration (3.0 Lecture) 3.0 UNITS
Prerequisite: CHD 001, CHD 002, and CHD 010. This course gives students skills and information about the effective application of supervision and administration procedures in early care and education programs. This course fulfills the State of California licensing requirements and partially fulfills the requirement for Site Supervisor or Program Director Child Development Permits.

CHD 007 Management Issues in Child Development Programs (3.0 Lecture) 3.0 UNITS
Prerequisite CHD 006 This course is a continuation of CHD 006. The course covers effective strategies for personnel management and leadership in early care and education settings. This course partially fulfills the requirements for the Site Supervisor or Program Director Child Development Permit.

CHD 008A Practicum A (1.5 Lecture/2.0 Lab) 3.5 UNITS
Prerequisite CHD 001 and CHD 008A. This course provides students with an opportunity to work with children in early childhood environments. Included in the course is the study of infectious diseases, preventative health practices, nutrition and health promotion. This course is designed for persons working with children in early childhood environments. Included in the course is the study of infectious diseases, preventative health practices, nutrition and health promotion. This course is designed for persons working with children in early childhood environments. Included in the course is the study of infectious diseases, preventative health practices, nutrition and health promotion.

CHD 008B Practicum B (1.0 Lecture/2.0 Lab) 3.0 UNITS
Prerequisite CHD 008A. Students continue developing child centered curriculum. Classroom management techniques are discussed as well as the effective use of environment. Students work under the supervision of a practicum supervisor at Mission College or may be placed at an approved Mentor Teacher Site. This course is required for an AS degree in Child Development.

CHD 010 Principles and Practices in Education (3.0 Lecture) 3.0 UNITS
This course is an introductory survey of the field of education. Students explore problems and potentials of education in today's world. This course is designed for those who are considering a professional career in education.

CHD 013 Teaching in a Diverse Society (3.0 Lecture) 3.0 UNITS
Prerequisite CHD 001. This course is an examination of the development of social identities and the processes involved. Students explore how these processes impact work with young children and their families while exploring classroom strategies to support all children.

CHD 014 Art and Creative Development of Young Children (3.0 Lecture) 3.0 UNITS
Students examine theories of artistic development and learn how creativity effects the child's overall development. Students will design developmentally appropriate lesson plans focusing on creative expression. Observation of children will be required.
CHD 053 Contemporary Education in a Changing Society 3.0 UNITS
This course is designed for students who are considering a professional career in education. The course focuses on the history, theories, and approaches to education in a culturally and linguistically diverse student population. Students will participate in a Community Service Learning project at a school. Grade Only.

CHINESE (CHI)

CHI 001 First Semester Chinese (5.0 Lecture) 5.0 UNITS
This course is an introduction to the pronunciation and basic grammatical structures of the Mandarin Chinese language. Emphasis is on listening and speaking skills; however, reading and writing are introduced and practiced. Chinese culture is incorporated in the course content.

CHI 002 Second Semester Chinese (5.0 Lecture) 5.0 UNITS
Prerequisite CHI 001 Chinese 002 is a continuation of Chinese 001 and is an elementary level course.

CHI 050A Conversational Chinese/Mandarin (3.0 Lecture) 3.0 UNITS
Course emphasizes conversation and vocabulary building and includes the study of the culture and traditions of the Chinese-speaking world.

CHI 050B Conversational Chinese/Mandarin (3.0 Lecture) 3.0 UNITS
This course is a continuation of CHIN 050A. Students will add to their knowledge of language, culture, & traditions.

COMMUNITY HEALTH (CHL)

CHL 010 Community Health Problems (3.0 Lecture) 3.0 UNITS
Advisory: MAT 900. Introductory course giving overview of the field of community health with a focus on community health problems and issues facing consumers today. Grade Only.

CHEMISTRY (CHM)

CHM 001A General Chemistry (3.0 Lecture/2.0 Lab) 5.0 UNITS
Prerequisite: CHM 002 or High School Chemistry with a "B" or better; and MAT 000C or MAT 000CM. This course is pre-professional chemistry for students planning a career in science related fields. High School Chemistry with a B or better is required.

CHM 001AH General Chemistry I - Honors (3.0 Lecture/2.0 Lab) 5.0 UNITS
Chemistry 001A is the first of a two-semester of general college-level inorganic chemistry series designed for students majoring in biology, chemistry, engineering, pre-med, and other fields demanding rigorous scientific preparation. Not recommended for nursing. Students cannot get credit for both CHM 001A and CHM 001AH. High school Chemistry with a B is also required. This section requires enrollment in the Honors Transfer Project. More information and the online application can be found at http://honors.missioncollege.edu.

CHM 001B General Chemistry (3.0 Lecture/2.0 Lab) 5.0 UNITS
Prerequisite: CHM 001A or CHM 001AH. This course is a continuation of CHM 001A (General Chemistry I) and is intended for majors in chemistry, biological sciences, engineering, and professional programs in medicine and pharmacy. Topics include chemical kinetics, chemical equilibrium, thermodynamics, electrochemistry, chemistry of the transition elements, and selected topics in nuclear chemistry.

CHM 001BH General Chemistry II - Honors (3.0 Lecture/2.0 Lab) 5.0 UNITS
This course is a continuation of CHEM 001A (General Chemistry I) and is intended for majors in chemistry, biological sciences, engineering, and professional programs in medicine and pharmacy. Topics include chemical kinetics, chemical equilibrium, thermodynamics, electrochemistry, chemistry of the transition elements, and selected topics in nuclear chemistry. Students cannot get credit for both CHEM 001B and CHEM 001BH. This section requires enrollment in the Honors Transfer Project. More information and the online application can be found at http://honors.missioncollege.edu.

CHM 002 Introductory Chemistry (3.0 Lecture) 3.0 UNITS
Prerequisite MAT 000C or any MAT course higher than MAT 000C. This is a preprofessional chemistry course designed for students planning a career in science-related fields and to prepare students for CHM 001A.

CHM 002L Introductory Chemistry Laboratory (1.0 Lab) 1.0 UNITS
Corequisite CHM 002 or Prerequisite CHM 002. This course is a laboratory component to accompany CHM 002: Introductory Chemistry.

CHM 007 Biochemistry: An Introduction to Structure, Enzymes, and Metabolism (3.0 Lecture) 3.0 UNITS
Prerequisite CHM 012B or Prerequisite CHM 012BH; or Corequisite CHM 012B or Corequisite CHM 012BH Biological chemistry is the study of the molecular nature of life. This course surveys biological structures (proteins, nucleic acids, carbohydrates, and lipids), enzyme function, and the chemical processes of metabolism.

CHM 012A Organic Chemistry I (3.0 Lecture/2.0 Lab) 5.0 UNITS
Prerequisite: CHM 001B or CHM 001BH. This course is a study of the fundamentals of organic chemistry with emphasis on underlying concepts. It is recommended for chemistry majors, chemical engineering majors, and most biology majors, pre-pharmacy, pre-medical and pre-dental students.

CHM 012AH Organic Chemistry I - Honors (3.0 Lecture/2.0 Lab) 5.0 UNITS
This course is a study of the fundamentals of organic chemistry with emphasis on underlying concepts. It is recommended for chemistry majors, chemical engineering majors, and most biology majors, pre-pharmacy, pre-medical and pre-dental students. Students cannot get credit for both CHEM 012A and CHEM 012AH. This section requires enrollment in the Honors Transfer Project. More information and the online application can be found at http://honors.missioncollege.edu.

CHM 012B Organic Chemistry II (3.0 Lecture/2.0 Lab) 5.0 UNITS
Prerequisite: CHM 012A or CHM 012AH. This course is the continuing study of the fundamentals of organic chemistry with emphasis on underlying concepts. It is recommended for chemistry majors, chemical engineering majors, and most biology majors, pre-pharmacy, pre-medical and pre-dental students.

CHM 012BH Organic Chemistry II - Honors (3.0 Lecture/2.0 Lab) 5.0 UNITS
This honors course is the continuing study of the fundamentals of organic chemistry with emphasis on underlying concepts. It is recommended for chemistry majors, chemical engineering majors, and most biology majors, pre-pharmacy, pre-medical and pre-dental students. Students cannot get credit for both CHM 012B and CHM 012BH. This section requires enrollment in the Honors Transfer Project. More information and the online application can be found at http://honors.missioncollege.edu.

CHM 030A Fundamentals of Chemistry (3.0 Lecture/1.0 Lab) 4.0 UNITS
Prerequisite MAT 903 or Prerequisite MAT 903M or higher CHM 030A is an introductory chemistry course designed for nursing and allied-health majors. Topics include dimensional analysis, inorganic nomenclature, atomic and molecular structure, bonding, chemical reactions, gas laws, solutions, acids-bases, oxidation-reduction, equilibrium and electrolyte systems. This course is not recommended for students majoring in biology or chemistry or for those seeking entry to professional programs in medicine or pharmacy.

CHM 030B Fundamentals of Chemistry (3.0 Lecture/1.0 Lab) 4.0 UNITS
Prerequisite CHM 030A. This course is a continuation of CHM 030A. It is intended for pre-nursing students and is not recommended for science majors or those seeking entry to professional programs in medicine or pharmacy. This course is a survey of the major classes of biological macromolecules and their role in the chemistry of life processes. This course satisfies the general education requirements for non-science majors.
COURSES

CHM 060 Survey of General, Organic, and Biological Chemistry (3.0 Lecture/1.0 Lab) 4.0 UNITS
Prerequisite: MAT 903 or Prerequisite MAT 903M or any higher math chem. 060 is a one-semester survey of General, Organic, and Biological Chemistry designed for students majoring in health sciences such as nursing or physical therapy.

COMPUTER INFORMATION SYSTEMS (CIS)

CIS 007 Python Programming (3.0 Lecture/1.0 Lab) 4.0 UNITS
This is an introductory course in programming using Python. Prior programming experience required. Students learn to design, code, and execute programs using the Python programming language. This course covers basic programming concepts, object-oriented programming, and GUI programming concepts and topics.

CIS 008 Advanced Python Programming (3.0 Lecture/1.0 Lab) 4.0 UNITS
This is an advanced course in Python programming that covers features of the language and its libraries. Students learn about parallel programming using threads and processes, network programming, database programming, and persistence, text processing and regular expressions, and HTML and XML parsing.

CIS 033 Robotics and Embedded System (3.0 Lecture/1.0 Lab) 4.0 UNITS
Advisory: CIS 037A and CIS 039 This course is an introduction to microcontrollers and interfacing. It covers the basic hardware components such as LEDs, switches, motors and sensors. It introduces the components needed for the drone hardware. In addition it includes programming of the microcontroller.

CIS 037A Introduction to C Programming (3.0 Lecture/1.0 Lab) 4.0 UNITS
This course is an introduction to the concepts and methods of computer programming using C language. The course covers data types, expressions, control structures, functions, sequential files, arrays, pointers, strings, string library and ADTs. It also covers low level programming elements such as memory manipulations, pass-by reference pointers, structs and bit level manipulation.

CIS 039 Introduction to Computer Systems (2.5 Lecture/0.5 Lab) 3.0 UNITS
This course provides a solid introduction to computer systems and machine language programming. Students learn the inner working of computer systems, instruction sets, assembly language programming, and data representation. Students also learn how to understand the code that a compiler generates, the memory layout and hierarchy, and the details of linking and loading.

CIS 040 C++ Programming (3.0 Lecture/1.0 Lab) 4.0 UNITS
Advisory: CIS 037A This is an introductory course in programming using C++. Students learn to design, code, and execute programs using the C++ programming language. This course includes control structures, functions, object-oriented programming concepts and topics.

CIS 043 Software Development With Java Programming (3.0 Lecture/1.0 Lab) 4.0 UNITS
This course is an introduction to the concepts and methods of computer programming with an emphasis on OOP (Object-Oriented Programming), using Java programming language. This course also includes packages, GUI (graphical user interface), arrays lists, arrays, streams, and exception handling.

CIS 044 Intro to Data Structures Using Java (3.0 Lecture/1.0 Lab) 4.0 UNITS
This course is an advanced course in Java Programming Language. It covers basic data structures such as stacks, lists, dynamic arrays, trees, and the algorithms of their implementation.

CIS 044A Perl Programming 4.0 UNITS
Advisory: MATH 903 or MATH 903M, Eligibility for ENGL 001A and READ 053. This is an introductory course in Perl programming. This course includes instruction on the basic features of Perl scripting/programming. It covers regular expressions, operators, arrays, functions, file handlers, system interface and exception handling, Pass/No Pass Option.

CIS 045 Linux Essentials I (2.5 Lecture/0.5 Lab) 3.0 UNITS
This is an introductory course in the Linux operating system. Students learn the basic Linux commands and utilities, including files, editors, and shell scripting.

CIS 046 Linux Essentials II (Shell Programming) (2.5 Lecture/0.5 Lab) 3.0 UNITS
This course covers shell scripting in depth. Students learn to program in Bourne Again Shell, including variables, expressions, control structure, files and subroutines. This course also includes networking, internet and Perl scripting.

CIS 047 Linux System Administration I (3.0 Lecture/1.0 Lab) 4.0 UNITS
This is an introductory course in Linux system administration. Students learn hands-on skills for Linux administration including system initialization, file system management, user and services administration and network configuration.

CIS 048 Advanced Linux System Administration (2.0 Lecture/1.0 Lab) 3.0 UNITS
This is an advanced course in the Linux system administration series. Students learn to set-up and configure Linux based servers and networks. The course covers file systems, file sharing, mail server, LDAP, DNS, fire wall, web server and network security.

CIS 055 Introduction to Database and SQL (2.5 Lecture/0.5 Lab) 3.0 UNITS
This course covers the concepts of relational databases and SQL query language. Students learn to create tables, insert data, update data and retrieve records in a database. This course introduces students to widely used database systems such as Oracle, Microsoft SQL server, and MySQL.

CIS 056 Database Essentials - PL/SQL (2.5 Lecture/0.5 Lab) 3.0 UNITS
Advisory: CIS 055 This course is an introduction to database programming and management. It builds upon the basic database and SQL course to cover stored procedures, functions, packages, and database triggers.

CIS 060 Mobile Apps Programming - Iphone (3.0 Lecture/1.0 Lab) 4.0 UNITS
Advisory: CIS 043 or Advisory CIS 040 This course is an introduction to programming Iphone and Ipad applications using an object-oriented paradigm. Students learn to develop simple to more advanced applications using Swift including Model-View-Control framework, graphical-user interface, classes, methods, and messages.

CIS 063 Mobile Apps Programming - Android (3.0 Lecture/1.0 Lab) 4.0 UNITS
This course is an introduction to programming applications for the Android operating system. Students learn to develop simple to more advanced applications using the latest Java technologies and the Android SDK.

CIS 064 Advanced Android Apps Development (2.0 Lecture/1.0 Lab) 3.0 UNITS
Advisory: CIS 063 This is an advanced course on Android application development that builds upon CIS 063, Mobile Apps Programming-Android. Topics include broadcast, services, custom views, widgets, SMS, and device hardware features.

CIS 065 C#.Net Programming (4.0 Lecture) 4.0 UNITS
This course builds upon CIS 65, C# .NET programming, to cover web-based programming including graphical user interfaces with Web forms, ASP.NET and database access. Students learn to design, code, and execute programs using Visual C# programming language in a Microsoft Visual Studio development environment.

CIS 082 Ruby and Ruby on Rails (3.0 Lecture/1.0 Lab) 4.0 UNITS
This is web programming course on agile web development using Ruby on Rails. It covers Ruby on Rails framework, Ruby programming language, Model-
View-Controller (MVC) framework, site layouts, data models, authentication, validations, updates, user management and application deployment.

CIS 086 Web Development with PHP and MySQL (2.0 Lecture/1.0 Lab) 3.0 UNITS
Advisory CA 097A and Advisory CIS 007 This is an introductory course on web server side programming using PHP and MySQL. This course includes basic PHP programming elements, MySQL database basics and how to create a database driven web application using PHP and MySQL.

CIS 088 Advanced Javascript for Web Developers (3.0 Lecture/1.0 Lab) 4.0 UNITS
This is an advanced course on JavaScript. It covers the following advanced topics: IIFEs, Regular expressions, JSON, XML, REST, HTML5 Canvas, jQuery, MVC, single page applications, Angular, client-server interaction, Node.js and Ajax.

COMPUTER INFORMATION TECHNOLOGY (CIT)

CIT 011 Introduction to Computer Hardware and Software (A+) (3.0 Lecture/1.0 Lab) 4.0 UNITS
Advisory: MAT 093 This course covers the fundamentals of computer hardware and software and advanced concepts such as security, networking, mobile devices such as tablets and smartphones, client side virtualization, and the responsibilities of an IT professional. It helps students prepare for entry-level career opportunities in ICT and for the CompTIA A+ certification. It also provides a learning pathway to Cisco CCNA.

CIT 012 Introduction to Networking (Network+) (3.0 Lecture/1.0 Lab) 4.0 UNITS
This course introduces the fundamental building blocks that form the modern network, such as protocols, media, topologies and hardware. It then provides in-depth coverage of the most important concepts in contemporary networking, such as TCP/IP, Ethernet, wireless transmission, virtual networks, security and troubleshooting. This course helps students prepare for entry-level career opportunities in ICT and the CompTIA Network+ certification. It also provides a learning pathway to Cisco CCNA.

CIT 016 CyberSecurity and Ethical Hacking (3.0 Lecture/1.0 Lab) 4.0 UNITS
This course is an introduction to IT security and ethical hacking using the latest operating systems, security techniques, and wireless standards. It also covers the fundamentals of system security, network infrastructure, access control, assessments and audits, cryptography, and organizational security. Students gain hands-on experience with various ethical hacking methods and techniques.

CIT 021 Cisco Network Fundamentals (CISCO-1) (3.0 Lecture/1.0 Lab) 4.0 UNITS
This course is the first of four courses leading to the CCNA designation. This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks.

CIT 022 Routing and Switching Essentials (CISCO-2) (3.0 Lecture/1.0 Lab) 4.0 UNITS
Prerequisite: CIT 021 This course describes the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality.

CIT 023 Scaling Networks (CISCO-3) (3.0 Lecture/1.0 Lab) 4.0 UNITS
Prerequisite: CIT 022 This course is the third of four courses leading to the Cisco Certified Network Associate Routing and Switching (CCNA Routing and Switching) designation. It describes the architecture, components, and operations of routers and switches in a larger and more complex network. Students learn how to configure routers and switches for advanced functionality.

CIT 024 Connecting Networks (CISCO-4) (3.0 Lecture/1.0 Lab) 4.0 UNITS
Prerequisite: CIT 023 This course is the fourth of four courses leading to the CCNA designation. This course discusses the WAN technologies and network services required in Enterprise networks.

CIT 025 Cisco 5-IMPLEMENTING Cisco Ip Routing 4.0 UNITS
Prerequisite: CIT 024. Advisory: Eligibility for ENGL 001A and READ 053. This course teaches students how to implement, monitor, and maintain routing services in an enterprise network. Students will learn how to plan, configure, and verify the implementation of complex enterprise LAN and WAN routing solutions, using a range of routing protocols in IPv4 and IPv6 environments. The course also covers the configuration of secure routing solutions to support branch offices and mobile workers. Comprehensive labs emphasize hands-on learning and practice to reinforce configuration skills. Pass/No Pass Option.

CIT 026 Cisco 6-IMPLEMENTING Cisco Ip Switched Networks 4.0 UNITS
Prerequisite: CIT 024. Advisory: Eligibility for ENGL 001A and READ 053. This course teaches students how to monitor and maintain complex, enterprise routed and switched IP networks. Skills learned include the planning and execution of regular network maintenance, as well as support and troubleshooting using technology-based processes and best practices, in a systematic and ITIL-compliant approach. Extensive labs emphasize hands-on learning and practice to reinforce troubleshooting techniques. Pass/No Pass Option.

CIT 027 Cisco 7 Troubleshooting Cisco Ip Switched Networks 4.0 UNITS
Prerequisite: CIT 024, Eligibility for ENGL 001A and READ 053. This course teaches students how to monitor and maintain complex, enterprise routed and switched IP networks. Students learn how to plan, configure, and verify the implementation of complex enterprise switching solutions. The course also covers the secure integration of VLANs, WLANs, voice, and video into campus networks. Comprehensive labs emphasize hands-on learning and practice to reinforce configuration skills. Pass/No Pass Option.

CIT 046 Designing a Secure Windows 2000 Network 3.0 UNITS
Prerequisite: CIT 044. Advisory: CIS 054B. Students will learn how to provide secure access to local network users, remote users and remote offices, between private and public networks and to partners. Pass/No Pass Option.

CIT 060 NetWare Administration 3.0 UNITS
Corequisite: CIT 160. Advisory: CIS 054B, This is the day to day administration of a NetWare 5 server, clients, printer, etc. Pass/No Pass Option.

CIT 078 Microsoft Server Essentials 1 (3.0 Lecture/1.0 Lab) 4.0 UNITS
Advisory: CIT 011 This course focuses primarily on the installation, storage, “compute features and functionality” and the “networking features and functionality” available in Windows Server 2016. It covers general installation tasks and considerations and the installation and configuration of Nano Server, in addition to the creation and management of images for deployment. It also covers DFS and BranchCache solutions, high performance network features and functionality, and implementation of software-defined networking (SDN) solutions, such as Hyper-V Network Virtualization (HNV) and Network Controller.

CIT 079 Microsoft Server Essentials 2 4.0 UNITS
Advisory: CIT 078 and ENGL 001A. This is the second of three courses leading to the Microsoft Server Certificate program. This course provides the basic knowledge necessary to understand and identify the tasks involved in designing, building, administering, managing and supporting Network Operating Systems based networks. Pass/No Pass Option.

COMMUNICATION STUDIES (COM)

COM 001 Public Speaking (3.0 Lecture) 3.0 UNITS
Advisory: LIB 010 or LIB 010H. Prerequisite: ENG 908 or higher. This is a basic course in speech communication that emphasizes the fundamentals of informative and persuasive speaking presented extemporaneously. The theory and techniques that are stressed include: research, critical evaluation, reasoning, organization, style, and delivery; the role of the listener in oral communication; and understanding the audience-speaker relationship.

COM 001H Public Speaking - Honors (3.0 Lecture) 3.0 UNITS
This honors course emphasizes the fundamentals of informative and persuasive speaking presented extemporaneously. The theory and techniques that are stressed include: research, critical evaluation, reasoning, organization, style, and delivery; the role of the listener in oral communication; and understanding the audience-speaker relationship.
communication; and understanding the audience-speaker relationship. Students cannot receive credit for both COM 001 and COM 001H. This section requires enrollment in the Honors Transfer Project. More information and the online application can be found at http://honors.missioncollege.edu.

COM 004  Small Group Communication (3.0 Lecture)  3.0 UNITS
This course is designed to provide students with theoretical and practical experiences into the interaction, information-sharing, decision-making and problem-solving processes of small groups. In addition, students will demonstrate effective oral communication skills in a variety of situations.

COM 008  Interpersonal Communication (3.0 Lecture)  3.0 UNITS
Students learn theory and skills to improve human communication in personal relationships and the workplace. Topics include effective listening, assertiveness, expressing feelings and ideas clearly, nonverbal communication, and conflict resolution.

COM 012  Introduction to Intercultural Communication (3.0 Lecture)  3.0 UNITS
This is an introductory course examining the effects of culture on interpersonal communication. Emphasis is given to the influence of culture upon the interpretation of the communication act and to the skills that improve intercultural communication.

COM 015  Fundamentals of Communication  3.0 UNITS
This course is designed for students who want to improve their communication skills. Emphasis is on presentational skills, group communication skills, employment interviewing, and interpersonal/intercultural communication in career settings. Grade Only.

COM 019A  Communication Activities (1.0 Lecture)  1.0 UNIT
Students can participate in a variety of speech communication activities such as leading conversation groups for ESL students, intercollegiate competition in individual speaking events and debate, judging high school competition, and designing individual communication projects. Pass/No Pass Option.

COM 019B  Communication Activities  1.0 UNIT
Students can participate in a variety of speech communication activities such as leading conversation groups for ESL students, intercollegiate competition in individual speaking events and debate, judging high school competition, and designing individual communication projects. Pass/No Pass Option.

COM 019C  Communication Activities  1.0 UNIT
Students can participate in a variety of speech communication activities such as leading conversation groups for ESL students, intercollegiate competition in individual speaking events and debate, judging high school competition, and designing individual communication projects. Pass/No Pass Option.

COM 019D  Communication Activities  1.0 UNIT
Students can participate in a variety of speech communication activities such as leading conversation groups for ESL students, intercollegiate competition in individual speaking events and debate, judging high school competition, and designing individual communication projects. Pass/No Pass Option.

COM 020  Argumentation and Debate (3.0 Lecture)  3.0 UNITS
This is a basic course in rhetorical theory and practice. Students engage in argumentation and debate while learning the means of discovering and supporting intelligent decisions and adapting them to particular audiences. Attention is given to distinguishing fact from inference; presenting, analyzing and refuting propositions of fact, value, and policy; identifying and applying types and methods of reasoning; correct use and analysis of evidence, and the identification and analysis of fallacies.

COM 020H  Argumentation and Debate - Honors (3.0 Lecture)  3.0 UNITS
This honors course provides an introduction to rhetorical theory and practice. Students engage in argumentation and debate while learning the means of discovering and supporting intelligent decisions and adapting them to particular audiences. Attention is given to distinguishing fact from inference; presenting, analyzing and refuting propositions of fact, value, and policy; identifying and applying types and methods of reasoning; correct use and analysis of evidence, and the identification and analysis of fallacies. Students cannot receive credit for both COM 020 and COM 020H. This section requires enrollment in the Honors Transfer Project. More information and the online application can be found at http://honors.missioncollege.edu.

COM 022  Voice & Articulation  2.0 UNITS
Advisory: Eligibility for ENGL 001A. This course is designed for students who would benefit from skills improvement in voice and articulation, as needed in communication situations. This course may be repeated 1 time. Pass/No Pass Option.

COM 025  Mass Communication and Society (3.0 Lecture)  3.0 UNITS
This course is a survey of the mass media, including the history of the development of each of the covered media and an examination of the impact of each on the institutions and individuals in our society. Theories of mass communications as they apply to each of the covered media are explored. Covered media include radio, television, magazines, newspapers, books, film, and the Internet.

(COU)

COU 000A  Orientation to Mission College (0.5 Lecture)  0.5 UNITS
This course provides new students with basic information needed to attend college. It includes an orientation to Mission College programs and services, assessment information, registration procedures, an overview of general education requirements, and educational planning.

COU 001  College Survival Skills  2.0 UNITS
This course provides the opportunity to learn self-management and study skills essential for success in college. Pass/No Pass Option.

COU 003  Strategies for Personal and Professional Growth  2.0 UNITS
This course will present students with practical and proven strategies for improving the skills necessary to be successful in college and in their personal lives. Students will explore and practice strategies to set clear goals, make wise choices, improve self management, enhance creative and critical thinking skills, and acquire skills for life-long learning. Credit/No Credit Option.

COU 005  Strategies For Success (3.0 Lecture)  3.0 UNITS
This is a comprehensive course that integrates critical and creative thinking proficiency, personal growth and values, and academic study strategies. Emphasis is on the attainment of life-long success in academic, professional and personal development.

COU 007  University Transfer Planning (1.0 Lecture)  1.0 UNIT
This course provides in-depth information and assistance with the transfer process to 4-year colleges/universities.

COU 007H  University Transfer Planning - Honors (1.0 Lecture)  1.0 UNIT
This honors course provides in-depth information and assistance with the transfer process to 4-year colleges/universities. Students cannot get credit for both COUNS 007 and COUNS 007H. This section requires enrollment in the Honors Transfer Project. More information and the online application can be found at http://honors.missioncollege.edu.

COU 012  Careers and Life Styles (3.0 Lecture)  3.0 UNITS
This course assists the student in examining the components of career choice. Students will explore personal interests, values, abilities and skills. Self assessment instruments will be used to help identify career options. Decision-making strategies, resume writing, interviewing skills and job search techniques will be reviewed.

COU 012A  Careers & Life Styles (1.0 Lecture)  1.0 UNIT
This course assists the student in examining the components of career choice. Students will explore personal interests, values, abilities and skills. Self-assessment instruments will be used to help identify career options.

COU 012C  Careers and Life Styles (1.0 Lecture)  1.0 UNIT
Learn successful job search techniques. Learn to identify your skills and compare them to job requirements. Resume writing, interviewing and networking skills and job search marketing techniques are reviewed. Pass/No Pass Option.
### ECM 001A Principles of Macroeconomics (3.0 Lecture/1.0 Lab) 4.0 UNITS
Prerequisite MAT 903 Advisory MAT 000C This course is a general study of the U.S. economy, including national output, employment, price level, and fiscal and monetary policy. The course also includes an online lab component.

### ENGR 030 Introduction to Computing for Engineers (3.0 Lecture/1.0 Lab) 4.0 UNITS
Advisory: Eligibility for ENG 001A and READ 053. This course is designed to improve students' study skills for college success. Pass/No Pass Option.

### COU 102 Skills for Success 0.5 UNITS
This course provides workshops and activities for participants of special programs (ACCESS, EOPS, CalWORKS, and MESA) that meet the goals of these programs related to student success in college. NOTE: This section is open to students in the programs named above. If you would like to sign up for this section, please contact the prospective program directly. Pass/No Pass Option.

### COU 017 Transfer Success and Life Transitions (3.0 Lecture) 3.0 UNITS
Through the context of transferring from a community college to a university, this course introduces students to appropriate life skills that can help them achieve greater success in their educational, personal, and professional lives. The course is designed specifically for students interested in successfully navigating the process of transferring to a college or university.

### ECN 006 The Global Economy (3.0 Lecture) 3.0 UNITS
This course is an examination of the basic principles of international economics and the relationships between nations and their economic policies. Topics to be covered include the pros and cons of economic globalization, the WTO and IMF, debt relief, outsourcing of jobs, multinational corporations and sweat shops, capital flows, and free trade versus fair trade.

### EGR 010 Introduction to Engineering (3.0 Lecture/1.0 Lab) 4.0 UNITS
Advisory MAT 903 or Advisory MAT 903M Students explore the field of engineering and develop skills to succeed in engineering. Hands-on design projects introduce engineering design and evaluation as well as the problem-solving process. Tours and guest speakers are included.

### COU 023 Becoming a Master Student-Athlete (2.0 Lecture) 2.0 UNITS
In this course student-athletes learn tools for success to be applied in the classroom and in their sport.

### COU 055 Valuing Diversity (3.0 Lecture) 3.0 UNITS
This is a theoretically based course which examines and explores students' multicultural awareness, knowledge base and practices and which allows them to develop new skills. The course addresses the complexities of interpersonal relationships among and between cultures and ethnic groups within our society. Students examine cultural perceptions, while exploring self-concepts, values, beliefs, communication styles, religion, gender, ageism, and lifestyles in order to promote respect for differences and develop a sense of community.

### COU 145A Beginning Study Skills 0.5 UNITS
Advisory: Eligibility for ENGL 001A and READ 053. This course is designed to improve students' study skills for college success. Pass/No Pass Option.

### COU 145B Beginning Study Skills (1.0 Lecture) 1.0 UNITS
This course is designed to assist students to successfully transition to college by providing basic orientation to college and information about study skills and techniques for college success.

### ECONOMICS (ECN)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ECN 001A</td>
<td>Principles of Macroeconomics (3.0 Lecture/1.0 Lab)</td>
<td>4.0 UNITS</td>
</tr>
<tr>
<td>ECN 001AL</td>
<td>Principles of Macroeconomics Lab</td>
<td>1.0 UNIT</td>
</tr>
<tr>
<td>ECN 001B</td>
<td>Principles of Microeconomics (3.0 Lecture/1.0 Lab)</td>
<td>4.0 UNITS</td>
</tr>
<tr>
<td>ECN 001BL</td>
<td>Principles of Microeconomics Lab</td>
<td>1.0 UNIT</td>
</tr>
<tr>
<td>ECN 006</td>
<td>The Global Economy (3.0 Lecture)</td>
<td>3.0 UNITS</td>
</tr>
<tr>
<td>EGR 010</td>
<td>Introduction to Engineering (3.0 Lecture/1.0 Lab)</td>
<td>4.0 UNITS</td>
</tr>
<tr>
<td>EGR 024</td>
<td>Introduction to Circuit Analysis (3.0 Lecture)</td>
<td>3.0 UNITS</td>
</tr>
<tr>
<td>EGR 024L</td>
<td>Introduction to Circuit Analysis Lab (1.0 Lab)</td>
<td>1.0 UNIT</td>
</tr>
<tr>
<td>EGR 025</td>
<td>Engineering Graphics and Design (3.0 Lecture/1.0 Lab)</td>
<td>4.0 UNITS</td>
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<tr>
<td>EGR 026</td>
<td>Engineering Materials (3.0 Lecture/1.0 Lab)</td>
<td>4.0 UNITS</td>
</tr>
<tr>
<td>EGR 030</td>
<td>Introduction to Computing for Engineers (3.0 Lecture/1.0 Lab)</td>
<td>4.0 UNITS</td>
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</tbody>
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### ENGLISH (ENG)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ENG 001A</td>
<td>English Composition (3.0 Lecture)</td>
<td>3.0</td>
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<tr>
<td></td>
<td>Prerequisite: ENG 908 or qualifying score on the English Placement Assessment. (Prior completion of English 108A, an older version of English 908, with a minimum grade of CR may be substituted for this prerequisite course.) Advisory LIB 010 or LIB 010H This English Composition course emphasizes the writing of college level essays, research writing, argument, and analytical reading skills.</td>
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<tr>
<td>ENG 001B</td>
<td>English Composition and Literature (3.0 Lecture)</td>
<td>3.0</td>
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<tr>
<td></td>
<td>Prerequisite: ENG 001A. This course continues emphasis on English composition skills with an introduction to techniques of reading and writing about literature and acquiring skills in analysis and interpretation.</td>
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<tr>
<td>ENG 001C</td>
<td>Clear Thinking in Writing (3.0 Lecture)</td>
<td>3.0</td>
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<tr>
<td></td>
<td>Prerequisite ENG 001A English 001C is an advanced composition course that emphasizes critical thinking, particularly in the reading and writing of arguments.</td>
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<tr>
<td>ENG 005A</td>
<td>English Literature Through 18th Century (3.0 Lecture)</td>
<td>3.0</td>
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<tr>
<td></td>
<td>Prerequisite ENG 908 or Prerequisite Qualify for English 1A on the English Placement test. This course is a survey of English literature that begins with Anglo-Saxon writings and the epic &quot;Beowulf&quot; and extends through the works of the eighteenth century ending with the writings of Samuel Johnson.</td>
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<tr>
<td>ENG 005B</td>
<td>English Literature From 19th Century to Present (3.0 Lecture)</td>
<td>3.0</td>
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<tr>
<td></td>
<td>Prerequisite ENG 908 or Prerequisite Placement at the English 1A level on the English Placement Test This course is a survey of the second half of English literature, from 1900 to the present.</td>
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<tr>
<td>ENG 006B</td>
<td>Survey of World Literature (3.0 Lecture)</td>
<td>3.0</td>
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<tr>
<td></td>
<td>Prerequisite ENG 908 or ENG 905AC World Literature is the study of representative works of world literature from the seventeenth century to the present.</td>
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<tr>
<td>ENG 007A</td>
<td>American Literature to 1865 (3.0 Lecture)</td>
<td>3.0</td>
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<tr>
<td></td>
<td>Advisory: Eligibility for ENG-001A and REA-054. Prerequisite ENG-908 or Qualifying score on the English placement test. This course covers major American writers from the Colonial period through 1865. It begins with William Bradford's works and ends with the works of Walt Whitman.</td>
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<tr>
<td>ENG 007B</td>
<td>American Literature 1865 to Present (3.0 Lecture)</td>
<td>3.0</td>
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<tr>
<td></td>
<td>Prerequisite ENG 908 or Prerequisite Qualifying score on the English placement test. This course covers major American writers from 1865 to the present.</td>
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<tr>
<td>ENG 012</td>
<td>African American Literature 3.0 UNITS</td>
<td>3.0</td>
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<td></td>
<td>Advisory: Eligibility for ENGL 001A and READ 053. This course explores major themes/literary issues in the development of African American literature during the periods of slavery, reconstruction, and the Harlem Renaissance, as well as contemporary writing. Pass/No Pass Option.</td>
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<tr>
<td>ENG 013</td>
<td>Chicana/o-Latina/o Literature (3.0 Lecture)</td>
<td>3.0</td>
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<td>This course provides an introduction to authors, topics, and movements in Chicana/o and Latina/o literature from the late 19th century to the present.</td>
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<tr>
<td>ENG 014</td>
<td>Native American Literature 3.0 UNITS</td>
<td>3.0</td>
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<td></td>
<td>Advisory: Eligibility for ENG 001 A and READ 053. This course involves reading, analysis, and discussion of Native American Literature from the eighteenth through the twenty-first centuries. Issues include literary forms, race, gender, Native American culture, history and politics and their relationship to the formation of Native American literature. Pass/No Pass Option.</td>
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<tr>
<td>ENG 015</td>
<td>Introduction to Film Analysis (3.0 Lecture)</td>
<td>3.0</td>
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<td></td>
<td>Critical analysis of film as a literary art form is covered in this course.</td>
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<tr>
<td>ENG 018</td>
<td>Asian American Literature 3.0 UNITS</td>
<td>3.0</td>
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<td></td>
<td>Prerequisite: Eligibility for ENGL 001A and READ 053. This course covers the reading, analysis and discussion of Asian American Literature from the eighteenth through the twenty-first centuries. Pass/No Pass Option.</td>
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<tr>
<td>ENG 043</td>
<td>Classical Mythology (3.0 Lecture)</td>
<td>3.0</td>
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<td></td>
<td>Advisory: Eligibility for ENG-001A and REA-054. Prerequisite: ENG-908 or ENG 905AC. Classical Mythology is an examination of the major classical myths of Western heritage for an appreciation of their literary value and their influence on modern life and culture.</td>
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<tr>
<td>ENG 048</td>
<td>Introduction to Shakespeare (3.0 Lecture)</td>
<td>3.0</td>
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<td>Advisory ENG 900A/B is a recommended co-requisite for students needing extra help with the writing requirements of ENG 048. Prerequisite ENG 908 or eligibility for ENG 001A based on the English placement test score. This course is an analysis and discussion of a selection of Shakespeare's major plays and poems.</td>
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<tr>
<td>ENG 070</td>
<td>Creative Writing (3.0 Lecture)</td>
<td>3.0</td>
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<td>Students learn and practice various strategies associated with these genres, read and workshop each other's writing, and read/analyze the work of professional writers. Other activities may include attending literary events, hearing visiting writers, and making book presentations.</td>
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<tr>
<td>ENG 090</td>
<td>Writing Skills Lab (0.5 Lab)</td>
<td>0.5</td>
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<td>English 900 is required for any student taking English 903 or 905. It is also advised for students wanting extra help in any English course. This course provides instruction designed to help students improve their writing by having them practice the steps of the writing process and apply writing strategies. Any student may enroll in the course. In order to receive credit, students must complete the required coursework. Pass/No Pass Only.</td>
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<tr>
<td>ENG 095</td>
<td>English Fundamentals (3.0 Lecture)</td>
<td>3.0</td>
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<td></td>
<td>Prerequisite Qualifying score on the English Placement Test or Prerequisite ESL 970GW and Prerequisite ESL 970RV and Prerequisite ESL 970LS ; Corequisite REA 961 and Corequisite ENG 900 Concentration is on the writing of basic expository paragraphs and essays.</td>
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<tr>
<td>ENG 095AC</td>
<td>Accelerated Essay Writing (6.0 Lecture)</td>
<td>6.0</td>
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<td></td>
<td>Prerequisite Qualifying score on the English Placement Test or Prerequisite ESL 970GW and Prerequisite ESL 970RV and Prerequisite ESL 970LS ; Concentration is on the writing and revision process, academic essays and introduction to research skills. The course qualifies students for English 001A.</td>
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<tr>
<td>ENG 098</td>
<td>Effective Writing (3.0 Lecture)</td>
<td>3.0</td>
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<td></td>
<td>Prerequisite: ENG 905 or qualifying score on placement test. Concentration is on the writing process, academic essays, and introduction to research skills. This course prepares and qualifies students for English 001A.</td>
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</tbody>
</table>

### ESL (ESL)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ESL 910LC</td>
<td>Foundations in Listening and Culture</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>Independent study course providing guidance and practice in basic listening, reading and writing skills in the English language. Aspects of American life are also featured. Pass/No Pass Option.</td>
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<tr>
<td>ESL 920LC</td>
<td>Beginning Listening and Culture</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>Independent study course providing guidance in and development of listening, reading, and writing skills in the English language. Facets of American culture will be addressed. Pass/No Pass Option.</td>
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<tr>
<td>ESL 930CC</td>
<td>Child Care Part I (3.0 Lecture)</td>
<td>3.0</td>
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<tr>
<td></td>
<td>Students develop and practice the oral and written skills in standard English necessary within the context of child care and parenting. Students practice listening, speaking, reading, and writing skills useful for communicating with and about children, including day-to-day care, health and safety. This course is intended for parents, grandparents, child care providers, preschool teachers, and students of Child Development who are non-native speakers of English. Pass/No Pass Only.</td>
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<tr>
<td>ESL 930EC</td>
<td>ESL for Child Care Part I (3.0 Lecture)</td>
<td>3.0</td>
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<tr>
<td></td>
<td>Advisory: Qualifying score at the ESL 930 level on the ESL placement test. This high-beginning course develops oral and written communication skills in standard English within the context of child care and parenting. Students</td>
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</tbody>
</table>
practice skills useful for communicating with and about children on topics including day-to-day care, health and safety.

**ESL 930GW** High Beginning Grammar and Writing (3.0 Lecture/0.5 Lab) 3.5 UNITS
Develops basic writing and grammar skills of standard written English.

**ESL 930LC** High Beginning Listening and Culture (3.0 Lecture) 3.0 UNITS
This course provides guidance in and development of listening, reading, and writing skills for high-beginning students of the English language. Topics of American Culture are covered.

**ESL 930LS** High Beginning Listening and Speaking (3.0 Lecture/0.5 Lab) 3.5 UNITS
Advisory Concurrent enrollment in ESL 930GW and ESL 930RV is required. ESL 930RC or a qualifying score on the ESL placement test. This course provides guidance in and development of listening and speaking at the word, phrase, and sentence level. Listening focuses on comprehension of verbal instructions, of vocabulary in context, and of ideas in sentences, monolog, and dialog. Speaking focuses on the clear pronunciation of common words and phrases and the development of basic English pronunciation patterns of stress and intonation. This course includes one and a half hours of laboratory work weekly to facilitate skill development.

**ESL 930PL** Basic Pronunciation and Listening (3.0 Lecture) 3.0 UNITS
This basic pronunciation course includes sound-spelling patterns, important vowel and consonant contrasts, syllables, word stress, and key intonation patterns.

**ESL 930RV** High Beginning Reading and Vocabulary (3.0 Lecture/0.5 Lab) 3.5 UNITS
Advisory ESL 930GW Advisory ESL 930LS Prerequisite Qualifying score on ESL placement test or ESL 930GW. This course focuses on comprehension of simplified articles and stories in English. Students also increase their understanding of and ability to use high frequency vocabulary.

**ESL 940EC** ESL for Child Care Part I (3.0 Lecture) 3.0 UNITS
Advisory: ESL 930ECC, ESL 930GW, ESL 930LS and ESL 930RV This low-intermediate level course develops oral and written English language skills useful for child care and parenting. Students practice skills to communicate with and about young children at different stages of development.

**ESL 940GW** Low Intermediate Grammar and Writing (3.0 Lecture) 3.0 UNITS
Advisory Concurrent enrollment in ESL 940RV and ESL 940LS is recommended. Prerequisite A qualifying score on the ESL placement test or ESL 940GW. This course continues the development of basic grammar and writing skills using level appropriate structures of standard written English.

**ESL 940LC** Low Intermediate Listening and Culture (3.0 Lecture) 3.0 UNITS
Advisory ESL 930LC and/or placement of 940 level on the ESL Placement Test. This distance learning course provides guidance in and development of listening and some writing skills for low-intermediate students of the English language. Topics of American culture are covered.

**ESL 940LS** Low Intermediate Listening and Speaking (3.0 Lecture/0.5 Lab) 3.5 UNITS
Advisory Concurrent enrollment in ESL 940GW and ESL 940RCPrerequisite ESL 930LS or a qualifying score on the ESL placement test. In this course, students practice oral instructions and questions, high-frequency vocabulary, conversations and short lectures. The course continues the development of basic English pronunciation of common words and phrases.

**ESL 940RV** Low Intermediate Reading and Vocabulary (3.0 Lecture) 3.0 UNITS
Advisory Concurrent enrollment in ESL 940GW and ESL 940LS is recommended. Prerequisite A qualifying score on the ESL placement test or ESL 940RV This course focuses on vocabulary development and comprehension of short readings.

**ESL 950CD** English as a Second Language for Child Development Part I 3.0 UNITS
This course develops English language skills necessary for communicating about and with children. The students practice those skills necessary for the listening, speaking, reading and writing tasks which are typically required in Child Development courses and in the child care workplace, including observations of children and reflecting on their development. This course is appropriate for non-native English speakers who are interested in working with and caring for children.

**ESL 950EC** ESL for Child Development: Introduction (3.0 Lecture) 3.0 UNITS
Qualifying score (at the ESL 950 level) on the ESL placement test, or ESL 930ECC and ESL 940EC. This intermediate course develops oral and written English language skills necessary to communicate about a child’s development. Students practice skills to introduce, objectively describe, and reflect on children, their actions, and their interests.

**ESL 950G** Intermediate Grammar (3.0 Lecture) 3.0 UNITS
Prerequisite A qualifying score on the ESL placement test or ESL 940GW Advisory ESL 940RV and Advisory ESL 940LS This course develops student writing fluency through study and practice of compound and complex sentence patterns used in standard written English. It increases student understanding and use of intermediate grammar structures and intermediate sentence patterns used in standard written and spoken English.

**ESL 950PL** Intermediate Pronunciation and Listening (3.0 Lecture/0.5 Lab) 3.5 UNITS
Prerequisite ESL 940LS or a qualifying score on the ESL placement test. Advisory ESL 930PL Intermediate level students receive guidance and practice in effective oral communication in a variety of social and/or vocational situations.

**ESL 950RW** Intermediate Reading and Writing (5.0 Lecture) 5.0 UNITS
Prerequisite ESL 940LS or a qualifying score on the ESL placement test. Advisory ESL 930PL Intermediate level students receive guidance and practice in the study of a variety of fiction and nonfiction reading materials. The course focuses on reading skills such as comprehending main ideas and details in intermediate level readings, the acquisition and use of new vocabulary, and the strategies to understand and interpret content.

**ESL 940EC** ESL for Child Development: Introduction (3.0 Lecture) 3.0 UNITS
Prerequisite Qualifying score on the ESL placement test or ESL 940GW and ESL 940RV Advisory ESL 940LS This course provides guidance in and development of listening, reading, and writing skills for high-beginning students of the English language. Topics of American Culture are covered.

**ESL 940LS** Low Intermediate Listening and Speaking (3.0 Lecture/0.5 Lab) 3.5 UNITS
Advisory Concurrent enrollment in ESL 940GW and ESL 940RCPrerequisite ESL 930LS or a qualifying score on the ESL placement test. In this course, students practice oral instructions and questions, high-frequency vocabulary, conversations and short lectures. The course continues the development of basic English pronunciation of common words and phrases.

**ESL 940RV** Low Intermediate Reading and Vocabulary (3.0 Lecture) 3.0 UNITS
Advisory Concurrent enrollment in ESL 940GW and ESL 940LS is recommended. Prerequisite A qualifying score on the ESL placement test or ESL 940RV This course focuses on vocabulary development and comprehension of short readings.

**ESL 950CD** English as a Second Language for Child Development Part I 3.0 UNITS
This course develops English language skills necessary for communicating about and with children. The students practice those skills necessary for the listening, speaking, reading and writing tasks which are typically required in Child Development courses and in the child care workplace, including observations of children and reflecting on their development. This course is appropriate for non-native English speakers who are interested in working with and caring for children.
| COURSES |
|-----------------|---------------------------|-----------------|
| **ESL 960G**    | High Intermediate Grammar (3.0 Lecture) | 3.0 UNITS      |
| Prerequisite: A qualifying score on the ESL Placement Test; or Prerequisite ESL 950G or Prerequisite ESL 950GW; or Advisories ESL 950LS and ESL 950G. This course develops students' knowledge of grammar at a high-intermediate level. The course focuses comprehensible simple, compound, and complex sentences and various rhetorical styles in cohesive, well-organized, and grammatically correct paragraphs. |

| **ESL 960GW**   | High Intermediate Grammar and Writing (5.0 Lecture) | 5.0 UNITS      |
| Prerequisite: Qualifying score on the ESL Placement Exam; or Prerequisite ESL 950RW and Prerequisite ESL 950G; or Prerequisite ESL 950RW and Prerequisite ESL 950GW Advisory ESL 950LS. This course develops students' knowledge of grammar at a high-intermediate level. The course focuses comprehensible simple, compound, and complex sentences and various rhetorical styles in cohesive, well-organized, and grammatically correct paragraphs. |

| **ESL 960LS**   | High Intermediate Listening and Speaking (3.0 Lecture) | 3.0 UNITS      |
| Advisory Concurrent enrollment in ESL 960G and ESL 960RW. Prerequisite ESL 950LS or a qualifying score on the ESL placement test. This high intermediate course continues to develop students' oral communication skills in a variety of social, business and/or academic situations. |

| **ESL 960RV**   | High Intermediate Reading and Vocabulary (3.0 Lecture) | 3.0 UNITS      |
| Prerequisite: Qualifying score on the ESL Placement test; or Prerequisite ESL 950RW and Prerequisite ESL 950G; or Prerequisite ESL 950RW and Prerequisite ESL 950GW Advisory ESL 950LS. Students learn to recognize main ideas and supporting details, distinguish between fact and opinion, infer meaning, and summarize texts. Academic vocabulary is developed. |

| **ESL 960AM**   | Accent Modification (3.0 Lecture) | 3.0 UNITS      |
| Prerequisite: ESL 960LS or a qualifying score on the ESL placement test. Advisory ESL 950PL. Advanced ESL speakers receive guidance and extensive practice in refining oral pronunciation and listening skills. |

| **ESL 970G**    | Advanced Grammar Review and Editing (3.0 Units) | 3.0 UNITS      |
| Prerequisite: Qualifying score on the ESL Placement test or Prerequisite ESL 960G. This course continues to develop paragraph skills attained in ESL 960RW and introduces the structure of the academic essay in standard written English. Students practice a variety of rhetorical styles and increase competency in controlling grammatical structures relevant to the advanced ESL student. |

| **ESL 970AM**   | Advanced ESL Composition and Grammar (5.0 Lecture) | 5.0 UNITS      |
| Prerequisite: Qualifying score on the ESL Placement test; or Prerequisite ESL 960G and Prerequisite ESL 960RW; or Prerequisite ESL 960G and Prerequisite ESL 960RW. This course continues to develop paragraph skills attained in ESL 960RW and introduces the structure of the academic essay in standard written English. Students practice a variety of rhetorical styles and increase competency in controlling grammatical structures relevant to the advanced ESL student. |

| **ESL 970G**    | Advanced Listening and Speaking (3.0 Lecture) | 3.0 UNITS      |
| Advisory Concurrent enrollment in ESL 970GW and ESL 970RW. Prerequisite ESL 960LS or a qualifying score on the ESL placement test. Advanced level ESL students receive guidance and extensive practice in listening and speaking in academic, professional, and social settings. |

| **ESL 970RV**   | Advanced Reading and Vocabulary (3.0 Lecture) | 3.0 UNITS      |
| Prerequisite: Qualifying score on the ESL placement test; or Prerequisite ESL 960RW and Prerequisite ESL 960GW; or Prerequisite ESL 960G and Prerequisite ESL 960RW Advisory ESL 960LS. Students learn abstract inferencing, rhetorical styles, and summarizing and paraphrasing of various texts. Academic vocabulary is developed. |

| **ESL 970RW**   | Advanced Reading and Writing (5.0 Lecture) | 5.0 UNITS      |
| Prerequisite: Qualifying score on the ESL Placement Test or ESL 960RW and ESL 960G. Advisory: CA 010A, ESL 960LS, and ESL 970G. In this combined class students develop fluency in writing essays in standard written English through the study and practice of thesis statements that express rhetorical notion, essay organization, coherence, and verb sequencing. Students are introduced to abstract inferencing and to making summaries and paraphrases of various texts. Pass/No Pass Option. |

| **ESL 980**     | Effective Writing for Advanced ESL Students (4.0 Lecture) | 4.0 UNITS      |
| Prerequisite: ESL 970LS or Corequisite ESL 970LS; or Prerequisite ESL 970RW and Prerequisite ESL 970GW; or Prerequisite ESL 970RW; or Prerequisite Qualifying score on the ESL placement test. This course is for students whose native language is not English. Students write academic essays and a short research paper. Emphasis is on the writing process, academic essay writing, and introductory research skills. The course also provides intensive practice with the sentence patterns, grammatical structures, and academic vocabulary necessary to produce clear, accurate prose. |

| **ESL 985**     | Writing for ESL Students in English 001A (2.0 Lecture) | 2.0 UNITS      |
| This course is for English 001A students whose native language is not English. This course provides intensive instruction and practice in writing coherent paragraphs and essays for specific audiences. This course includes the drafting, revision, and editing processes as well as instruction in grammar, mechanics, and usage. The course focuses on the sentence patterns, grammatical structures and academic vocabulary necessary to be successful in English 001A. Prerequisite: ENG 905AC or Prerequisite ENG 908. Advisory: ESL 970GW |

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<thead>
<tr>
<th><strong>HOSPITALITY MANAGEMENT (FDR)</strong></th>
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<tbody>
<tr>
<td><strong>FDR 050A</strong></td>
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<tr>
<td>This course is an overview of the Hospitality and Tourism Industry designed to prepare students for careers in hospitality management. Tours and guest lectures highlight this course. Information about the Hospitality Management Program is explained. Advisory: MAT 900.</td>
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| **FDR 051** | Basic Food Preparation (2.0 Lecture/3.0 Lab) | 5.0 UNITS |
| Corequisite: FDR 051S. Advisory: INF 050. It is highly recommended that INF 050 be taken simultaneously with FDR 051. This is a lecture and laboratory course dealing with the fundamentals of food preparation. Students practice the basic principles of food preparation and prepare small quantities from standard recipes, and international cuisines are introduced. Materials Fee $200.00 |

| **FDR 051S** | Introductory Catering Operations Lab (0.5 Lab) | 0.5 UNITS |
| Corequisite: FDR 051. This supplemental instruction class gives students hands-on practice in catering operations. It is a required corequisite to FDR 051: Basic Food Preparation. |

| **FDR 052** | Quantity Foods Operation (1.0 Lecture/5.0 Lab) | 6.0 UNITS |
| Prerequisite: FDR 051. Prerequisite: FDR 055. Prerequisite: FDR 058. Prerequisite FDR 075. Prerequisite INF 050. Corequisite: FDR 052. Advisory: FDR 059. Students engage in and plan an actual cafeteria style lunch operation. |
Action station preparation and catering operations are emphasized. Menu planning, purchasing, commercial kitchen organization, sanitation and safety, and cost accounting are reinforced. A chef’s uniform is required. Lab fee: $150.00. Registered students are responsible for logging on to Angel and retrieving the posted information prior to the first day of class. http://wvmccd.angellearning.com/frames.aspx

FDR 052S  Quantity Foods Lab (0.5 Lab)  0.5 UNITS
This course is a required supplement for students enrolled in FDR 052, Quantity Foods. Students must fulfill 24-30 hours working on department on-site and off-site banquet and catering events. Activities include, but are not limited to: client contact and communication, event planning, service and execution, breakdown and followup.

FDR 053  Restaurant Operations (1.0 Lecture/5.0 Lab)  6.0 UNITS
Prerequisite: FDR 052 Prerequisite: FDR 059 Corequisite: FDR 053S Students engage in ‘live’ restaurant and catering operations. Every student rotates through all positions necessary to carry out service to the public. Front of the house and back of the house uniforms are required. $150 lab fee. Registered students are responsible for logging on to Angel and retrieving posted information prior to the first day of class. class. http://wvmccd.angellearning.com/frames.aspx

FDR 053S  Restaurant Operations Lab (0.5 Arranged Lab)  0.5 UNITS
Corequisite: FDR 053. Students enrolled in Restaurant Operation are required to spend at least 27.5 hours working on department banquet and catering events. The efforts of students who repeat the course are directed towards event supervision and management.

FDR 054  Hotel and Restaurant Accounting (3.0 Lecture)  3.0 UNITS
Study of the basic principles of Hotel and Restaurant accounting.

FDR 055  Food Purchasing (3.0 Lecture)  3.0 UNITS
This course covers two basic areas. Product information which is required for procurement in the food services industry and fundamental principles and purchasing techniques, receiving and storage of supplies.

FDR 058  Food, Beverage and Labor Cost Controls (3.0 Lecture)  3.0 UNITS
Advisory: FDR 051, MAT 900. This course covers the scope of food and beverage control systems used in small and large food and beverage operation. Pre-cost control, inventory systems, cost analysis, food and beverage cost percentages and profit and loss statement are covered. Also included is the cycle of product handling; federal, state and local laws and requirements and licensing as they apply to the Hospitality Industry.

FDR 059  Hospitality Supervision and Leadership (4.0 Lecture)  4.0 UNITS
Advisory: MAT 900, FDR 050A This course approaches hospitality supervision from the perspective of general management theory and the operational functions of supervision.

FDR 060A  Food Service Facilities Planning (3.0 Lecture)  3.0 UNITS
Course designed to familiarize student with complexities of planning, designing and equipping a food service operation.

FDR 072  Intermediate Cuisine (2.0 Lecture/1.0 Lab)  3.0 UNITS
Advisory: FDR 051 Advanced cooking techniques and international cuisines are explored in this class.

FDR 072S  Intermediate Cuisine Lab (0.5 Lab)  0.5 UNITS
Corequisite FDR 072 This supplemental instruction class gives students hands-on practice in catering operations. It is a required corequisite for FDR 072: Intermediate Cuisine.

FDR 073  Fundamentals of Baking and Confectionery (1.0 Lecture/1.0 Lab)  2.0 UNITS
An introduction to baking & pastry work. A uniform is required.

FDR 074  Intermediate Baking and Confectionery (1.0 Lecture/1.0 Lab)  2.0 UNITS
Prerequisite FDR 073 This course is a continuation of FDR 073 with an emphasis on advanced techniques and baking skills and confectionery design. A uniform is required. A $200.00 fee is required at the time of registration.

FDR 075  Menu Planning (2.0 Lecture)  2.0 UNITS
The core competencies covered in menu planning include: marketing, nutritional needs, menu layout and design, calculating basic pricing methods, and evaluating both a sales performance analysis and a menu sales mix analysis.

FDR 076  Sales and Marketing in the Hospitality Industry (3.0 Lecture)  3.0 UNITS
Advisory: MAT 900 This course is designed to provide students with a solid understanding of hospitality sales and marketing, and how daily operations is influenced by marketing effort.

FDR 078  Advanced Baking and Pastry (1.0 Lecture/1.0 Lab)  2.0 UNITS
Advisory: FDR 073, FDR 074. This is class is the third in the series of hands on baking classes offered for the Baking and Pastry certificate or A.S. degree. It covers the most advanced baking and decorating techniques.

FDR 079  Introduction to Food and Wine Pairing (2.0 Lecture/1.0 Lab)  3.0 UNITS
Advisory: FDR 081, FDR 051 Valid proof of age must be provided at first class meeting. Food and wine pairing is explored. Students will produce a variety of ethnic cuisine to pair with wines from around the world. Traditional and non-traditional approaches will be learned. A uniform is required.

FDR 081  Intro to Wines and Spirits of the World (2.0 Lecture)  2.0 UNITS
This class is an introduction to wines and spirits of the world. The class includes lecture and tasting of wines, beers, and spirits of the world. Students taking this course must be over 21; ID showing proof of age is requested at the first class meeting. Materials Fee $100.00

FDR 082  Introduction to Chocolate and Confectionary (1.0 Lecture/1.0 Lab)  2.0 UNITS
This class introduces students to chocolate and sugar confectionary work.

FDR 085  Sustainable Operations for Hosp Industry (2.0 Lecture)  2.0 UNITS
Going green. Everyone talks about it, but what can hospitality operations do to actually reduce their impact on the earth? This class addresses this topic with practical tools for reducing waste and energy use.

FDR 086  Beginning Bread Making (1.0 Lecture/1.0 Lab)  2.0 UNITS
Advisory: FDR 073 Beginning Bread Making introduces baking students to artisan, loaf, flat and hearth breads, their ingredients, and how to utilize them to insure the best results.

FDR 096  Healthy Cuisine (1.0 Lecture/1.0 Lab)  2.0 UNITS
Light and healthy food preparation techniques is introduced, demonstrated and practiced in a hands on food laboratory environment. Emphasis is on the selection of healthier ingredients, and introducing cooking methods to produce lighter and satisfying gourmet cuisine.

FDR 105  Catering Management and Operations (1.0 Lecture/1.0 Lab)  2.0 UNITS
Advisory: MAT 900 Students engage in an in-depth study of managing catering operations. Students gain hands on experience at planning, preparing for and execution of, actual catering events. Uniform requirements are: a chef’s uniform, black slacks/skirt, a white button blouse or shirt.

FDR 106A  Food Trucks: Starting a Mobile Food Business (2.0 Lecture)  2.0 UNITS
Food trucks are the single fastest growing sector of the restaurant industry. Discover how to develop your business, build your brand, and gain a loyal following.
COURSES

FDR 106B   Food Trucks: Mobile Food Operations (1.0 Lecture/0.5 Lab)  1.5 UNITS
Co-requisite INF 050 Prerequisite FDR 106A This is a continuation of Food Truck Course FDR 106A. Students engage in an in-depth study of managing food truck operations. Students gain hands-on experience at planning, preparing for, and execution of actual food truck concession events. Students must be concurrently enrolled in or have completed Sanitation and Safety course INF 050. Students must also have completed FDR 106A with a passing grade. A chef’s uniform and a $100.00 fee is required.

FIRE TECH (FPT)

FPT 051   Fire Protection Organization (3.0 Lecture)  3.0 UNITS
Advisory MAT 903 This course provides an introduction to the history and career opportunities of Fire Protection, the basic chemistry and physics of fire control techniques and fireground strategy and tactics.

FPT 052   Fire Behavior and Combustion (3.0 Lecture)  3.0 UNITS
This course focuses on the theory and fundamentals of how and why fires start, fire spread and control methods; fire chemistry and physics; fire characteristics of materials; extinguishing agents and fire control techniques.

FPT 053   Fire Protection Equipment and Systems (3.0 Lecture)  3.0 UNITS
Advisory FPT 052 This course focuses on utilizing portable fire extinguishing equipment including inspection and maintenance procedures; fundamentals of design and operation of various types of sprinkler systems, special hazard protection systems and associated fire detection and signaling systems; water supply requirements.

FPT 054   Building Construction for Fire Protection (3.0 Lecture)  3.0 UNITS
Advisory MAT 903 Advisory FPT 051 This course provides instruction regarding; theory and fundamentals of building construction; laws, regulations and standards; the Uniform Building Code requirements for fire safety in buildings; classification of buildings by occupancy; elements of building construction and design.

FPT 055   Fire Prevention Technology (3.0 Lecture)  3.0 UNITS
This course provides instruction on the following: the organization and function of fire prevention; fire and life safety inspections; utilization of the Uniform Fire Code and related standards; surveying and mapping procedures; recognition of fire and life hazards; enforcing the solution of a fire hazard; public education aspects of fire prevention; and firefighters’ responsibility in determining the cause of fire.

FPT 056   Hazardous Materials Technology (3.0 Lecture)  3.0 UNITS
Advisory FPT 052 and Advisory MAT 903 This course provides an in-depth study of the materials presenting special problems in fire fighting operations, including the identification of hazardous materials and the handling procedures utilized for emergencies.

FPT 057   Rescue Practices (2.0 Lecture/1.0 Lab)  3.0 UNITS
This lecture and lab course focuses on rescue procedures: patient assessment; controlling bleeding; orthopedic, poison and environmental emergencies; multiple casualties and triage; manual lifts and carries; low angle and confined space rescue; hazardous materials awareness and decontamination procedures; transportation techniques; extraction procedures.

FPT 060   Wildland Fire Technology (1.5 Lecture/1.5 Lab)  3.0 UNITS
This course focuses on the organizational skills necessary for wildland fire protection. The minimum safety equipment required for the field evolutions consists of an OSHA approved helmet with chin strap, impact goggles and leather gloves. Safety equipment and/or uniforms required.

FPT 061   Fundamentals of Fire Suppression (1.5 Lecture/1.5 Lab)  3.0 UNITS
This course provides instruction in the identification and operation of the specific fire service tools and equipment including knots and hitches; portable fire extinguishers; protective breathing apparatus; basic hose evolutions and effective hose lines; fire service ladders and basic salvage and overhaul techniques.

FPT 065   Emergency Medical Technician I Theory (6.0 Lecture)  6.0 UNITS
Prerequisite AHL 011 or American Heart Association BLS for the Healthcare Provider or equivalent. Corequisite FPT 065L and Corequisite FPT 065C This EMT-I training program is designed to prepare individuals to render pre-hospital basic life support. This course meets all the theory requirements for certification as an Emergency Medical Technician –I as specified in the regulations approved by the State of California Emergency Medical Services Authority April, 2013. Students must also successfully complete FPT 065L and FPT 065C concurrently to be eligible for certification.

FPT 065C   Emergency Medical Technician I Clinical Experience (0.5 Lab)  0.5 UNITS
This course meets all the clinical requirements for certification as an Emergency Medical Technician-I as specified in the regulations approved by the State of California Emergency Medical Services Authority in April, 2013. The student needs to show proof of a current TB test.

FPT 065L   Emergency Medical Technician Laboratory (1.5 Lab)  1.5 UNITS
Prerequisite AHL 011 American Heart Association BLS for the Healthcare Provider or equivalent. Corequisite FPT 065 and Corequisite FPT 065C Advisory MAT 903 This course meets all the skills laboratory requirements for certification as an Emergency Medical Technician –I as specified in the regulations approved by the State of California Emergency Medical Services Authority in April, 2013. Students must successfully complete concurrently FPT 065 and FPT 065C to be eligible for certification.

FPT 110   Emergency Medical Technician (3.5 Lab)  3.5 UNITS
Prerequisite: Students must be registered through the South Bay Regional Public Safety Training Consortium; Prerequisite: Current First Aid or Medic First Aid card and Prerequisite: AHO 011 or current CPR card (either American Heart Association/BLS Healthcare Provider level, or American Red Cross/Professional Rescuer level) or Prerequisite: Current Emergency Medical Responder card (preferred) Advisory AHO 003 or a solid understanding of medical terminology Advisory BIO 022 or a solid understanding of human anatomy and physiology. This course provides instruction to the level of Emergency Medical Technician (previously called EMT-I or EMT Basic). Students acquire the knowledge and skills necessary to provide emergency medical care at a basic life support level with a fire, ambulance, or other specialized service.

FPT 111   Fire Fighter I Academy (2.5 Lecture/7.0 Lab)  9.5 UNITS
Prerequisite: Students must be part of the South Bay Regional Public Safety Training Consortium; Prerequisite: AHO 011 or Current CPR card (either American Heart Association/BLS Healthcare Provider level or American Red Cross/Professional Rescuer medical Clearance Form or Current Medical Responder card (preferred) and Prerequisite: HED 004 or current First Aid or Medic First Aid card This academy includes instruction on basic firefighting skills, laws and regulations affecting the fire service. The course provides the student with knowledge and skills to safely perform, under minimal supervision, essential and advanced fire ground tasks, basic rescue, basic fire prevention and fire investigation task and to use, inspect, and maintain firefighting and rescue equipment.

FPT 112   Fire Continued Professional Training (2.5 Lab)  2.5 UNITS
Prerequisite: Students must be part of the South Bay Regional Public Safety Training Consortium, and Prerequisite: PFT 110 or Proof of graduation from a California State Fire Academy This course provides training recommended by the California State Fire Marshal to keep students current with new equipment, policies, laws and skills needed to be prepared in the line of duty. It also provides the student with command awareness and the control techniques required to effectively manage a fire fighter emergency event should the situation occur.

FPT 180   Emergency Medical Technician I Refresher Course (2.0 Lecture)  2.0 UNITS
Prerequisite AHL 011 American Heart Association BLS for the Healthcare Provider or equivalent. Advisory MAT 903 This course meets all the refresher course requirements for recertification as an Emergency Medical Technician-I
as specified in the regulations approved by the State of California Emergency Medical Services Authority on October 10, 2004.

**FRENCH (FRN)**

**FRN 001**  
First Semester French (Elementary Level)  
5.0 UNITS  
Corequisite FRNCH 001L. This course covers basic French grammar, structure, vocabulary and pronunciation in a cultural context.

**FRN 001L**  
French Laboratory (0.5 Lab)  
0.5 UNITS  
Corequisite FRN 001. This self-paced lab course improves language skills, reinforces grammar, presents culture of French-speaking countries through computer programs, CDs, films, current publications, Internet research. This course is required for students enrolled in FRN 001 to further enhance class material, and may also be taken independently by students who are not enrolled in a foreign language course.

**FRN 002**  
Second Semester French (5.0 Lecture)  
5.0 UNITS  
Corequisite FRN 002L. Prerequisite FRN 001 or its equivalent (2 years of high school French). This class is a continuation of FRN 001 with further development of basic skills and structures. Students enrolled in FRN 002 must also enroll in the lab component, FRN 002L.

**FRN 002L**  
Second Semester French Laboratory (Elementary Level) (0.5 Lab)  
0.5 UNITS  
Advisory FRN 001. Advisory Concurrent enrollment in FRN 002 is advisable. This class is a continuation of FRN 001L with further development of basic skills and structure. Students enrolled in FRN 002 must also enroll in the lab component FRN 002L. FRN 002L may also be taken independently by students who are not enrolled in a foreign language course.

**FRN 003**  
Third Semester French (5.0 Lecture)  
5.0 UNITS  
Prerequisite: FRN 002 or its equivalent or permission of instructor. French 003 is a continuation of French 002, emphasizing intensive oral and written skills.

**FRN 004**  
Fourth Semester French (5.0 Lecture)  
5.0 UNITS  
Prerequisite FRN 003 and/or its equivalent FRN 004 is a continuation of FRN 003 emphasizing written and oral skills in the cultural context.

**FRN 005**  
Fifth Semester French (Advanced Level) (5.0 laboratory)  
5.0 UNITS  
Prerequisite: FRNCH 004 or its equivalent. FRNCH 005 is a continuation of FRNCH 004. This course continues the development of reading and writing proficiency. Pass/No Pass Option.

**FRN 006**  
Sixth Semester French (Advanced Level)  
5.0 UNITS  
Prerequisite: FRNCH 005 or its equivalent. FRNCH 006 is a continuation of FRNCH 005. This course further develops reading and writing proficiency. Pass/No Pass Option.

**FRN 050A**  
Basic Conversational French and Culture  
3.0 UNITS  
Beginning practical, conversation and culture. Pass/No Pass Option.

**FRN 050B**  
Basic Conversational French and Culture  
3.0 UNITS  
Advisory: FRNCH 050A. Continuation of basic, practical conversation and culture. Pass/No Pass Option.

**FRN 051A**  
Conversational French and Culture  
3.0 UNITS  
Advisory: FRNCH 050B. Intermediate conversation & culture – reviews basic grammar, develops vocabulary & oral expression. Credit/No Credit Option.

**GRAPHIC DESIGN (GDS)**

**GDS 011**  
The History of Modern Design (3.0 Lecture)  
3.0 UNITS  
This introductory survey course focuses on the history, perception and development of design during the Twentieth Century. The students will develop an understanding of the evolution and role of the Modern Movement and how it affects society. The students will also learn about the evaluation criteria of two-dimensional and three-dimensional design while examining examples of architecture, industrial, graphic, fashion and interior design. The students will be introduced to influential Twentieth Century design figures and their work.

**GDS 012**  
History of Photography (3.0 Lecture)  
3.0 UNITS  
This course surveys the history of photography from its origins to the present. Students examine the practice of photography as an art form and as a form of visual communication in historical, socio-political and cultural contexts.

**GDS 013**  
Creativity and Visual Communication  
3.0 UNITS  
This course will examine the concept of creativity and the way we construct visual messages. The effects of technology on visual communication, the use of the Web and new media techniques will be discussed. Credit/No Credit Option.

**GDS 015**  
Photo-Media and Social Change (3.0 Lecture)  
3.0 UNITS  
This course examines the impact of a wide range of new photographic genres on global social change. This includes analysis of the historical and social context of photojournalism, art photography, and internet multi-media and their influence on culture.

**GDS 035**  
Beginning Graphic Design (2.0 Lecture/1.0 Lab)  
3.0 UNITS  
In this introductory course students learn about the practical, artistic, and technical sides of Graphic Design. Students also begin to gain the necessary critical thinking and technical skills required in the field of Graphic Design. Students are evaluated through a series of hands-on projects. The primary software used in this course is Adobe Photoshop, but multiple software packages are explored.

**GDS 039A**  
3D Animation and Modeling Using Maya (2.0 Lecture/1.0 Lab)  
3.0 UNITS  
Advisory: ART 035A This is an introductory course in learning to make 3D art assets for animation. Students learn modeling and texturing techniques using 3D software. Students learn to design and create 3D movies.

**GDS 039B**  
Intermediate Computer Animation  
3.0 UNITS  
Advisory: Eligibility for ENGL 108A and READ 053, GDES 039A. Students learn advanced animation techniques using 3D modeling and animation software (i.e. Autodesk Maya), including texture mapping and lighting effects. Students create complex 3-dimensional scenes and create animations on different platforms. Pass/No Pass Option.

**GDS 041**  
Mobile Game Design and Development (2.0 Lecture/1.0 Lab)  
3.0 UNITS  
This class focuses on creating mobile games using third party developer tools. Students learn how to design, program, test, and publish their mobile game to various mobile platforms.

**GDS 043A**  
3D Game Character Animation with Maya (2.0 Lecture/1.0 Lab)  
3.0 UNITS  
Advisory: ART 031A, GDS 039A This is an introductory course in character animation using Maya to generate animation. Using pre-built 3D characters, students learn basic animation principles such as squash and stretch, and anticipation. Students learn the controls for 3D mesh characters, and generate walk cycles, run cycles, and action sequences. Students develop concepts for short movies for 3D characters in action sequences, and add lighting and textures to their scenes in making their animated movie shorts.

**GDS 045**  
Web Design with HTML and CSS (2.0 Lecture/1.0 Lab)  
3.0 UNITS  
This introductory course focuses on the design and technical skills required to create effective web designs using HTML, CSS and a variety of software packages. The basic principles of type, color, and layout are explored, along with necessary basic coding skills. Emphasis is placed on using industry standard workflows and techniques to create compelling designs.

**GDS 046**  
Web Design and Development 2 (2.0 Lecture/1.0 Lab)  
3.0 UNITS  
Advisory: GDS 045 This intermediate level course focuses both on the creative design and the appropriate software and coding skills required in web design and front end web development. This course provides an intermediate level content continuation of the GDS 045 course. Advanced design principles of type, color, illustration and layout are explored, along with intermediate to advanced HTML and CSS. There is also an introduction to Javascript and other
relevant technologies. A basic understanding of computer system operation is required.

GDS 047 Web Animation (2.0 Lecture/1.0 Lab) 3.0 UNITS
This introductory course focuses on the skills required to create effective web animations using a variety of software applications. Principles of animation, visual communication, UI design, and web and mobile optimization are explored. A basic understanding of computer system operation is assumed. Eligibility for ENG 001A and REA 054 Advisory GDS 045.

GDS 049 Wordpress and Content Management Systems (2.0 Lecture/1.0 Lab) 3.0 UNITS
Advisory: CAP 088A, GDS 046 In this advanced web design and development class, students use WordPress to build dynamic websites that can be updated easily. Students are also introduced to PHP & MySQL, theme customization, and other CMS frameworks.

GDS 051 Mobile Application and Web Development With Web Standards (2.0 Lecture/1.0 Lab) 3.0 UNITS
Advisory: GDS 045, GDS 046 This class focuses on using web technologies like HTML5 and CSS3 to create rich web applications as well as native mobile applications. Students learn to develop media using web standards. Current options for delivery methods on mobile devices are explored.

GDS 055A Design Agency and Branding (2.0 Lecture/1.0 Lab) 3.0 UNITS
Advisory: GDS 035, GDS 062 In a real-world environment, this course is designed to increase the skills and abilities needed by students in the design industry, with an emphasis on creating brands and promoting brand awareness across all media, including interactive and print. The course includes project-based exploration of creative ideas in logo design, concept work, layout, package design, advertising, and more. The students, with active faculty involvement and supervision, work on real-world projects responding to design needs of clients.

GDS 056 Advanced Presentation Design (2.0 Lecture/1.0 Lab) 3.0 UNITS
Advisory: CAP 046D, CAP 046E This class focuses on the visual communication skills necessary to produce compelling presentations. Topic include color design, animation, interaction, storytelling, and advanced technical skills used in the production of assets for presentation. The class assumes an existing intermediate knowledge of Microsoft PowerPoint.

GDS 060 Page Layout and Typography (2.0 Lecture/1.0 Lab) 3.0 UNITS
Advisory: GDS 035 This is a foundation course for graphic designers. The focus of the course is on developing an understanding of the basic principles of page layout and typography along with a working knowledge of appropriate software including Adobe Indesign, and creating work for inclusion in a portfolio. Practical design projects examine the interaction of form and message, with emphasis on fundamental theory, i.e., elements, principles, and attributes of typographical and layout design. This course assumes basic understanding of computer systems.

GDS 062 Introduction to Adobe Illustrator (2.0 Lecture/1.0 Lab) 3.0 UNITS
In this course, students use Adobe Illustrator to create vector-based graphics such as technical illustrations, logos, photo-realistic images, and other artwork used in print publications and on the web. Techniques used by industry professionals are emphasized.

GDS 063 Introduction to Adobe InDesign (2.0 Lecture/1.0 Lab) 3.0 UNITS
Advisory: GDS 064 This introductory level course in page layout uses Adobe InDesign software. Students assemble a variety of printed pieces such as booklets, brochures, magazines, newspapers, newsletters, and other communication materials. Emphasis is on learning techniques used by graphics professionals to create full-color pieces integrating text, photos, and illustrations.

GDS 064 Introduction to Adobe Photoshop (2.0 Lecture/1.0 Lab) 3.0 UNITS
This is a beginning Adobe Photoshop course for graphic designers, artists, and photographers. Students learn how to create original artwork, refine photographs and manipulate digital imagery. Basic design principles are explored.
in motion, keyframe animation, masking/keying, tracking, color correction and compositing. The focus is on creative visual communication. The student develops skill in the use of After Effects, as well as other appropriate software. Access to a camera capable of recording video, and a basic understanding of Adobe Photoshop and computer system operation are recommended.

**GDS 082**  
Game Design and Architecture (2.0 Lecture/1.0 Lab)  
3.0 UNITS
This introductory course focuses on the planning and methodology of game design. The students will develop an understanding of conceptual game development and, game architecture. The students will also examine and evaluate a number of case studies. A basic understanding of computer system operation is required.

**GDS 083**  
Designing Websites for e-Commerce  
3.0 UNITS
Advisory: GDSE 045, and GDSE 046 or GDSE 047. This course focuses on the planning and methodology of e-commerce Web site design. The students will develop an understanding of the strategic interaction of the business and design processes. Focus will be on creating elements of brand identity for a small business on the Web. The course also includes in-depth examination and comparison of corporate identity, branding and emotional branding in both the old and new economies. The students will also examine and evaluate a number of case studies. Pass/No Pass Option.

**GDS 085**  
Professional Portfolio and Design (1.0 Lecture/1.0 Lab)  
2.0 UNITS
Advisory: GDS 035, GDS 055A This course introduces students to the basic principles and skills related to building a professional portfolio, as well as preparing for work as a freelance designer. The student prepares the necessary materials such as logos, resumes, business cards, stationery, etc. to present a professional image. The course includes portfolio evaluation, self-promotional techniques, interviewing techniques, and the procedures to set up a successful design office. The students also interact with professionals in the field of design. Credit/No Credit Option

**GDS 088**  
Introduction to Javascript for the Web (1.0 Lecture)  
1.0 UNIT
Advisory: CAP 097A This is an introductory course on JavaScript programming for the web. Students learn to program interactive web pages using JavaScript. This course covers JavaScript basics, arrays, objects, an introduction to DOM scripting and debugging. (This course is cross-listed as CA 088A.)

**GDS 088B**  
Intermediate Javascript for the Web (2.0 Lecture)  
2.0 UNITS
Advisory: CAP 088A Students learn to create interactive web pages using JavaScript. This course builds on CA088A (Introduction to JavaScript) to cover advanced objects, Web forms, events, DOM Scripting dynamic content, cookies and Web storage, and an introduction to advanced topics such as AJAX and JavaScript libraries. This course is also cross-listed as CA 088B.

**GDS 089**  
Javascript 1 (2.0 Lecture/1.0 Lab)  
3.0 UNITS
Advisory: GDS 045 This is an introductory course on using JavaScript to develop applications for the web. Students learn to develop interactive web pages using JavaScript. The course covers JavaScript basics, arrays, objects, an introduction to DOM scripting and debugging. Intermediate topics include advanced objects, Web forms, events, DOM Scripting dynamic content, cookies and Web storage, and an introduction to advanced topics such as AJAX and JavaScript libraries.

**GEOGRAPHY (GEO)**

**GEO 001**  
Introduction to Physical Geography (3.0 Lecture)  
3.0 UNITS
This course examines the interactions among weather and climate, water resources, landforms, and living things. Human impact on all aspects of the physical environment and use of geospatial technology are explored.

**GEO 002**  
Introduction to Cultural Geography (3.0 Lecture)  
3.0 UNITS
People's relationship to the land; descriptions of the technologies and human endeavors of the world's regions.

**GEO 004**  
The Developing World  
3.0 UNITS
Advisory: Eligibility for ENGL 001A and READ 054. In this course, students examine conditions among developing nations using an interdisciplinary approach. Analyses of development and underdevelopment along historical, political, economic, technological, social and environmental lines are addressed. Current issues particular to the developing world today are examined. This course is cross-listed as GLOBL 004 and SOCSC 004.

**GEO 006**  
World Regional Geography (3.0 Lecture)  
3.0 UNITS
World Regional Geography deals with the study of a particular group of world regions or realms as each compares with the rest of the world in terms of both physical and cultural landscapes. It uses the fundamental geographic concepts and themes to provide a framework for understanding development patterns around the world. Development is viewed from the perspective of the natural environment that provides the basis for development as well as the cultural, social, political, and the economic factors that vary from region to region.

**GEO 008**  
Environmental Geography  
3.0 UNITS
This course studies the interrelationships among human beings and their environment, within and among nations. The emphasis is on human and environmental factors and processes as they impact themselves and others as global citizens.

**GEO 010**  
Development and Underdevelopment (3.0 Lecture)  
3.0 UNITS
This course examines development as it relates to the processes of development and underdevelopment that have occurred around the world, with emphasis on the historical, political, economic, technological, social, and environmental factors that have contributed to development and underdevelopment. The course is designed to provide a broad perspective on the development and underdevelopment processes that are occurring around the world today.

**GEO 012**  
Globalization and Foreign Policy  
3.0 UNITS
This course introduces students to the study of global systems and their interdependence. The class discusses the origins and growth of cultural values and technological, political, economic and environmental systems. The students compare and contrast basic world views inherent in these systems as they impact themselves and others as global citizens.

**GEO 009**  
Drug Abuse and Human Disease  
2.0 UNITS

**HEALTH EDUCATION (HED)**

**HED 002**  
Health and Lifestyle (3.0 Lecture)  
3.0 UNITS
Advisory: CAP 033A This course is designed to provide students with the learning experiences that will lead to a better understanding of the concept of a healthy lifestyle. Major topics covered in the class will include understanding behavior and change, relationships, cardiovascular health, fitness, nutrition and weight control, stress management, drug and alcohol abuse, reproductive issues, self-care and the use of the health care system.

**HED 004**  
First Aid and CPR (0.5 Lecture)  
0.5 UNITS
This course covers Adult/Child/Infant CPR/AED (automated external defibrillator) and first aid instruction and skills. A certificate of completion will be given. American Heart Association fee must be paid to Mission Cashier prior to first class meeting. Students' workbook (text) must be purchased and read before class.

**HED 009**  
Drug Abuse and Human Disease  
2.0 UNITS
### HISTORY (HIS)

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<tr>
<td>HIS 004A</td>
<td>History of Western Civilization (3.0 Lecture)</td>
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<tr>
<td>HIS 004AH</td>
<td>History of Western Civilization - Honors (3.0 Lecture)</td>
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<td>History of Western Civilization (3.0 Lecture)</td>
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<td>HIS 004BH</td>
<td>History of Western Civilization - Honors (3.0 Lecture)</td>
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<td>HIS 015</td>
<td>World History to 1500 (3.0 Lecture)</td>
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<td>HIS 015H</td>
<td>World History to 1500 - Honors (3.0 Lecture)</td>
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<td>HIS 016</td>
<td>World History Since 1500 (3.0 Lecture)</td>
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<td>HIS 016H</td>
<td>World History Since 1500 - Honors (3.0 Lecture)</td>
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<td>HIS 017A</td>
<td>History of the United States to 1877 (3.0 Lecture)</td>
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<td>History of the United States to 1877 - Honors (3.0 Lecture)</td>
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<td>HIS 020</td>
<td>History and Geography of California (3.0 Lecture)</td>
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<tr>
<td>HIS 031</td>
<td>History of East Asia (3.0 Lecture)</td>
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<tr>
<td>HIS 033</td>
<td>Women's Issues Past and Present (3.0 Lecture)</td>
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<td>HIS 033H</td>
<td>Women's Issues Past and Present - Honors (3.0 Lecture)</td>
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<tr>
<td>HIS 037</td>
<td>The Environment (3.0 Lecture)</td>
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<td>HIS 037H</td>
<td>The Environment - Honors (3.0 Lecture)</td>
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### HMT

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<tr>
<td>HMT 075</td>
<td>Housekeeping in Hotels, Motels and Institutions (3.0 Lecture)</td>
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<tr>
<td>HMT 076</td>
<td>Hotel and Motel Front Office Management (3.0 Lecture)</td>
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### HEALTH OCCUPATIONS (HOC)

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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>HOC 001</td>
<td>Medical Terminology (3.0 Lecture)</td>
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<tr>
<td>HOC 002</td>
<td>Cardiopulmonary Resuscitation (0.5 Lecture)</td>
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<tr>
<td>HOC 003</td>
<td>Emergency Disaster Preparedness for Allied Health Professionals (0.5 Lecture)</td>
<td>0.5</td>
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<td>COURSES</td>
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<tr>
<td><strong>HOC 004</strong> First Aid and CPR (0.5 Lecture)</td>
<td>0.5 UNITS</td>
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<tr>
<td>This course covers Adult/Child/Infant CPR/AED (automated external defibrillator) and first aid instruction and skills. A certificate of completion is given to successful participants. American Heart Association fee must be paid to Mission Cashier prior to first class meeting. Students' workbook (text) must be purchased and read before class.</td>
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| **HOC 005** Introduction to Community Health Worker (3.0 Lecture) | 3.0 UNITS |
| Learn the various roles, skills and function of Community Health Workers. This course introduces important core competencies for providing direct services, including, cultural humility, scope of practice, ethics, client-centered coaching, care management, and home visiting. Eligibility for ENGL 001A and READ 054 |

| **HOC 006** Personal Health and Life Style (3.0 Lecture) | 3.0 UNITS |
| This course is designed to provide students with learning experiences that will lead to a better understanding of the concept of a healthy lifestyle. Major topics covered in the class are: understanding the dynamics of behavior and change, relationships, cardiovascular health, fitness, nutrition and weight control, stress management, drug and alcohol abuse, reproductive issues, self-care and utilization of the health care system. Eligibility for ENGL 001A and READ 054 Advisory: CAP 033A |

| **HOC 008** Chronic Disease Management and Community Wellness (3.0 Lecture) | 3.0 UNITS |
| This is an introductory community health course with a focus on community health issues, including chronic disease and substance abuse, and management strategies that address these problems. This course is required for students in the community health worker program and individuals working in residential care agencies. Eligibility for ENGL 001A and READ 054 Advisory: MAT 900 |

| **HOC 010** Health Communication: Health Literacy, Health Coaching, and Motivational Interviewing (3.0 Lecture) | 3.0 UNITS |
| Students will learn methods of communication in healthcare: health literacy, health coaching, group dynamics, and motivational interviewing. In addition, students will demonstrate an understanding of how one's culture affects health behavior and will develop a client-informed plan. Advisory: MAT 900 |

| **HOC 011** | 0.5 UNITS |
| The course is designed to prepare the student to provide mouth-to-mouth rescue breathing and closed chest heart compression (Basic Life Support) to a victim of sudden death. This course is taught according to guidelines of the American Heart Association. AHA CPR/AED course completion cards are issued to students who successfully meet course objectives. The student is required to read the textbook "BLS for Healthcare Providers" prior to attending class. |

| **HOC 012** Community Health Worker Internship (1.0 Lecture / 2.0 Arranged Lab) | 3.0 UNITS |
| This internship course provides students with an opportunity to learn in a work setting while obtaining practical experience in community health work. Students will contract for a minimum of 100 hours at an internship placement and participate in a weekly seminar to discuss their fieldwork and apply academic theory to practice. Eligibility for ENGL 001A and READ 054 Prerequisite: HOC 005 |

| **HOC 019A** Nursing Assistant Fundamentals (3.5 Lecture/0.5 Lab) | 4.0 UNITS |
| This beginning course in nursing fundamentals gives the student a foundation in the basic scientific principles required to provide health care in a skilled nursing facility. Students who successfully complete this course, along with HOC 019B, are eligible to apply for the California Certified Nurse Assistant (CNA) examination. (Advisory: HED-004) |

| **HOC 019B** Nursing Assistant Clinical Experience (2.0 Lab) | 2.0 UNITS |
| This clinical practicum provides the Nursing Assistant student with experience in the application of basic patient skills in a skilled nursing facility. Students who successfully complete this course, along with HOC 019A, are eligible to apply for the examination National Nurses Aide Assessment Program (NNAAP) examination. Eligibility for ENG 001A and READ 054 Corequisite HOC 019A Students must pass the course with 75% or higher. |

| **HOC 019F** Home Health Aide Fundamentals (1.5 Lecture) | 1.5 UNITS |
| This course introduces the Certified Nurse Assistant (CNA) to the basic concepts of home care nursing. Students learn entry-level skills for employment as a home health aide. Successful completion of this course, along with HO 019G, provides eligibility for a California Home Health Aide (HHA) certificate. |

| **HOC 019G** Home Health Aide Clinical (0.5 Arranged Lab) | 0.5 UNITS |
| This clinical practicum provides the student with experience in basic nursing skills in a skilled nursing facility/home setting. Students who successfully complete this course along with HO 019F are eligible to apply for the California Home Health Aide Certificate. |

| **HOC 020** Introduction to Professional Health Care (0.5 Lecture) | 0.5 UNITS |
| This course acquaints incoming vocational nursing and psychiatric technician students with Mission College, available student services, and Health Occupations career track requirements. It covers college orientation and information regarding the Health Occupation Program policies and procedures, career opportunities, stress management, study skills, and self-awareness exercises. |

| **HOC 022** Patient Nursing Care Fundamentals (1.5 Lecture) | 1.5 UNITS |
| This course introduces vocational nursing and psychiatric technician students to the theoretical foundations and basic skills essential to providing safe, patient-centered, quality health care. The basic skills include scopes of practice and other legal and ethics principles and the nursing process as related to therapeutic communication, documentation, cultural sensitivity, body mechanics and mobility, infection prevention and control, hygiene, safety, basic and focused physical and psychosocial assessment, nutritional requirements, elimination needs, respirations and oxygen delivery, wound prevention and care, and administration of medications. |

| **HOC 023A** Beg. Medical-Surgical Nursing Theory (2.5 Lecture) | 2.5 UNITS |
| Prerequisite: Possess current California Nurse Assistant certification (CNA), and Acceptance into Health Occupations Vocational Nursing or Psychiatric Technician career track. Prerequisite: AHL 011 Students must have current Am. Heart Assoc. Healthcare Provider or Am. Red Cross Professional Rescuer CPR/AED certification; Prerequisite: BIO 022, or BIO 047 and BIO 048; HOC 020; Corequisite: HOC 022; HOC 023B; HOC 023C (For PT students only); HOC 024; HOC 025A (For VN students) or HOC 025B (for PT students); HOC 026A (for VN students) or HOC 026B (for PT students); HOC 027; HOC 028 May be taken as a pre-requisite: PSY 001 (For VN students) or PSY 012 (For PT students); Advisory: ENG 001A, MAT 903 or HED 002. This course focuses on beginning level nursing care and interventions for clients with diseases or disorders of the musculoskeletal, neurological, neurosensory and reproductive systems. |

| **HOC 023B** Beg. Cognitive Disabilities - Mental Health Theory (1.0 Lecture) | 1.0 UNIT |
| This beginning course is designed to present theoretical principles and current biological, psychosocial and socio-cultural concepts of abnormal and maladaptive behavior to vocational nursing and psychiatric technician students. Assessment, classification and current therapies for mental health disorders are discussed and explored. |

| **HOC 023C** Beg. Cognitive Disabilities - Developmental Disability Theory (1.0 Lecture) | 1.0 UNIT |
| This beginning course is designed to provide the Psychiatric Technician student with an understanding of the principles of providing care to the intellectually and developmentally disabled client, including therapeutic communication, integration of developmental theory, behavioral and functional assessment, behavioral modification intervention, and documentation. |

<p>| <strong>HOC 024</strong> Pharmacology A (1.0 Lecture) | 1.0 UNIT |
| This beginning pharmacology course provides the vocational nursing and psychiatric technician student with the basic principles of pharmacology for safe administration of pharmacological agents to patients with disorders of the musculoskeletal, neurological, neurosensory, and reproductive systems. |</p>
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<tr>
<th>COURSES</th>
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<tbody>
<tr>
<td>HOC 025A</td>
<td>Fundamentals Skills/Simulation Lab (1.0 Lab) 1.0 UNIT</td>
</tr>
<tr>
<td>This course allows the beginning nursing student the opportunity for applying theoretical concepts and developing clinical competence of basic nursing skills in a controlled laboratory setting. Simulated scenarios reinforce planning and implementing interventions aimed to meet the needs of the medical-surgical and geriatric patients with musculoskeletal, neurological, neurosensory, reproductive and mental health disorders in inpatient and outpatient settings.</td>
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<tr>
<td>HOC 025B</td>
<td>Fundamentals Skills/Simulation Lab (1.0 Lab) 1.0 UNIT</td>
</tr>
<tr>
<td>This course allows the beginning psychiatric technician student the opportunity for applying theoretical concepts and developing clinical competence of basic nursing skills in a controlled laboratory setting. Simulated scenarios reinforce planning and implementing interventions aimed to meet the needs of patients with musculoskeletal, neurological, neurosensory, reproductive, mental health and developmental disability disorders in inpatient and outpatient settings.</td>
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<tr>
<td>HOC 026A</td>
<td>Beg. Clinical Practicum (5.0 Lab) 5.0 UNITS</td>
</tr>
<tr>
<td>This is a foundational clinical experiential course in which beginning vocational nursing students apply theoretical concepts, basic nursing skills, the nursing process and therapeutic communication to delivery of safe, quality healthcare to patients with medical-surgical and mental health problems under direct supervision of the instructor. Pass/No Pass Only</td>
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<tr>
<td>HOC 028</td>
<td>Care of the Geriatric Patient (1.0 Lecture) 1.0 UNIT</td>
</tr>
<tr>
<td>This course is designed to give the vocational nursing student an introduction to the care of the older adult client in both an institutional and a community setting. This course is a required course that must be completed prior to students beginning the Health Occupations VN career track second semester. Non-Health Occupations students may enroll in this course as well.</td>
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<tr>
<td>HOC 032A</td>
<td>Int. Medical/Surgical Nursing Theory (2.0 Lecture) 2.0 UNITS</td>
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<tr>
<td>This course focuses on intermediate level nursing care and interventions for clients with diseases or disorders of the cardiac, vascular, respiratory, and urinary systems.</td>
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<tr>
<td>HOC 032B</td>
<td>Int. Project-Based Medical/Surgical Reasoning (1.5 Lecture) 1.5 UNITS</td>
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<tr>
<td>This course is designed to provide practice for the intermediate level vocational nursing student with principal problem-solving and critical reasoning through a variety of group activities and projects related to patients with cardiac, vascular, respiratory, and genitourinary disorders.</td>
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<tr>
<td>HOC 033C</td>
<td>Int. Cognitive Disabilities - Mental Health Theory (2.5 Lecture) 2.5 UNITS</td>
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<tr>
<td>This intermediate continuation course is designed to integrate and apply previously learned concepts, present theoretical principles and current biological, psychosocial and socio-cultural concepts of abnormal and maladaptive behavior to psychiatric technician students. Students plan and evaluate therapeutic patient-centered goals and interventions used to establish the group process. Includes two hours of related pharmacology content.</td>
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<tr>
<td>HOC 033D</td>
<td>Int. Cognitive Disabilities - Devel. Disability Theory (2.5 Lecture) 2.5 UNITS</td>
</tr>
<tr>
<td>This intermediate continuation course is designed to present to the Psychiatric Technician student the opportunity to integrate healthcare concepts with the principles of behavioral modification to provide physical, intellectual and behavioral care for developmentally and intellectually disabled individuals.</td>
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<tr>
<td>HOC 034</td>
<td>Pharmacology B (1.0 Lecture) 1.0 UNIT</td>
</tr>
<tr>
<td>This intermediate continuation pharmacology course focuses on safe administration and patient teaching principles for patients with disorders of the cardiac, vascular, respiratory and urinary systems.</td>
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<tr>
<td>HOC 035A</td>
<td>Int. Nursing Skills/Simulation Lab (1.0 Lab) 1.0 UNIT</td>
</tr>
<tr>
<td>This course integrates intermediate nursing skills, theoretical concepts and clinical competence in a controlled laboratory setting using case studies, group care planning, simulation scenarios and class discussions. Simulated scenarios reinforce planning and implementing interventions aimed to meet the needs of patients with respiratory, cardiac, vascular, and urinary disorders, and obstetrical and neonatal patients in inpatient and outpatient settings.</td>
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<tr>
<td>HOC 037</td>
<td>Int. Care of the Neonate (2.0 Lecture) 2.0 UNITS</td>
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<tr>
<td>This intermediate clinical course is designed to give the intermediate nursing student an introduction to the care of the neonate in both the medical-surgical and neonatal intensive care settings. This course is a required course that must be completed prior to students beginning the Health Occupations VN career track second semester. Non-Health Occupations students may enroll in this course as well.</td>
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<tr>
<td>HOC 038</td>
<td>Int. Care of the Neonate Intensive Care (2.0 Lecture) 2.0 UNITS</td>
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<tr>
<td>This intermediate course is designed to give the intermediate nursing student an introduction to the care of the neonate in both the medical-surgical and neonatal intensive care settings. This course is a required course that must be completed prior to students beginning the Health Occupations VN career track second semester. Non-Health Occupations students may enroll in this course as well.</td>
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<tr>
<td>HOC 039</td>
<td>Int. Care of the Pediatric Patient (2.0 Lecture) 2.0 UNITS</td>
</tr>
<tr>
<td>This intermediate course is designed to give the intermediate nursing student an introduction to the care of the pediatric patient in both the medical-surgical and pediatrics intensive care settings. This course is a required course that must be completed prior to students beginning the Health Occupations VN career track second semester. Non-Health Occupations students may enroll in this course as well.</td>
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<tr>
<td>HOC 040</td>
<td>Int. Care of the Pediatric Patient Intensive Care (2.0 Lecture) 2.0 UNITS</td>
</tr>
<tr>
<td>This intermediate course is designed to give the intermediate nursing student an introduction to the care of the pediatric patient in both the medical-surgical and pediatrics intensive care settings. This course is a required course that must be completed prior to students beginning the Health Occupations VN career track second semester. Non-Health Occupations students may enroll in this course as well.</td>
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diagnostics, assessing manifestations experienced by the patient, identifying and implementing evidence-based nursing interventions, and evaluating outcomes. Students identify the roles of vocational nurses and psychiatric technicians in collaborating with other health team members and planning therapeutic management of patients with conditions affecting the gastrointestinal, integumentary, endocrine, and hematological systems. Includes six hours of related pharmacology content.

HOC 043B Advanced Project-Based Medical Surgical Reasoning (1.5 Lecture) 1.5 UNITS
This course is designed to provide practice for the advanced level vocational nursing student with principal problem-solving and critical reasoning through a variety of group activities and projects related to patients with gastrointestinal, integumentary, endocrine, and hematological disorders.

HOC 043C Adv. Cognitive Disabilities - Mental Health Theory (2.5 Lecture) 2.5 UNITS
This is an advanced continuation course designed for psychiatric technician students to focus on previously learned mental health concepts and skills which constitute critical thinking as utilized in clinical practice. Students develop, analyze and evaluate principles of mental health, therapeutic, patient-centered, comprehensive plans of care for vulnerable and diverse populations in community and acute care settings. Includes two hours of related pharmacology content.

HOC 043D Adv Cognitive Disab - Developmental Disab. Theory (2.5 Lecture) 2.5 UNITS
This is an advanced course which focuses on integration of previous learning and skills which constitute critical thinking. It is designed to provide the psychiatric technician student with an understanding of the principles needed for the provision of comprehensive care for quality of life enhancement with a focus on self-determination, emotional well-being, social inclusion, rights, personal development, and physical well-being for mental healthcare and health promotion for the developmentally and intellectually disabled client. Students integrate their nursing knowledge with the principles of behavioral therapy and group communication process to plan care to a unique population of individuals with a multitude of physical and intellectual challenges. Includes two hours of related pharmacology content.

HOC 044 Pharmacology C (1.0 Lecture) 1.0 UNIT
This is a continuation course in pharmacology designed to assist the psychiatric technician and vocational nursing student with the principles of pharmacology. Emphasis is on defining pharmacological agents, classes, precautions for use, side effects, medication interactions, contraindications, and patient teaching for safe and proper pharmacological agents used for patients with disorders of the endocrine, hematologic, integumentary, and gastrointestinal systems and for pediatric clients.

HOC 045A Advanced Skills/Simulation Lab (1.0 Lab) 1.0 UNIT
This course allows the advanced vocational nursing student the opportunity to integrate the concepts of the nursing process, clinical reasoning, nursing theory, and nursing skills in a laboratory setting which simulates the clinical experience. Focus is placed on developing competence in performing basic nursing procedures and skills through practice on manikins, return demonstration of skills and participation in simulated clinical scenarios aimed to meet the needs of the medical-surgical and geriatric patients with gastrointestinal, integumentary, endocrine, and hematological disorders and pediatric patients and their families in inpatient and outpatient settings.

HOC 045B Advanced Skills/Simulation Lab (1.0 Lab) 1.0 UNIT
This course integrates advanced psychiatric technician skills, theoretical concepts and clinical competence in a controlled laboratory setting using case studies, group care planning, simulated scenarios and class discussions. Simulated scenarios reinforce planning and implementing interventions aimed to meet the needs of patients with gastrointestinal, integumentary, endocrine, and hematological, mental health and developmental disability disorders in inpatient and outpatient settings.

HOC 046A Advanced Clinical Practicum (5.0 Lab) 5.0 UNITS
This is a clinical experience course in which advanced vocational nursing students apply theoretical concepts, basic nursing skills, the nursing process and therapeutic communication to delivery of safe, quality healthcare to medical-surgical and pediatric patients in a variety of community healthcare settings under direct supervision of the instructor. Pass/No Pass Only.

HOC 046B Advanced Clinical Practicum (5.0 Lab) 5.0 UNITS
This is a continuation clinical experiential course in which advanced psychiatric technician students apply theoretical concepts, basic nursing skills, the nursing process and therapeutic communication to delivery of safe, quality healthcare to patients with medical-surgical, mental health and developmental disability disorders under direct supervision of the instructor.

HOC 047 Leadership and Professional Practice (1.5 Lecture) 1.5 UNITS
This course prepares the advanced vocational nursing and psychiatric students for application for licensure examination, the transition to entry level practice, and the development of leadership skills for advancement in their chosen career tracks. Grade Only.

HOC 050 Role Transition LVN to RN (2.0 Lecture) 2.0 UNITS
This course is designed to prepare the licensed vocational nurse for entry into an associate degree nursing (ADN) program. The course content focuses on competencies expected of the graduate ADN (critical thinking skills, review of medical-surgical nursing concepts, role change, research skills, teaching-learning principles, development of the nursing teaching role, pharmacology principles, medication calculation) to prepare the student for success in an ADN program.

HOC 050A Role Transition Clinical (1.0 Lab) 1.0 UNIT
This course involves directed clinical experiences in a simulated acute hospital and simulated community healthcare agencies that provide services for perioperative and medical/surgical clients. Through the use of the nursing process, the student provides care, teaching, support and rehabilitation to perioperative and medical/surgical clients. Emphasis is on the role of the registered nurse caring for clients with acute and chronic problems.

HOC 051 Community Mental Health Nursing (2.0 Lecture) 2.0 UNIT
This course is designed to present mental health principles to assist the nursing student in developing an increased understanding of human behavior related to a variety of psychiatric and mental health disorders. This course is designed to provide theoretical and clinical approaches in providing nursing care to individuals of varying ages, with complex health care needs in the community setting.

HOC 052 Intermediate Medical-Surgical Nursing Theory (3.0 Lecture) 3.0 UNITS
The student learns to synthesize and correlate nursing knowledge and skills in the provision of care to multiple patients who have complex, multi-system illnesses. The focus is on helping students learn to identify and anticipate patient needs and priorities, and evaluate outcomes of care. The nursing care of adult and geriatric clients with acute and chronic illnesses is addressed.

HOC 053 Introduction to Clinical Judgment (1.0 Lab) 1.0 UNIT
This course integrates nursing theory and clinical learning experiences through the use of case studies, clinical narratives, participation in clinical simulation scenarios with computerized manikins, and class discussion. This simulated clinical experience enhances the student's nursing theory course classroom learning. The emphasis is on the role of the registered nurse caring for acute medical-surgical and geriatric patients with acute and chronic problems in the nursing simulation lab.

HOC 054 Intermediate Clinical Practicum (4.0 Lab) 4.0 UNITS
This course provides the nursing student with directed clinical experiences in acute care hospitals and a variety of community healthcare agencies for adult and geriatric patients/clients who have acute or chronic medical-surgical and mental health/psychiatric illnesses.

HOC 060 Advanced Maternal-Child Nursing (2.0 Lecture) 2.0 UNITS
This course is designed for the student to focus on advanced concepts in caring for high risk child-bearing and child-rearing families. Concepts required include family communications, teaching, the nursing process, critical thinking, legal-ethical issues, and advocacy for the RN role and scope of practice.
HOC 061 Advanced Medical-Surgical/Leadership Nursing (3.0 Lecture) 3.0 UNITS
This course focuses on advanced application of the nursing process in the care of critically ill adult and geriatric patients. Content includes leadership theory and application, delegation, priorities, and time management.

HOC 062 Leadership and Ethics (1.0 Lecture) 1.0 UNIT
This course prepares the student to take responsibility for managing and coordinating patient care. The registered nurse must have the knowledge and skills necessary to make decisions on setting priorities, delegation, quality improvement, legal parameters of nursing practice, and ethical issues confronting nursing today.

HOC 064 Advanced Clinical Practicum (5.0 Lab) 5.0 UNITS
This course provides the nursing student with directed clinical experiences in acute care hospitals and a variety of community healthcare agencies for maternal-child and pediatric patients/clients as well as for adult and geriatric patients/clients who have acute or chronic medical-surgical illnesses.

HOC 095 Math for Health Occupations (1.0 Lecture) 1.0 UNIT
Advisory: MAT 903 This course is an introduction to math calculations for health occupations students. It provides the learner with the opportunity to explore the math functions within the health field.

HUMANITITES (HUM)

HUM 001A Human Values in and From the Arts (3.0 Lecture) 3.0 UNITS
Integrated survey of art, music, literature and history in the Western World from ancient Greece through Medieval Europe. Slide lectures.

HUM 001B Human Values in and From the Arts (3.0 Lecture) 3.0 UNITS
Integrated survey of art, music, literature and history in the Western World from Renaissance to Modern Europe. Slide lectures.

HUM 007 International Films (3.0 Lecture) 3.0 UNITS
This course provides a critical look at the world and its problems through some of the finest international films. Films from Asia, Africa, Europe, South America and the United States will be viewed and analyzed to explore such topics as nationalism, sovereignty, war and peace, ethnic conflict, economics and immigration.

HUM 013 Creativity and Visual Communication 3.0 UNITS
This course will examine the concept of creativity and the way we construct visual messages. The effects of technology on visual communication, the use of the Web and new media techniques will be discussed. Pass/No Pass Option.

HUM 015 Introduction to Film Analysis (3.0 Lecture) 3.0 UNITS
Critical analysis of film as a literary art form. Eligibility for ENGL 001A and READ 054.

HUM 016A Hispanic Roots and Culture (3.0 Lecture)3.0 UNITS
This course undertakes a study of Hispanic culture beginning with the native American and Spanish civilizations and continuing to the present. Pass/No Pass Option.

HUM 018 African-American Culture and Humanities (3.0 Lecture) 3.0 UNITS
An overview of the humanities through the culture and life experiences of African-Americans. Pass/No Pass Option.

HUM 018H African-American Culture and Humanities - Honors (3.0 Lecture) 3.0 UNITS
This honors course provides an overview of the humanities through the culture and life experiences of African-Americans. Students may not receive credit for both HUM 018 and HUM 018H. This section requires enrollment in the Honors Transfer Project. More information and the online application can be found at http://honors.missioncollege.edu.

HUM 020 Asian Roots and Culture (3.0 Lecture) 3.0 UNITS
This course provides an introduction to the lands, people, languages and culture of Asia beginning with the earliest times and continuing to the present. Pass/No Pass Option.

HUM 022 Introduction to Islam (3.0 Lecture) 3.0 UNITS
This course provides an introduction to Islam as a religious system focusing on its origins, basic sources, history, culture and values. Pass/No Pass Option.

HUM 024 The Asian-American Experience (3.0 Lecture) 3.0 UNITS
Advisory: Eligibility for ENGL 001A and READ 054. The Asian-American Experience is a multi-disciplinary course that introduces students to the historical and contemporary experiences of different groups of Asian-Americans. Pass/No Pass Option.

HUM 030 Cultural Studies (3.0 Lecture) 3.0 UNITS
Through foreign travel, this course exposes students to the culture and daily life of people in different countries around the world. Students attend mandatory meetings on campus before trip departure.

(HVC)

HVC 111 HVAC Apprenticeship: Basic Refrigeration/Heritage/CFC/OSHA 10 (0.5 Lecture/2.5 Lab) 3.0 UNITS
First year course of the Refrigeration & Air Conditioning Apprenticeship program. This course provides students with a working knowledge of Thermodynamics, Chloro-Fluoro Carbons (CFC), and basic Refrigeration, as it pertains to the Air Conditioning Service industry. Also provides OSHA 10 certification.

HVC 112 HVAC Apprenticeship: Refrigeration Science (1.5 Lecture/1.5 Lab) 3.0 UNITS
First year course of the Refrigeration & Air Conditioning Apprenticeship program. This course provides students with a working knowledge of Basic Refrigeration, Refrigeration Equipment, and Equipment Maintenance.

HVC 113 HVAC Apprenticeship: Basic Electricity for The HVAC Service Trade (0.5 Lecture/2.5 Lab) 3.0 UNITS
Second year course of the Refrigeration & Air Conditioning Apprenticeship program. This course provides students with a working knowledge of basic electricity, including AC/DC theory and Ohm's Law. Students will be expected to apply these theories in the laboratory using electronic and testing instruments.

HVC 114 HVAC Apprenticeship: Advanced Electricity/ Pneumatic DDC Introduction (0.5 Lecture/2.5 Lab) 3.0 UNITS
Second year course of the Refrigeration & Air Conditioning Apprenticeship program. This course provides students with a working knowledge of Advanced Electricity, Motors, Starter, Circuitry, and Variable Drives.

HVC 115 HVAC Apprenticeship: Controls I/Electro Pneumatics (1.0 Lecture/2.0 Lab) 3.0 UNITS
Third year course of the Refrigeration & Air Conditioning Apprenticeship program. This course provides students with a working knowledge of Controls, Control Theory, Timing Circuits, Computerized Control, and Energy Management Systems.

HVC 116 HVAC Apprenticeship: Controls II/ Advanced Pneumatics Calibration/Hydraulics (1.0 Lecture/2.0 Lab) 3.0 UNITS
Third year of the Refrigeration & Air Conditioning Apprenticeship program. This course provides students with a working knowledge of advanced control systems, including the uses of 2-Position, Floating and Modulating Controls. Fiber Optics and Direct Digital Controls are introduced.

HVC 117 HVAC Apprenticeship: Start, Test & Balance I (1.5 Lecture/1.5 Lab) 3.0 UNITS
Fourth year course of the Refrigeration & Air Conditioning Apprenticeship program. This course provides students with an introduction to Start, Test and Balance for fluid distribution. Ducting, Cooling, Fans, and Air Distribution is covered in the laboratory exercises.
HVC 118 HVAC Apprenticeship: Start, Test & Balance II/Energy Auditing Practices (1.5 Lecture/1.5 Lab) 3.0 UNITS
Fourth year course of the Refrigeration & Air Conditioning Apprenticeship program. This course provides students with a working knowledge of Start, Test and Balance for Piping Systems, Pumps, Chillers, Boilers, and Condensers. Students will learn how to audit mechanical equipment to ensure proper energy efficiency techniques are applied.

HVC 119 HVAC Apprenticeship: Chillers/Special Systems/ HVACR Star Review (1.0 Lecture/2.0 Lab) 3.0 UNITS
Fifth year course of the Refrigeration & Air Conditioning Apprenticeship program. This course provides students with a working knowledge of pipe drafting and blueprint reading for Heating, Ventilation and Air Conditioning (HVAC) Systems. Hands-on activities include applying aidside, waterside and pressure testing systems.

HVC 120 HVAC Apprenticeship: HVACR Junior Mechanics Review & Exam (1.0 Lecture/2.0 Lab) 3.0 UNITS
Fifth year course of the Refrigeration & Air Conditioning Apprenticeship program. This course provides students with a working knowledge of Troubleshooting, Test and Repair of Refrigeration and Air-Conditioning systems.

INSTITUTIONAL FOODS (INF)

INF 050 Sanitation and Safety (2.0 Lecture) 2.0 UNITS

INF 950 Institutional Foods: Serving Large Populations 0.5 UNITS
This course covers personal cleanliness, sanitary practices, and prevention of food-contaminated illnesses. Basic principles of nutrition in meal planning are examined. Pass/No Pass Option.

INTERDISCIPLINARY STUDIES (INS)

INS 010 Peer Tutor and Mentor Training (1.5 Lecture) 1.5 UNITS
This course provides students with effective learning strategies and academic assistance techniques for peer tutoring and mentoring in a community college setting.

INS 010A Tutor Training 1.0 UNITS
Advisory: Eligibility for ENGL 108A and READ 053. This is a self-paced course to provide students with techniques and strategies for effective academic peer tutoring in a community college setting. Pass/No Pass Only.

INS 015 Advanced Training for Peer Tutors and Mentors (1.5 Lecture) 1.5 UNITS
Advisory: INS 010 This is an advanced peer tutor and mentor training course. Topics include the roles and responsibilities of tutors and mentors, as well as specific strategies to help students reach their academic and personal goals.

INS 030 Digital Study Strategies for Online and Onscreen Materials (2.0 Lecture) 2.0 UNITS
Advisory: Eligibility for ENGL 001A and READ 053. Study without paper! This course teaches study strategies for digital materials and online course assignments. Topics include: reading and studying online textbooks, taking and organizing digital notes, communication strategies for blogs, wikis and discussion board posts, techniques for online group work, scheduling yourself to do online course homework, using virtual calendars to manage your time, and using electronic resources such as phone/tablet apps and Web 2.0 tools to personalize your learning. Pass/No Pass Option.

INS 947 Supervised Tutoring (NONCREDIT) 0.0 UNITS
Corequisite: Enrollment in the course or courses (other than INS 947) at Mission College for which tutoring is sought. This 0 unit open entry/open exit course provides learning assistance in the form of tutoring. Students will be assigned to tutoring by an instructor or counselor based on an identified learning need. For more information, contact the Academic Support Center in room SEC-154 Pass/No Pass Option.

INS 949 College Study Skills (1.0 Lecture) 1.0 UNIT
Prerequisite ESL 960RW Advisory Eligibility for English 905. This course is designed to improve students’ study skills. After an assessment of needs, the students work on specific study strategies and techniques including studying from textbooks, taking notes, preparing for tests, managing time, and using campus resources effectively.

INS 950 Academic Achievement 0.0 UNITS
Corequisite: Students must be enrolled in a Mission College or Community Education course. This open entry/open exit course is intended for students who need help with academic skills related to other courses they are taking at Mission College. Topics may include learning strategies, writing, reading, oral/aural skills, computational and logic skills for science and engineering, and/or study skills. Pass/No Pass Option.

INS 960 Academic Strategies 0.5 UNITS
This open entry/open exit course consists of individualized instruction. Students work regularly with an instructor to identify and practice a variety of academic skills. Students receive individualized assessment and a personalized curriculum to further skill-building in the following areas: learning strategies, writing, reading, oral/aural skills, computational and logic skills for science and engineering, and/or study skills. Students hold regular meetings with the instructor as well as complete lab hours in the learning assistance center. Pass/No Pass Option.

INS 990 Conversation Skills Development for Non-Native English Speakers (NONCREDIT) 0.0 UNITS
This noncredit course focuses on communication practice for home, work, community and educational needs. Activities are aimed at the intermediate levels of ESL. Students at any conversation skill level are encouraged to join.

JAPANESE (JPN)

JPN 001 First Semester Japanese (5.0 Lecture) 5.0 UNITS
The student will learn the fundamentals of Japanese grammar, pronunciation, and two written syllabary systems, Hiragana and Katakana, and be able to converse on a limited scale on topics of everyday importance. The student will able to understand spoken and written (primarily Romanized) Japanese within the limits of the grammatical structures and vocabulary introduced in the course.

JPN 002 Second Semester Japanese (5.0 Lecture) 5.0 UNITS
Prerequisite JPN 001 This course is a continuation of JPN 001 with further development of basic skills and structure.

JPN 003A Intermediate Japanese 1 3.0 UNITS
Prerequisite: JPN 002, or equivalent (2 years of high school Japanese) with “C” or better. Japanese 003A is the first in the series of four, 3-credit, second-year Japanese language course. It is designed for the student who has successfully completed a full one-year college Japanese language course or its equivalence. Focus is on intermediate level skills, new vocabulary, Kanji, idioms, and cultural topics. Pass/No Pass Option.

JPN 003B Intermediate Japanese 1 3.0 UNITS
Prerequisite: JPN 003A or equivalent (3 years of high school Japanese) with “C” or better. Japanese 003B is the second in the series of four, 3-credit, second-year Japanese language course. It is designed for the student who has successfully completed the Japanese 003A course or its equivalence. Focus is on intermediate level skills, new vocabulary, Kanji, idioms, and cultural topics. Pass/No Pass Option.

JPN 011A Japanese Laboratory 0.5 UNITS
This is an individualized, self-paced laboratory course offered by arrangement at the student’s convenience, which aims to present the culture of Japan through a variety of media. The student will review the customs and culture of Japan through slides, audio and video tapes, and selected reading materials. Pass/No Pass Option.

JPN 011B Japanese Laboratory 0.5 UNITS
This is an individualized, self-paced laboratory course offered by arrangement at the student’s convenience, which aims to present the culture of Japan through slides, audio and video tapes, and selected reading materials. Pass/No Pass Option.
KINESIOLOGY (KIN)

KIN 001A  Adapted Weight Training (1.0 Lab)  1.0 UNIT
This course is designed for students with verifiable disabilities. A personalized exercise plan (PEP) is developed to meet each student's needs. Focus is on increasing overall muscular strength and endurance based on each individual's ability.

KIN 001B  Adapted Physical Education (1.0 Lab)  1.0 UNIT
This course will allow students with verifiable disabilities to focus on individual goals along with developing the five health related fitness components: muscular strength, muscular endurance, flexibility, cardiovascular endurance and body composition.

KIN 001C  Adapted Aerobics (1.0 Lab)  1.0 UNIT
This course is designed to introduce skills needed for daily cardiovascular fitness through the use of aerobic activities for students with verifiable disabilities.

KIN 001D  Adapted Tennis (1.0 Lab)  1.0 UNIT
This course is designed to introduce the basic fundamentals of tennis to students with verifiable disabilities. Emphasis is placed on basic strokes, footwork and serves.

KIN 001E  Adapted Yoga (1.0 Lab)  1.0 UNIT
This class introduces students with verifiable disabilities to basic yoga poses. Emphasis is placed on asana(postures), postural alignment, breath awareness and relaxation in order to develop overall fitness and balance.

KIN 001G  Adapted Badminton (1.0 Lab)  1.0 UNIT
This course is designed to introduce the basic fundamentals of badminton to students with verifiable disabilities. Emphasis is placed on basic strokes, footwork and serves.

KIN 001J  Adapted Balance and Stability (1.0 Lab)  1.0 UNIT
This course is designed to introduce basic balance activities, and stability exercises for students with verifiable disabilities. Activities focus on enhancing energy levels and increasing confidence to perform daily activities.

KIN 014A  Volleyball - Introduction (1.0 Lab)  1.0 UNIT
This course is designed to introduce students to the fundamental skills of volleyball. Players learn to serve, pass, set and employ the basic strategies of the game.

KIN 014B  Volleyball - Beginning (1.0 Lab)  1.0 UNIT
Advisory: KIN 014A or demonstrated ability to pass, set and serve. This course is designed to review the fundamental skills of volleyball and add spiking, blocking and the dink to the players’ repertoire. Players work on improving the depth and accuracy of their shots while employing the strategies of the game.

KIN 015A  Basketball - Introduction (1.0 Lab)  1.0 UNIT
This course is designed to introduce the student to the basic skills and techniques of basketball.

KIN 015B  Basketball - Beginning (1.0 Lab)  1.0 UNIT
Advisory: KIN 015A This course is designed to teach the basic skills and of basketball. Drills are utilized to increase playing ability while scrimmages are used to develop the concept of team play.

KIN 015C  Basketball: Intermediate (1.0 Lab)  1.0 UNIT
Advisory: KIN 015B This course is designed to teach the intermediate skills of basketball. Drills are utilized to increase playing ability while scrimmages are used to develop the concept of team play.

KIN 015D  Basketball - Advanced (1.0 Lab)  1.0 UNIT
Advisory: KIN 015C This course is designed to teach the advanced skills of basketball. Drills are utilized to increase playing ability while scrimmages are used to develop the concept of team play.

KIN 019A  Soccer - Introduction (1.0 Lab)  1.0 UNIT
This course is designed to introduce the basic rules, skills, techniques and history of soccer. Drills are included to introduce the student to shooting, passing, trapping, and dribbling. Scrimmages are utilized to develop team play concepts.

KIN 019B  Soccer - Beginning (1.0 Lab)  1.0 UNIT
Advisory: KIN 019A This course is designed to review the basic rules, skills, and techniques of soccer, as well as develop players’ execution of the fundamental strategies of the game. Drills are included to enhance shooting, passing, heading and dribbling. Scrimmages are utilized to develop team play concepts.

KIN 020A  Badminton- Introduction (1.0 Lab)  1.0 UNIT
This course introduces the student to the fundamentals, rules, and strategies of the game of badminton.

KIN 020B  Badminton: Beginning (1.0 Lab)  1.0 UNIT
This course continues the development of the fundamental skills and strategies of the game of badminton. The main emphasis of this course is to refine the technique and improve the proficiency of the basic skills of the game.

KIN 020C  Badminton - Intermediate (1.0 Lab)  1.0 UNIT
This course introduces the student to the more advanced skills and strategies of the game of badminton. The main emphasis of this course is on drills, finesse shots, shot placement, court position, and singles and doubles strategy.

KIN 020D  Badminton - Advanced (1.0 Lab)  1.0 UNIT
Advisory: KIN 020C This course introduces the student to the advanced skills and strategies of the game of badminton. The main emphasis of this course is on drills, finesse shots, shot placement, court position, and singles and doubles strategy.

KIN 021A  Tennis - Introduction (1.0 Lab)  1.0 UNIT
This course is designed to teach the fundamentals of tennis to students. Mastery of these skills enables students to progress to the next level of tennis.

KIN 021B  Tennis - Beginning (1.0 Lab)  1.0 UNIT
This course is designed to teach the basic fundamentals of tennis. Mastery of these skills enables the student to progress to the next level of tennis.

KIN 021C  Tennis - Intermediate (1.0 Lab)  1.0 UNIT
This course is designed to develop skill and knowledge of the game of tennis at an intermediate level.

KIN 021D  Tennis - Advanced (1.0 Lab)  1.0 UNIT
This course is designed to develop skill and knowledge of the game of tennis at an advanced level.

KIN 021E  Tennis - Tournament (2.0 Lab)  2.0 UNITS
This course is designed for the student, with advanced skill competency, who has played or desires to play tournament tennis. Advanced skills and strategy are reviewed and practiced to increase mastery for tournament play.

KIN 021F  Tennis - Doubles Strategies and Play (0.5 Lecture/1.0 Lab)  1.5 UNITS
Advisory: KIN 021C Students are instructed in the basic skills of doubles for the sport of tennis. Rules of play, strategies, and skill development for doubles are emphasized.
KIN 023A  Archery: Introduction (1.0 Lab)  1.0 UNIT
This course introduces the student to the sport of archery. Emphasis will be placed on safety, etiquette and the rules of archery.

KIN 023B  Archery: Beginning (1.0 Lab)  1.0 UNIT
This course is designed to refine the shooting skills of the beginning archery student. Emphasis is placed on shooting technique, form, and concentration. Safety guidelines, etiquette, and rules of archery are reviewed.

KIN 024A  Bowling - Introduction (1.0 Lecture/0.5 Lab)  1.5 UNITS
This class is designed to introduce the student to the basic techniques and theory of Bowling. Emphasis is on approach, delivery, timing, rules, and scoring.

KIN 030A  Pilates Matwork - Introduction (1.0 Lab)  1.0 UNIT
This course is an introduction to Joseph Pilates’ Physicalmind Conditioning Method. The matwork provides the ideal physical fitness for the attainment and maintenance of a uniformly developed body and sound mind. The study of Pilates improves flexibility, strength and breathing techniques.

KIN 030B  Pilates Matwork - Beginning (1.0 Lab)  1.0 UNIT
This course is the study and practice of Joseph Pilates’ Physicalmind Conditioning Method at a beginning level.

KIN 030C  Pilates Matwork - Intermediate (1.0 Lab)  1.0 UNIT
This course is the study and practice of Joseph Pilates’ Physicalmind Conditioning Method at an intermediate level. Through the study of matwork, the student improves physical well-being including flexibility, strength and breathing techniques.

KIN 030D  Pilates Matwork - Advanced (1.0 Lab)  1.0 UNIT
This course is the study and practice of Joseph Pilates’ Physicalmind Conditioning Method at an advanced level. Prior Pilates practice is strongly recommended.

KIN 031A  Step Aerobics - Introduction (1.0 Lab)  1.0 UNIT
This course is designed to utilize the step as a means for improving cardiovascular fitness. A thorough warm-up and cool-down is included in each class. Knowledge of proper step technique as well as an understanding of ways to improve all aspects of fitness is also covered in this course.

KIN 031B  Step Aerobics - Beginning (1.0 Lab)  1.0 UNIT
This course is designed to build upon the skills learned in KIN 031A. Proper step technique, body alignment and basic choreography are taught.

KIN 032A  Aerobics- Introduction (1.0 Lab)  1.0 UNIT
This course is designed to satisfy the needs for cardiovascular activity and to develop and maintain cardiovascular fitness through the use of continuous rhythmic movements and general overall exercise.

KIN 032B  Aerobics- Beginning (1.0 Lab)  1.0 UNIT
This is a beginning level course designed to satisfy the needs for cardiovascular activity for individuals who are developing a fitness routine. Students maintain cardiovascular fitness through the use of continuous rhythmic movements, weights, and various forms of stretching to complete their workouts.

KIN 032C  Aerobics - Intermediate (1.0 Lab)  1.0 UNIT
This is an intermediate level course designed to help students maintain cardiovascular fitness through the use of continuous rhythmic movements, weights, and various forms of stretching to complete their workouts.

KIN 033A  Kickboxing Fitness - Introduction (1.0 Lab)  1.0 UNIT
This course is an introduction to kickboxing for aerobic fitness. Cardio-kickboxing uses techniques from various martial arts as way to achieve an aerobic workout. In this course, there is an appropriate warm-up and cool-down.

KIN 033B  Kickboxing Fitness - Beginning (1.0 Lab)  1.0 UNIT
Students build upon the kickboxing movements learned in KIN 033A, with an emphasis on proper body alignment and a more advanced level of cardiovascular fitness. Techniques are from karate, tai chi and boxing as ways to improve overall fitness.

KIN 035A  Weight Training - Introduction (1.0 Lab)  1.0 UNIT
This course is designed to enhance the development of muscular fitness and overall body tone. Information is presented to increase student understanding of various aspects of weight training from safety through proper lifting techniques.

KIN 035B  Weight Training - Beginning (1.0 Lab)  1.0 UNIT
This course is designed to enhance the development of muscular fitness. Information is presented to increase the student’s understanding of various aspects of weight training from safety through proper lifting techniques.

KIN 035C  Weight Training - Intermediate (1.0 Lab)  1.0 UNIT
This course is designed for students at the intermediate level. Topics include advance training techniques such as pyramids and super sets.

KIN 037A  Cardio-Cross Training - Introduction (1.0 Lab)  1.0 UNIT
This course is designed to enhance the development of muscular fitness. Information is presented to increase the student’s understanding of various aspects of weight training from safety through proper lifting techniques.

KIN 037B  Cardio-Cross Training - Beginning (1.0 Lab)  1.0 UNIT
This course is designed to enhance the student's cardiovascular condition by providing a variety of methods of training at an introductory level.

KIN 037C  Cardio-Cross Training - Intermediate (1.0 Lab)  1.0 UNIT
This course is designed to enhance the student's cardiovascular condition by providing a variety of methods of training at an intermediate level.

KIN 037D  Cardio-Cross Training - Advanced (1.0 Lab)  1.0 UNIT
This course is designed to enhance the student's cardiovascular condition by providing a variety of methods of training at an advanced level.

KIN 038A  Lower Body Conditioning Introduction (1.0 Lab)  1.0 UNIT
This course is designed to improve middle and lower extremity muscular strength, condition, and shape at the introductory level.

KIN 038B  Lower Body Conditioning Beginning (1.0 Lab)  1.0 UNIT
This course is designed to improve middle and lower extremity muscular strength, condition, and shape for the beginning level of lower body conditioning.

KIN 038C  Lower Body Conditioning - Intermediate (1.0 Lab)  1.0 UNIT
This course is designed to improve middle and lower extremity muscular strength, condition, and shape at the intermediate level.

KIN 038D  Lower Body Conditioning Advanced (1.0 Lab)  1.0 UNIT
This course is designed to improve middle and lower extremity muscular strength, condition, and shape for the advanced level of lower body conditioning.

KIN 038E  Lower Body Conditioning - Endurance Training (1.0 Lab)  1.0 UNIT
This course is designed for the introductory, intercollegiate level of lower body conditioning. Students improve middle and lower extremity training through muscular and endurance training and cardio conditioning.

KIN 038F  Lower Body Conditioning - Speed Training (1.0 Lab)  1.0 UNIT
Advisory: KIN 038E This course is designed to improve middle and lower extremity through speed training for the beginning intercollegiate level of lower body conditioning.

KIN 038G  Lower Body Conditioning - Agility Training (1.0 Lab)  1.0 UNIT
Advisory: KIN 038F This course is designed to improve core strength and lower extremity agility for lower body conditioning at the intermediate collegiate level.
COURSES

KIN 038J  Lower Body Conditioning - Plyometric Training  (1.0 Lab)  1.0 UNIT
Advisory: KIN 038G This course is designed to improve core and lower extremity strength through plyometric training and conditioning for the advanced intercollegiate level.

KIN 039A  Fire Agility - Introduction (2.0 Lab)  2.0 UNITS
This course introduces the student to the specific skills required to pass a physical agility firefighting test. The emphasis is on improving both cardiovascular and anaerobic endurance as well as muscle strength and endurance. Intense resistance training, anaerobic and cardiovascular workouts are employed. Non-Fire Technology students are also welcome.

KIN 039B  Fire Agility - Beginning (2.0 Lab)  2.0 UNITS
This course allows the student to build on the specific skills required to pass a physical agility firefighting test. Resistance training, plyometrics and cardiovascular workouts are employed. Non-Fire Technology students are also welcome.

KIN 039C  Fire Agility - Intermediate (2.0 Lab)  2.0 UNITS
This course allows the student to build on the specific skills required to successfully pass the CPAT and other physical agility firefighting test. Emphasis is on intermediate fitness training techniques. Non-Fire Technology students are also welcome.

KIN 039D  Fire Agility: Advanced (2.0 Lab)  2.0 UNITS
This course covers the advanced skills and techniques designed to enhance the overall fitness level of the Fire Technology student in order to prepare them to successfully complete the CPAT and other fire agencies physical agility tests. Building upon the skills learned in KIN 039A, 039B and KIN 039C, the emphasis is on advanced training methodologies. Advanced resistance training techniques, plyometric speed and agility training and cardiovascular workouts are utilized. Non-Fire Technology students are also welcome.

KIN 040A  Modern Dance - Introduction (1.0 Lab)  1.0 UNIT
This course is an introduction to the varied theories, styles, and techniques of the modern dance idiom.

KIN 040B  Modern Dance - Beginning (1.0 Lab)  1.0 UNIT
This course is the study and practice of the varied theories, styles, and techniques of the modern dance idiom at a beginning level.

KIN 040C  Modern Dance - Intermediate (1.0 Lab)  1.0 UNIT
This course is the study and practice of the varied theories, styles, and techniques of the modern dance idiom at an intermediate level.

KIN 041A  Ballet - Introduction (1.0 Lab)  1.0 UNIT
This course is designed to introduce the student to the discipline, aesthetics, traditions, and historical background of classical ballet.

KIN 041B  Ballet - Beginning (1.0 Lab)  1.0 UNIT
This course is designed for beginning level dancers to practice the discipline of ballet including improving technique and performance skills. Historical background, traditions and etiquette are also covered.

KIN 041C  Ballet - Intermediate (1.0 Lab)  1.0 UNIT
This course is designed for intermediate level dancers to practice the discipline of ballet including improving technique, building strength, and developing higher level performance skills.

KIN 041D  Ballet - Advanced (1.0 Lab)  1.0 UNIT
This course is designed for advanced level dancers to practice the discipline of ballet including perfecting technique and developing advanced level performance skills.

KIN 042A  Jazz Dance - Introduction (1.0 Lab)  1.0 UNIT
This course is designed to introduce the student to the varied theories, styles and techniques of the jazz dance idiom.

KIN 042B  Jazz Dance - Beginning (1.0 Lab)  1.0 UNIT
This course is designed for the beginning level student. Emphasis is placed on the varied theories, styles and techniques of the jazz dance idiom. Practice and performance opportunities are available at a beginning level.

KIN 042C  Jazz Dance - Intermediate (1.0 Lab)  1.0 UNIT
Advisory: KIN 042B This course is designed for the intermediate level student. Emphasis is placed on the varied theories, styles and techniques of the jazz dance idiom. Practice and performance opportunities are available at an intermediate level.

KIN 046A  Ballroom Dancing - Introduction (1.0 Lab)  1.0 UNIT
This course introduces students to various ballroom dances. Alignment and posture, etiquette, and spontaneous leading and following are emphasized.

KIN 046B  Ballroom Dancing - Beginning (1.0 Lab)  1.0 UNIT
This course covers the foundations of ballroom dance, including beginning level steps, positions of the body, and basics of styling for the various dances.

KIN 046C  Ballroom Dancing - Intermediate (1.0 Lab)  1.0 UNIT
This intermediate ballroom dance course covers various ballroom dances with an emphasis on technique, styling and performance skills that are specific to each dance.

KIN 046D  Ballroom Dancing - Advanced (1.0 Lab)  1.0 UNIT
This is an advanced level course covering various ballroom dances. Advanced techniques for styling and performance are emphasized.

KIN 047A  Hip Hop - Introduction (1.0 Lab)  1.0 UNIT
This course introduces students to the fundamentals of hip hop. Students will learn general patterns as well as the basics of creating their own style and routines. Information is presented describing the history and cultural development of hip hop as a dance form.

KIN 047B  Hip Hop - Beginning (1.0 Lab)  1.0 UNIT
This course is the study and practice of hip hop at a beginning level. Students learn general patterns as well as the basics of creating their own style and routines. Information is presented describing the history and cultural development of hip hop as a dance form.

KIN 047C  Hip Hop - Intermediate (1.0 Lab)  1.0 UNIT
This course is the study and practice of hip hop at an intermediate level. Students learn choreography as well as create their own style and routines.

KIN 047D  Hip Hop - Advanced (1.0 Lab)  1.0 UNIT
This course is the study and practice of hip hop at an advanced level. Students learn choreography as well as create their own style and routines.

KIN 048A  Latin Dance/Salsa - Introduction (1.0 Lab)  1.0 UNIT
This course is designed to introduce the student to selected Latin and rhythm dances. There is an emphasis on alignment and posture, etiquette, and leading and following.

KIN 048B  Latin Dance/Salsa - Beginning (1.0 Lab)  1.0 UNIT
This is a beginning level course designed to practice selected Latin and rhythm dances. There is an emphasis on alignment and posture, etiquette, and leading and following.

KIN 050A  Tai Chi - Introduction (1.0 Lab)  1.0 UNIT
This course introduces the student to the fundamentals and health enhancing aspects of Tai Chi. Instruction covers the history and philosophy and emphasizes Tai Chi body movements and forms utilizing energy flow and stress reducing elements that are generated in the process.

KIN 050B  Tai Chi - Beginning (1.0 Lab)  1.0 UNIT
This course reviews the fundamentals and health enhancing aspects of Tai Chi. There is an introduction to Pushing Hands exercises and various Qi Gong exercises are included.

KIN 051A  Aikido - Introduction (1.0 Lab)  1.0 UNIT
This course introduces the student to the philosophy, principles and physical techniques of Aikido. Aikido is a non-violent martial art that emphasizes harmony and natural movements to resolve conflicts.

KIN 051B  Aikido - Beginning (1.0 Lab)  1.0 UNIT
This course reviews the philosophy, principles, and physical techniques of Aikido. The course emphasizes harmony and natural movements to resolve conflicts.
conflicts and integrate mind-body awareness. The principles of contraction and expansion and circular movement are explored in more detail.

**KIN 051C** Aikido - Intermediate (1.0 Lab)  1.0 UNIT
This course reviews the philosophy, principles and physical techniques of Aikido.

**KIN 053A** Karate - Introduction (1.0 Lab)  1.0 UNIT
This class introduces students to the Okinawan/Japanese martial art of Wado Ki Kai Karate. Emphasis is on blocks, strikes, kicking movements, traditional forms from the Taikyoko and Pinan series, and self-defense.

**KIN 053B** Karate - Beginning (1.0 Lab)  1.0 UNIT
This class reviews the fundamentals of the Okinawan/Japanese martial art of Wado Ki Kai Karate. Emphasis is on refinement of the student's blocks, strikes, kicking movements, traditional forms from the Taikyoko and Pinan series, and self-defense.

**KIN 053C** Karate - Intermediate (1.0 Lab)  1.0 UNIT
This class reviews the fundamentals of the Okinawan/Japanese martial art of Wado Ki Kai Karate. Emphasis is on the refinement of the student's skills and the combining of techniques at an intermediate level.

**KIN 055A** Self-Defense - Introduction (1.0 Lab)  1.0 UNIT
This course is designed to introduce the student to the fundamental skills, strategy, and tactics of self-defense which may help the individual to recognize, avoid, and respond to dangerous situations.

**KIN 055B** Self Defense - Beginning (1.0 Lab)  1.0 UNIT
This course reviews the fundamental skills, strategy, and tactics of self-defense. Emphasis is on refinement of skills and incorporates additional take downs and ground fighting tactics.

**KIN 061A** Hatha Yoga - Introduction (1.0 Lab)  1.0 UNIT
This class provided the student with an introduction to basic Hatha yoga poses with an emphasis on form and body alignment. Strength, flexibility and balance is improved through the practice of the yoga poses. Relaxation and meditation techniques are also introduced.

**KIN 061B** Hatha Yoga - Beginning (1.0 Lab)  1.0 UNIT
This class provides instruction and practice of yoga poses with an emphasis on form and body alignment. Strength, flexibility and balance are emphasized within the practice of the poses. Relaxation and meditation techniques are also incorporated into the practice of poses.

**KIN 061C** Hatha Yoga - Intermediate (1.0 Lab)  1.0 UNIT
This class provides instruction in the physical practice of yoga at an intermediate level. Breath control and relaxation techniques are also incorporated.

**KIN 061D** Hatha Yoga - Advanced (1.0 Lab)  1.0 UNIT
This class emphasizes the physical practice of yoga at an advanced level. A prior yoga practice is strongly encouraged. Relaxation and meditation techniques are also incorporated.

**KIN 063A** Hiking - Introduction (1.0 Lab)  1.0 UNIT
This course introduces the student to basic hiking techniques as well as various hiking facilities in the local community. Every session includes a warm-up as well as a cool-down after a vigorous hike.

**KIN 063B** Hiking - Beginning (1.0 Lab)  1.0 UNIT
This course reviews basic hiking techniques and safety precautions, and introduces students to the challenges of moderate level hiking facilities in the local community. Proper warm-up and cool-down specifically related to hiking are covered.

**KIN 063C** Walk / Jog for Fitness - Introduction (1.0 Lab)  1.0 UNIT
This course introduces the student to elementary walking and jogging. Students improve aerobic and muscular fitness. Proper warm-up, stretching, and cool down are introduced. Fitness goals are established and monitored throughout the course.

**KIN 063D** Walking / Jogging for Fitness - Beginner (1.0 Lab)  1.0 UNIT
This course introduces the student to beginning walking and jogging. Students improve aerobic and muscular fitness.

**KIN 069** Stress Management through Exercise (1.0 Lecture/1.0 Lab)  2.0 UNITS
Students learn to understand and identify the stress process and how it relates to personal health and exercise. The relationship between stress reduction techniques and exercise is discussed. Exercise routines and intervention strategies and techniques are developed and practiced during this course to help students effectively deal with stress.

**KIN 070** Weight Training Practicum I (1.0 Lab)  1.0 UNIT
This course is one of the requirements for the fitness specialist certificate program and provides students with an opportunity to serve as an intern in a weight training class presently offered at the college. Each intern serves as an aide to the instructor of the class to acquire the skills and confidence needed to be a personal trainer.

**KIN 071** Sports Injuries (1.5 Lecture)  1.5 UNITS
This course is designed specifically for the fitness specialist or enthusiast who wants a basic understanding of the prevention and care of athletic injuries. Emphasis is on fitness related injuries as well as preventative steps recommended to avoid injuries. Basic awareness of the needs of special populations is also discussed.

**KIN 072** Sports Nutrition (1.5 Lecture)  1.5 UNITS
Advisory: KIN 077 This course is designed specifically for the fitness specialist or enthusiast who wants a basic understanding of nutritional principles as they relate to exercise and sports. Emphasis is placed on understanding the role of nutrients in physical performance.

**KIN 073** Fitness Testing (0.5 Lecture/1.0 Lab)  1.5 UNITS
Advisory: KIN 074 This course is designed specifically for the fitness specialist or enthusiast and covers how to administer fitness tests to evaluate a person's physical fitness.

**KIN 074** Anatomy and Kinesiology (1.5 Lecture)  1.5 UNITS
This course is designed for the fitness specialist or enthusiast who wants to learn about the major muscles of the body and their movements. Students are taught how to analyze any activity and identify movement patterns, as well as the muscle groups responsible for those movements.

**KIN 075** Body Alignment and Stretching Techniques (0.5 Lecture/1.0 Lab)  1.5 UNITS
Advisory: KIN 074 This course is designed for the fitness specialist or enthusiast. Topics covered in class include correct posture and alignment, postural deviations, stretching techniques, and routines for various sports and activities.

**KIN 076** Weight Training Principles and Routines (0.5 Lecture/1.0 Lab)  1.5 UNITS
Advisory: KIN 074 This course is designed specifically for the fitness specialist or enthusiast who wants a more detailed and complete understanding of all aspects of weight training and how to develop specific programs to enhance muscle strength, endurance and definition.

**KIN 077** Exercise Physiology (1.5 Lecture)  1.5 UNITS
Advisory: KIN 074 This course is designed for the fitness specialist or enthusiast who wants a more complete understanding of how the body responds and adapts physiologically to exercise.

**KIN 078** Introduction to Kinesiology (3.0 Lecture)  3.0 UNITS
This course is an introduction to the interdisciplinary approach to the study of human movement. An overview of the importance of the sub-disciplines in kinesiology will be discussed along with career opportunities in the areas of teaching, coaching, allied health, and fitness professions.

**KIN 080** Dance Appreciation (3.0 Lecture)  3.0 UNITS
This course is a study of the function of dance as art and ritual, social activity, spectacle, and entertainment through a survey of major dance works and artists from 19th century to present. It includes cultural contexts as well as
styles and forms used in dance such as folk, ethnic, social, square, tap, jazz, modern and ballet.

KIN 083 Volleyball - Intercollegiate Training (2.0 Lab) 2.0 UNITS
Advisory: Basic knowledge and practice of volleyball is strongly encouraged. Advisory: KIN 014A. This course is designed to develop a highly conditioned body for strength, flexibility, and endurance for the competing Women's varsity volleyball player.

KIN 084 Intercollegiate Volleyball (3.0 Lab) 3.0 UNITS
This course is intercollegiate volleyball competition for women. Team strategies and skill development are emphasized. Demonstrated subject/skill proficiency and consent of the coach is required.

KIN 085 Intercollegiate Badminton (3.0 Lab) 3.0 UNITS
Advisory: KIN 098 This course is designed to provide an opportunity for students with advanced badminton skills to participate in and learn an activity geared to their level of ability.

KIN 086 Intercollegiate Basketball (3.0 Lab) 3.0 UNITS
This course is designed to allow the student the opportunity to play intercollegiate basketball. Aspects covered include skill development, teamwork, and team strategies. Skill and ability should be commensurate with this level of competition.

KIN 087 Intercollegiate Soccer (3.0 Lab) 2.0 UNITS
This course is intercollegiate soccer competition for women. Team strategies and skill development are emphasized. This course requires demonstrated subject/skill proficiency and consent of the coach.

KIN 088 Intercollegiate Softball (3.0 Lab) 3.0 UNITS
This course is intercollegiate softball competition for women. Team strategies and skill development are emphasized. This course requires demonstrated subject/skill proficiency and consent of the coach.

KIN 089 Intercollegiate Tennis - Women (3.0 Lab) 3.0 UNITS
This course is designed for students interested in intercollegiate tennis competition. Practice consists of both mental and physical training.

KIN 090 Intercollegiate Baseball (3.0 Lab) 3.0 UNITS
This course is intercollegiate baseball competition for men. Team strategies and skill development are emphasized. Demonstrated subject/skill proficiency and consent of the coach is required.

KIN 091 Intercollegiate Soccer (2.0 Lab) 2.0 UNITS
This course is intercollegiate soccer competition for men. Team strategies and skill development are emphasized. Demonstrated subject/skill proficiency and consent of the coach is required.

KIN 092 Intercollegiate Tennis-Men (3.0 Lab) 3.0 UNITS
Advisory: KIN 094 This course is designed for male students interested in competing for an intercollegiate tennis team.

KIN 093 Softball - Intercollegiate Training (2.0 Lab) 2.0 UNITS
Advisory: Recommended High School or travel softball experience. This course provides the student with the opportunity to master the specific individual skills, team techniques and strategies of softball.

KIN 094 Tennis - Intercollegiate Training (1.0 Lab) 1.0 UNITS
Advisory: Recommended High School or Tournament experience. This course is designed to develop a highly conditioned body for strength, flexibility, and endurance for the competing varsity tennis player.

KIN 095 Soccer - Intercollegiate Training (2.0 Lab) 2.0 UNITS
This course is designed to enhance the skills and abilities of students involved competitively in the game of soccer. Extensive soccer conditioning is stressed including strength training and speed conditioning. Skill development is covered in class.

KIN 096 Basketball - Intercollegiate Training (2.0 Lab) 2.0 UNITS
Advisory Recommended High School or travel ball experience. This class is designed for experienced basketball players who wish to learn advanced strategies of the game. Techniques such as full court press, press breakers, fast break, defensive schemes, and player to player and zone offenses are covered.

KIN 097 Baseball - Intercollegiate Training (2.0 Lab) 2.0 UNITS
This course is designed to provide an opportunity for men with advanced baseball skills to participate in and learn an activity geared to their level of ability.

KIN 098 Badminton - Intercollegiate Training (2.0 Lab) 2.0 UNITS
This course introduces the student to more advanced skills and strategies of the game of badminton. The main emphasis of this course is on drills, finesse shots, shot placement, court position, and singles and doubles strategy.

KIN 099 Athletic Training (1.0 Lab) 1.0 UNIT
This course is designed to develop a highly conditioned body for strength, flexibility, and endurance for the competing varsity athlete.

LIBRARY (LIB)

LIB 010 Information Competency (1.0 Lecture) 1.0 UNIT
Advisories: CAP 070, Eligibility for ENG 001A and REA 054. This course introduces students to the nature of research and the role of the library in research, including finding, analyzing, organizing, and presenting information and the legal and ethical aspects of research.

LIB 010H Information Competency - Honors (1.0 Lecture) 1.0 UNIT
Advisories: CAP 070, Eligibility for ENG 001A and REA 054. This course introduces students to the nature of research and the role of the library in research, including finding, analyzing, organizing, and presenting information and the legal and ethical aspects of research. Students cannot get credit for both LIB 010 and LIB 010H. This section requires enrollment in the Honors Transfer Project. More information and the online application can be found at http://honors.missioncollege.edu.

LIB 920 Information Competency Workshop 0.0 UNITS
This non-credit course consists of a series of workshops addressing specific areas of Information Competency that will help students doing research. Students may attend all or part of the offered workshops and may attend the workshops in any order. Pass/No Pass Only.

LIB 930 Library Seminars 0.0 UNITS
These seminars cover a wide range of topics and introduce students to how to utilize the offerings of a 21st century library for academic, vocational or personal goals. No Grade.

LEARNING SERVICES (LSR)

LSR 099E ADA Law and Workplace Accommodations 1.0 UNIT
This course examines the regulations pertaining to disabilities in employment. Issues of disclosing a disability and “reasonable accommodations” in the workplace will be explored. Students will develop a comprehensive accommodations plan. Credit/No Credit Option.

LSR 099F DISC Lab Skills 0.5 UNITS
This course is designed for students who have taken LS 950 or students who already have training in assistive technology. Students will receive instruction, training and practice in newer versions of assistive software.

LSR 099G Orientation to DISC 0.0 UNITS
This course provides students with disabilities an overview of Mission College and detailed information about the Disability Instructional Support Center(DISC), the services, and courses available through the Center.
This course is an introduction to basic skills math to assist in the completion of certificated programs.

**LRN 021A Role Transition Clinical (1.0 Lab) 1.0 UNIT**

Prerequisite: ENG 001A Corequisite: LRN 021 This course involves directed clinical experiences in acute hospitals and agencies that provide services for perioperative and medical/surgical clients. Through the use of the nursing process, the student will provide care, teaching, support and rehabilitation to perioperative and medical/surgical clients. Emphasis will be upon the role of the registered nurse caring for clients with acute and chronic problems.

**LRN 031 Community Mental Health Nursing (2.0 Lecture) 2.0 UNITS**

Prerequisite: ENG 001A, LRN 021A Corequisite: LRN 032, LRN 033, and LRN 034, Students must attain the minimum grade of 75% average. This course is designed to present mental health principles to assist the nursing student in developing an increased understanding of human behavior related to a variety of psychiatric and mental health disorders. This course is designed to provide theoretical and clinical approaches in providing nursing care to individuals of varying ages, with complex health care needs in the community setting.

**LRN 032 Intermediate Medical-Surgical Nursing Theory (3.0 Lecture) 3.0 UNITS**

Prerequisite: LRN 021A. Corequisite: LRN 031, LRN 033, LRN 034, Students will be required to maintain a 75% average. The student learns to synthesize and correlate nursing knowledge and skills in the provision of care to multiple patients who have complex, multi-system illnesses. The focus is on helping students learn to identify and anticipate patient needs and priorities, and evaluate outcomes of care. The nursing care of adult and geriatric clients with acute and chronic illnesses is addressed.

**LRN 033 Introduction to Clinical Judgment (1.0 Lab) 1.0 UNIT**

Prerequisite and Completion of ENG 001A. Corequisite LRN 021A. Corequisite: LRN 032, LRN 031. This course integrates nursing theory and clinical learning experiences through the use of case studies, clinical narratives, participation in clinical simulation scenarios with computerized manikins, and class discussion. This simulated clinical experience enhances the student's nursing theory course classroom learning. The emphasis is on the role of the registered nurse in caring for acute medical-surgical and geriatric patients with acute and chronic problems in the nursing simulation lab.

**LRN 034 Intermediate Clinical Practicum (4.0 Lab) 4.0 UNITS**

Prerequisite ENG 001A, Prerequisite LRN 021 and Prerequisite LRN 021A Students must complete all nursing course with 75% score or higher Corequisite LRN 031, Corequisite LRN 032 and Corequisite LRN 033 Students must complete all nursing course with 75% score or higher This course provides the nursing student with directed clinical experiences in acute care hospitals and a variety of community healthcare agencies for adult and geriatric patients/clients who have acute or chronic medical-surgical and mental health/psychiatric illnesses.

**LRN 041 Advanced Maternal-Child Nursing (2.0 Lecture) 2.0 UNITS**

Prerequisite ENG 001A Prerequisite LRN 031 Students must pass with a grade of 75% or higher , Prerequisite LRN 032 Students must pass with a grade of 75% or higher , Prerequisite LRN 033 Students must pass with a grade of 75% or higher , Prerequisite LRN 034 Students must pass with a grade of 75% or higher Corequisite LRN 042, Corequisite LRN 044 Students must pass with a grade of 75% or higher Corequisite LRN 050 Students must pass with a grade of 75% or higher This course is designed for the student to focus on advanced concepts in caring for high risk child-bearing and child-rearing families. Concepts required include family communications, teaching, the nursing process, critical thinking, legal-ethical issues, and advocacy for the RN role and scope of practice.

**LRN 042 Advanced Medical-Surgical/Leadership Nursing (3.0 Lecture) 3.0 UNITS**

Prerequisite: ENG 001A , Prerequisite: LRN 021A , LRN 021, LRN 031 Students must pass with a grade of 75% or higher, LRN 032 Students must pass with a grade of 75% or higher, LRN 033 Students must pass with a grade of 75% or higher, LRN 034, Corequisite: LRN 041 Students must pass with a grade of 75% or higher, LRN 044. This course focuses on advanced application of the nursing process in the care of critically ill adult and geriatric patients. Content includes leadership theory and application, delegation, priorities, and time management.
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**COURSES** (MAT)**

**MAT 000G** Mathematics for the Liberal Arts Student (4.0 Lecture)
- Prerequisite Placement into Math G or higher by the Mission College Mathematics Placement Exam; or Prerequisite MAT 000C or Prerequisite MAT 000CM This course introduces creative thinking skills using fascinating examples, problem solving, self-exploration, and expository work. Topics may include: sequences and series, probability and statistics, countable and uncountable sets, and the Pythagorean Theorem.

**MAT 001** College Algebra (4.0 Lecture)
- Prerequisite MAT 000C or satisfactory score on an appropriate Mathematics Placement Exam or Prerequisite MAT 000CM This college-level course in algebra covers the following topics: polynomial, rational, radical, exponential, absolute value, and logarithmic functions; systems of equations; theory of polynomial equations; and analytic geometry.

**MAT 002** Precalculus and Trigonometry (6.0 Lecture)
- Prerequisite MAT 000C or Prerequisite MAT 000CM or Prerequisite Satisfactory score on an appropriate Mathematics Placement Exam. This course incorporates all topics found in pre-calculus algebra (MAT 001) and trigonometry (MAT 000D). This is an intensive course for the highly motivated and very well prepared student.

**MAT 003A** Analytic Geometry and Calculus I (5.0 Lecture)
- Prerequisite MAT 002 or placement into the course by the Mission College Mathematics Placement Exam; or Prerequisite MAT 000D or higher or satisfactory score on an appropriate Mathematics Placement Exam and Prerequisite MAT 001 or placement into the course by the Mission College Mathematics Placement Exam. This is the first part of the three-semester calculus sequence. Topics include functions, limits, continuity, differentiation and integration, and applications for polynomial and transcendental functions.

**MAT 003B** Analytic Geometry and Calculus II (5.0 Lecture)
- Prerequisite MAT 003A or Prerequisite MAT 003AH This is the second part of the three-semester calculus sequence. Topics include infinite series, vectors in the plane, parametric equations, conic sections, polar coordinates, and integration techniques with applications.

**MAT 004A** Multivariable Calculus (4.0 Lecture)
- This course covers vector-valued functions, calculus of functions of more than one variable, partial derivatives, multiple integration, Green's Theorem, Stokes' Theorem, and the divergence theorem.

**MAT 004B** Differential Equations (4.0 Lecture)
- Topics include ordinary differential equations, with emphasis on linear equations, and partial differential equations. Methods include Laplace Transforms, power series, Fourier series, numerical solutions and applications.

**MAT 004C** Linear Algebra (4.0 Lecture)
- This course covers basic linear algebra including systems of linear equations, Gaussian elimination, determinants, matrices, vector spaces, transformations, eigenvalues, and eigenvectors.

**MAT 005** Programming and Problem-Solving in MATLAB (2.0 Lecture/1.0 Lab)
- Prerequisite MAT 003A or Prerequisite MAT 003AH or higher. This course utilizes the MATLAB environment to provide students with a working knowledge of computer-based problem-solving methods relevant to mathematics, science and engineering. Topics include procedural and object-oriented programming, two- and three-dimensional graphing, data import.
and export, curve fitting, recursion and applications in engineering, physics, and mathematics.

MAT 008 Finite Mathematics (3.0 Lecture) 3.0 UNITS
Prerequisite: MAT 000C or placement into Math 8 or higher by the Mission College Placement Exam. ; or Prerequisite MAT 000CM or placement into Math 8 or higher by the Mission College Placement Exam, and Prerequisite MAT 000CMX or placement into Math 8 or higher by the Mission College Placement Exam. Course topics include linear equations, matrix systems, linear programming, set theory, mathematics of finance, and introductory probability and statistics.

MAT 009 Integrated Statistics II (5.0 Lecture) 5.0 UNITS
Prerequisite: MAT 009 This is the second of two courses in the Statway sequence. Students study probability, descriptive and inferential statistics including probability distribution, hypothesis testing, linear regression and applications. Current statistical technology packages are used. This sequence is recommended for students with majors that require no mathematics beyond freshman-level statistics. Successful completion of both Math 009 and Math 009 is required to satisfy CSU and UC transferability.

MAT 00CMX Intermediate Algebra MAPS Extra (3.0 Lecture) 3.0 UNITS
Prerequisite: MAT 00CMX or successful placement into the course based on the Mission College Mathematics Placement Exam and an interview with the MAPS counselor. ; or Prerequisite MAT 903M or successful placement into the course based on the Mission College Mathematics Placement Exam and an interview with the MAPS counselor. and Corequisite MAT 903MX or successful placement into the course based on the Mission College Mathematics Placement Exam and an interview with the MAPS counselor.; and Corequisite MAT 00CMX Math CM must be taken concurrently with Math CMX. This lecture course is a corequisite for MAT 000CM. It is part of the MAPS program and provides additional time to help students succeed by participating in enhanced and innovative learning strategies and activities.

MAT 00CP Prep Trig/Bus Math 2.0 UNITS
Prerequisite: MATH 000C or satisfactory score on an appropriate Mathematics Placement Exam. This is an accelerated review of all the material from Intermediate Algebra. The course will concentrate on those areas of Intermediate Algebra which require additional work. Pass/No Pass Only.

MAT 010 Elementary Statistics (4.0 Lecture) 4.0 UNITS
Prerequisite: MAT 000C or Prerequisite MAT 000CM or successful placement into the course based on the Mission College Mathematics Placement Exam, or Prerequisite Completion of, or placement into, any higher-level math. Students study probability, descriptive and inferential statistics including probability distribution, hypothesis testing, linear regression and applications. Current statistical computer packages are used.

MAT 010H Elementary Statistics - Honors (4.0 Lecture) 4.0 UNITS
This course is the honors version of Elementary Statistics. This course provides students with a comprehensive introduction to statistical methods and research. Current statistical computer packages are used. Students may not receive credit for both MATH 010 and MATH 010H. This section requires enrollment in the Honors Transfer Project. More information and the online application can be found at http://honors.missioncollege.edu.

MAT 012 Calculus for Business (4.0 Lecture) 4.0 UNITS
Prerequisite: MAT 000C or placement into MAT 12 or higher by the Mission College Mathematics Placement Exam. ; or Prerequisite or placement into MAT 12 or higher by the Mission College Mathematics Placement Exam. Course topics include the intuitive concept of a limit, and simple techniques of differential and integral calculus and their most common applications in business. This course is not equivalent to MAT 003A.

MAT 014 Math for Elementary School Teachers (Number Systems) 3.0 UNITS
Prerequisite: MATH 000C or MATH 000CM or successful placement into the course based on the Mission College Mathematics Placement Exam. Advisory: MATH 000B. This course covers systems of numbers, emphasizes patterns and relationships, presents mathematical models and real-world applications, and provides algorithms for estimating and finding exact answers when doing calculations. Appropriate problem solving, critical thinking, and communication are included. The course is designed for students who intend to become elementary school teachers. Pass/No Pass Option.

MAT 019 Discrete Mathematics (4.0 Lecture) 4.0 UNITS
Prerequisite: MAT 001 or successful placement into the course based on the Mission College Mathematics Placement Exam, or Prerequisite MAT 002 This course covers discrete mathematics appropriate for computer applications. Topics may include graphs, sets, logic, mathematical induction, functions and relations, sequences and series, matrices, combinatorics, Boolean algebra, algebraic structures, and computer implementation.

MAT 081H Honors Seminar in Mathematics (1.0 Lecture) 1.0 UNIT
This course is an honors course involving discussion and analysis of various mathematical topics. There is an emphasis on in-depth understanding of mathematical theorems, general problem-solving techniques, and how to communicate mathematics. This section requires enrollment in the Honors Transfer Project. More information and the online application can be found at http://honors.missioncollege.edu.

MAT 900 Arithmetic Functions (3.0 Lecture) 3.0 UNITS
This course covers fundamental arithmetic skills including whole numbers, fractions and decimals, ratio, proportion and percent, simple equations, problem analysis, and practical applications.

MAT 901 Arithmetic Review 1.5 UNITS
Review topics include fundamental arithmetic skills including signed numbers, fractions and decimals, and applications of ratio, proportion and percent to practical problems. Pass/No Pass Option.

MAT 902 Pre-Algebra (4.0 Lecture) 4.0 UNITS
This course is designed for those students who have a solid foundation in arithmetic skills but need to develop those skills further before taking Algebra.

MAT 903 Elementary Algebra (5.0 Lecture) 5.0 UNITS
Prerequisite: MAT 002 or placement into the course based on the Mission College Mathematics Placement Exam. Course topics include operations with real numbers; properties of real numbers and signed exponents; solving and graphing linear equations; solving linear inequalities; functions; factoring polynomials; solving quadratic equations by factoring; simplifying rational expressions; solving rational equations; applications of linear, quadratic, and rational equations; and working with scientific notation.

MAT 903M Elementary Algebra (MAPS) (5.0 Lecture) 5.0 UNITS
Prerequisite: MAT 902 or successful placement into the course based on the Mission College Mathematics Placement Exam and an interview with the MAPS counselor. and Corequisite MAT 903M MAT 903MX must be taken concurrently with MAT 903M. The MAPS program offers students a team approach to succeed in elementary and intermediate algebra. This program is designed for students who have had difficulty in their math course in the past. Course study operations of signed numbers, exponents, polynomials and rational expressions; properties of real numbers, equations and exponents; solving and graphing linear equations; applications of linear equations; and factoring of polynomials. Pass/No Pass Option. Concurrent enrollment in MAT 903M is mandatory.

MAT 903MX Elementary Algebra MAPS Extra (3.0 Lecture) 3.0 UNITS
Prerequisite: MAT 902 or successful placement into the course based on the Mission College Mathematics Placement Exam and an interview with the MAPS counselor. and Corequisite MAT 903M MAT 903MX must be taken concurrently with MAT 903MX. This lecture course is a co-requisite for MAT 903M. It is part of the MAPS program and provides additional time to help students succeed by participating in enhanced and innovative learning strategies and activities.

MAT 909 Integrated Statistics I (5.0 Lecture) 5.0 UNITS
Prerequisite: MAT 902 or higher or satisfactory score on an appropriate Mathematics Placement Test This is the first of two courses in the Statway sequence. Students study probability, descriptive statistics, linear regression and applications. Current statistical technology packages are used. This sequence is recommended for students with majors that require no mathematics beyond freshman-level statistics. Successful completion of both MAT 909 and MAT 009 is required to satisfy CSU and UC transferability.
**MUSIC (MUS)**

**MUS 005** Fundamentals of Music Theory (3.0 Lecture) 3.0 UNITS

Advisory: Eligibility for ENG 001A and REA 054. This is a course for students interested in learning music fundamentals as related to music reading, writing, listening, and performing. The study of music notation, rhythm and meter, tonality, scales, and basic harmony is included, as well as practice in rhythm performance, sight singing, and techniques of listening to music. Pass/No Pass Option.

**MUS 006** Commercial Music Theory I (3.0 Lecture) 3.0 UNITS

Advisory: MUS 005. This is a beginning-level course in commercial music theory intended for students pursuing a certificate in music. Topics include basic song construction, use of diatonic harmony, analysis of popular song form and harmonic progressions, and the use of music notation software to create lead sheets.

**MUS 006A** Harmony and Musicianship I 4.0 UNITS

Prerequisite: MUSIC 005, 005A or equivalent experience. Corequisite: MUSIC 090. This is a beginning level course in harmony and musicianship intended for both music majors and all music students interested in developing their musical skills and understanding. Areas of study include beginning level music theory and notation, ear-training, and sight-singing. Students will work both as a class and individually utilizing computer-assisted music instruction software. Pass/No Pass Option.

**MUS 007** Commercial Music Theory II (3.0 Lecture) 3.0 UNITS

Prerequisite: MUS 006. This is an intermediate-level course in music theory intended for students pursuing a certificate in music. Topics include advanced song construction, use of chord extensions, chord substitutions, analysis of scores for film and video games, basic orchestration and the use of music notation software to create multi-part scores.

**MUS 008** Commercial Music Theory III (3.0 Lecture) 3.0 UNITS

Prerequisite: MUS 007. This is an advanced-level course in harmony and musicianship intended for students pursuing a certificate in music. Topics include arranging, orchestration and the use of music notation software to create finished scores for publication.

**MUS 010** Music Appreciation (3.0 Lecture) 3.0 UNITS

Advisory: Eligibility for ENG 001A and REA 054. This is a basic introductory course for the student without previous training in music. Students develop an appreciation and enjoyment of music through active listening and guided discussion. Pass/No Pass Option.

**MUS 015A** Songwriting and Music Business I (3.0 Lecture) 3.0 UNITS

Advisory: Concurrent enrollment in MUSIC 090. Write lyrics, simple melodies, harmonize with basic diatonic harmony. Pass/No Pass Option.

**MUS 015B** Songwriting and Music Business II (3.0 Lecture) 3.0 UNITS

Advisory: Concurrent enrollment in MUSIC 90. Write lyrics, simple melodies, harmonize with basic diatonic harmony. Continuation of Music 015A. Pass/No Pass Option.

**MUS 016** Survey of Rock and Popular Music (3.0 Lecture) 3.0 UNITS

Advisory: Eligibility for ENG 001A and REA 054. The course examines the History of Rock and Roll music, from its roots in Africa and 1950's America through the current music scene. Principal study is of the music, its styles and performance practices, its musician-composers, and the important social and musical forces influencing the development of Rock. Pass/No Pass Option.

**MUS 017** Music of the World (3.0 Lecture) 3.0 UNITS

This course is a multimedia, multicultural humanities course which introduces students to music from a world music perspective. Course content is centered on videos, a supplemental textbook, and an extensive collection of recorded examples. Topics include the transformative power of music, music and memory, musical style, musical performance and improvisation, music as ritual and music technology. Pass/No Pass Option.

**MUS 030A** Beginning Piano I (0.5 Lecture/0.5 Lab) 1.0 UNIT

Corequisite: concurrent enrollment in MUSIC 090. For students with no previous training in piano, the course includes studies in note reading, clefs, simple pieces & exercises. Pass/No Pass Option.

**MUS 030B** Beginning Piano II (0.5 Lecture/0.5 Lab) 1.0 UNIT

Prerequisite: MUS 030A, and Corequisite MUS 090. This course is for students with some previous training in piano. Topics include note reading, rhythmic notation, interpretive symbols, proper posture, hand position and fingering. Students learn to perform simple piano pieces.

**MUS 031A** Intermediate Piano I (0.5 Lecture/0.5 Lab) 1.0 UNIT


**MUS 031B** Intermediate Piano II (0.5 Lecture/0.5 Lab) 1.0 UNIT


**MUS 032A** Beginning Voice I (0.5 Lecture/0.5 Lab) 1.0 UNIT

Corequisite: MUS 090. This course covers the elements of vocal production, including breathing, correct diction, tone production, vocal support and confidence building, for the Beginning I level singer.

**MUS 032B** Beginning Voice II (0.5 Lecture/0.5 Lab) 1.0 UNIT

Corequisite: MUS 090. This course covers the elements of vocal production--breathing, correct diction, tone production, vocal support and confidence building--for the Beginning II level singer.

**MUS 036A** Beginning Guitar I (0.5 Lecture/0.5 Lab) 1.0 UNIT

Advisory: MUS 090. Eligibility for ENG 001A and REA 054. This is a beginning course in guitar. Emphasis is on music reading, playing in basic positions, scales, chords, and major and minor keys. Pass/No Pass Option.

**MUS 036B** Beginning Guitar II (0.5 Lecture/0.5 Lab) 1.0 UNIT

Prerequisite: MUS 036A. Advisory MUS 090. This beginning/intermediate level course in guitar is for students who have successfully completed MUS 036A. Emphasis is on music reading, playing in advanced basic positions, scales, chords, and major and minor keys.

**MUS 036C** Intermediate Guitar I (0.5 Lecture/0.5 Lab) 1.0 UNIT

Corequisite: MUS 036B. Advisory MUS 090. An intermediate level course in guitar for students who have successfully completed MUS 036B.

**MUS 036D** Intermediate Guitar II (0.5 Lecture/0.5 Lab) 1.0 UNIT

Prerequisite: MUS 036C. Advisory MUS 090. This is an advanced-intermediate course in guitar.

**MUS 039A** Advanced Piano Masterclass I (0.5 Lecture/0.5 Lab) 1.0 UNIT

Advisory: MUS 090. Eligibility for ENG 001A and REA 054. This course is designed for advanced piano students studying a variety of repertoire, musical styles and performance practices from the Baroque Period to 20th Century. Students will participate in discussions of piano repertoire and preparation for live performances. Pass/No Pass Option.

**MUS 039B** Advanced Piano Masterclass II (0.5 Lecture/0.5 Lab) 1.0 UNIT

Advisory: MUS 090. Eligibility for ENG 001A and REA 054. This course is designed for advanced piano students previously enrolled in MUS 039A. This course is designed for advanced piano students studying a variety of repertoire, musical styles and performance practices from the Baroque Period to 20th Century. Students will participate in discussion of piano repertoire and preparation for live performances. Pass/No Pass Option.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Prerequisites/Advisory</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 039C</td>
<td>Advanced Piano Masterclass III (0.5 Lecture/0.5 Lab)</td>
<td>1.0 UNIT</td>
<td>Prerequisite: MUS 039B. Advisory: MUS 090. This course is designed for advanced piano students previously enrolled in MUS 039B. This course is designed for advanced piano students studying a variety of repertoire, musical styles and performance practices from the Baroque Period to 20th Century. Students will participate in discussion of piano repertoire and preparation for live performances.</td>
</tr>
<tr>
<td>MUS 039D</td>
<td>Advanced Piano Masterclass IV (0.5 Lecture/0.5 Lab)</td>
<td>1.0 UNIT</td>
<td>Prerequisite: MUS 039C. Advisory: MUS 090. This is a piano performance course for advanced piano students. Emphasis is placed on developing repertoire and performance skills to prepare for a final piano concerto performance.</td>
</tr>
<tr>
<td>MUS 041A</td>
<td>Mission Chorus I (1.0 Lab)</td>
<td>1.0 UNIT</td>
<td>Advisory: MUS 090. Eligibility for ENG 001A and REA 054. Mission Chorus I is an ensemble of mixed voices that performs a wide variety of choral repertoire from classical to contemporary. Students participate in public performances. Placement auditions are held before the first day of class. Pass/No Pass Option.</td>
</tr>
<tr>
<td>MUS 041B</td>
<td>Mission Chorus II (1.0 Lab)</td>
<td>1.0 UNIT</td>
<td>Advisory: MUS 090. Eligibility for ENG 001A and REA 054. Mission Chorus II is an ensemble of mixed voices that performs a wide variety of choral repertoire from classical to contemporary. Students participate in public performances. Students who wish to enroll in MUS 041B must have previous experience in group singing at the beginning level. Placement auditions are held before the first day of class. Pass/No Pass Option.</td>
</tr>
<tr>
<td>MUS 041C</td>
<td>Mission Chorus III (1.0 Lab)</td>
<td>1.0 UNIT</td>
<td>Advisory: MUS 090. Eligibility for ENG 001A and REA 054. Mission Chorus III is an ensemble of mixed voices, that performs a wide variety of choral repertoire from classical to contemporary. Students will participate in public performances. Students who wish to enroll in MUS 041C must have previous experience in group singing at the intermediate level. Placement auditions will be held before the first day of class. Pass/No Pass Option.</td>
</tr>
<tr>
<td>MUS 041D</td>
<td>Mission Chorus IV (1.0 Lab)</td>
<td>1.0 UNIT</td>
<td>Advisory: MUS 090. Eligibility for ENG 001A and REA 054. Mission Chorus IV is an ensemble of mixed voices, that performs a wide variety of choral repertoire from classical to contemporary. Students will participate in public performances. Students who wish to enroll in MUS 041D must have previous experience in group singing at the intermediate to advanced level. Placement auditions will be held before the first day of class. Pass/No Pass Option.</td>
</tr>
<tr>
<td>MUS 048A</td>
<td>Symphony Orchestra I (1.0 Lab)</td>
<td>1.0 UNIT</td>
<td>Performance of symphonic and repertoire of all styles and periods. Emphasis is on group participation and public performance. Attendence at all public performance required. Enrollment by audition. Pass/No Pass Option.</td>
</tr>
<tr>
<td>MUS 048B</td>
<td>Symphony Orchestra II (1.0 Lab)</td>
<td>1.0 UNIT</td>
<td>Prerequisite: MUS 048A. Performance of symphonic and repertoire of all styles and periods. Emphasis is on group participation and public performance. Attendence at all public performance required. Enrollment by audition. Pass/No Pass Option.</td>
</tr>
<tr>
<td>MUS 048C</td>
<td>Symphony Orchestra III (1.0 Lab)</td>
<td>1.0 UNIT</td>
<td>Prerequisite MUS 048B. Advisory MUS 090. This is an intermediate/advanced level course for the performance of symphonic music of all styles and periods. Emphasis is on group participation and public performance. An audition is required.</td>
</tr>
<tr>
<td>MUS 048D</td>
<td>Symphony Orchestra IV (1.0 Lab)</td>
<td>1.0 UNIT</td>
<td>Prerequisite MUS 048C. Advisory MUS 090. This is an advanced level course for the performance of symphonic music of all styles and periods. Emphasis is on group participation and public performance. An audition is required.</td>
</tr>
<tr>
<td>MUS 050</td>
<td>Mission Steelband (1.0 Lab)</td>
<td>1.0 UNIT</td>
<td>Advisory: Concurrent enrollment in MUSC 090. Ensemble members will learn how to play Caribbean steeldrums and will be required to participate in at least two public performances. Prior experience with percussion/music is not required. Pass/No Pass Option.</td>
</tr>
<tr>
<td>MUS 080</td>
<td>MIDI and Music Production I (3.0 Lecture)</td>
<td>3.0 UNITS</td>
<td>Advisory: Eligibility for ENG 001A, READ 054, and MUS 005. This course is a practical introduction to the Musical Instrument Digital Interface (MIDI) music system and provides students the skills necessary to create their own music using Pro Tools software. Through a series of hands-on projects students develop basic musicianship skills including: music theory, composition and arranging as it applies to popular music. Students also use the recording studio to complete a final project that incorporates the use of MIDI and audio tracks. Pass/No Pass Option.</td>
</tr>
<tr>
<td>MUS 080A</td>
<td>MIDI and Music Technology I (3.0 Lecture)</td>
<td>4.0 UNITS</td>
<td>This course is on the Music Instrument Digital Interface (MIDI) music system.</td>
</tr>
<tr>
<td>MUS 080B</td>
<td>MIDI and Music Technology II (3.0 Lecture)</td>
<td>4.0 UNITS</td>
<td>This course is on the Music Instrument Digital Interface (MIDI) music system.</td>
</tr>
<tr>
<td>MUS 081</td>
<td>Audio Production I (3.0 Lecture)</td>
<td>3.0 UNITS</td>
<td>Advisory: Eligibility for ENGL 001A, READ 054, and MUSIC 080 or equivalent. This course is a hands-on survey of audio recording techniques using ProTools software and hardware. Students complete a series of projects designed to develop basic recording, editing and mixing skills. Pass/No Pass Option.</td>
</tr>
<tr>
<td>MUS 082</td>
<td>MIDI and Music Production II (3.0 Lecture)</td>
<td>3.0 UNITS</td>
<td>This is an advanced level, music production course that provides students the skills necessary to create their own compositions for film, TV and video. Through a series of hands-on projects students develop advanced composition skills including: score analysis, orchestration, composition and use of a recording studio to combine an original MIDI music composition with video. Prerequisite MUS 080. Advisory: MUS 005</td>
</tr>
<tr>
<td>MUS 083</td>
<td>Audio Production II (3.0 Lecture)</td>
<td>3.0 UNITS</td>
<td>This is an advanced audio recording, mixing and MIDI production course using ProTools software and hardware. Topics include: mixing, EQ, compression, bussing, advanced editing and mastering. Advisory: MUS 081</td>
</tr>
<tr>
<td>MUS 084</td>
<td>Advanced Piano Masterclass IV (0.5 Lecture/0.5 Lab)</td>
<td>0.5 UNITS</td>
<td>This course is on the Music Instrument Digital Interface (MIDI) music system.</td>
</tr>
<tr>
<td>MUS 085</td>
<td>Applied Music I (0.5 Lecture/0.5 Lab)</td>
<td>1.0 UNIT</td>
<td>This course is an introduction to the music industry, including its corporate structure and legal practices such as contracts, copyrights, licenses, and royalties. Other topics include production logistics in the recording studio, record manufacturing, music publishing, marketing, touring, and career strategies. Classes include guest speakers from the music industry, field trips, video and audio presentations. Pass/No Pass Option.</td>
</tr>
<tr>
<td>MUS 086</td>
<td>Applied Music II (0.5 Lecture/0.5 Lab)</td>
<td>1.0 UNIT</td>
<td>This is an introduction to music production and studio techniques. Through hands-on lab, students will gain practical experience in recording and mixing audio and MIDI tracks. Pass/No Pass Option.</td>
</tr>
<tr>
<td>MUS 087</td>
<td>Careers in Music Entrepreneurship (3.0 Lecture)</td>
<td>3.0 UNITS</td>
<td>This course is an introduction to the music industry, including its corporate structure and legal practices such as contracts, copyrights, licenses, and royalties. Other topics include production logistics in the recording studio, record manufacturing, music publishing, marketing, touring, and career strategies. Classes include guest speakers from the music industry, field trips, video and audio presentations. Pass/No Pass Option.</td>
</tr>
<tr>
<td>MUS 088</td>
<td>Careers in Music Entrepreneurship (3.0 Lecture)</td>
<td>3.0 UNITS</td>
<td>This course is an introduction to the music industry, including its corporate structure and legal practices such as contracts, copyrights, licenses, and royalties. Other topics include production logistics in the recording studio, record manufacturing, music publishing, marketing, touring, and career strategies. Classes include guest speakers from the music industry, field trips, video and audio presentations. Pass/No Pass Option.</td>
</tr>
<tr>
<td>MUS 090</td>
<td>Music Laboratory (0.5 Lab)</td>
<td>0.5 UNITS</td>
<td>Advisory: Eligibility for ENG 001A and REA 054. Corequisite Concurrent enrollment in any other music course. Music lab provides music students with supplementary learning activities related to Music Theory, Music Appreciation, Beginning Guitar, Voice and Music History courses. Pass/No Pass Option.</td>
</tr>
<tr>
<td>MUS 095A</td>
<td>Applied Music I (0.5 Lecture/0.5 Lab)</td>
<td>1.0 UNIT</td>
<td>Advisory: Eligibility for ENGL 001A and READ 054. Corequisite MUSIC 041A or MUSIC 048A or MUSIC 039A. This course is for declared Music Majors only and is intended to give individual instruction for students on their respective instrument or voice. Students are expected to pass a music jury exam and perform in student recitals. Pass/No Pass Option.</td>
</tr>
<tr>
<td>MUS 095B</td>
<td>Applied Music II (0.5 Lecture/0.5 Lab)</td>
<td>1.0 UNIT</td>
<td>Advisory: Eligibility for ENGL 001A and READ 054. Corequisite MUSIC 039B or MUSIC 041B or MUSIC 048B. This course is for declared Music Majors only and is intended to give individual instruction for students on their respective instrument or voice. Students are expected to pass a music jury exam and perform in student recitals. Pass/No Pass Option.</td>
</tr>
<tr>
<td>MUS 095C</td>
<td>Applied Music III (0.5 Lecture/0.5 Lab)</td>
<td>1.0 UNIT</td>
<td>Advisory: Eligibility for ENGL 001A and READ 054. Corequisite MUSIC 039C or MUSIC 041C or MUSIC 048C. This course is for declared Music Majors only and is intended to give individual instruction for students on their respective instrument or voice. Students are expected to pass a music jury exam and perform in student recitals. Pass/No Pass Option.</td>
</tr>
</tbody>
</table>
MUS 095D Applied Music IV (0.5 Lecture/0.5 Lab) 1.0 UNIT
Advisory: Eligibility for ENGL 001A and READ 054. Corequisite MUSIC 039D or MUSIC 041D or MUSIC 048D. This course is for declared Music Majors only and is intended to give individual instruction for students on their respective instrument or voice. Students are expected to pass a music jury exam and perform in student recitals. Pass/No Pass Option.

BASIC SKILLS (NCB)

NCB 002  Ged Skills Development Lab (NONCREDIT) 0.0 UNITS
This lab course is designed to prepare students for the General Educational Development Tests (GED) for high school equivalency. Students learn and practice skills needed to pass the GED exams, as well as the computer skills needed to take a computer-based GED exam.

NCB 003  GED Preparation: Reading & Critical Thinking (NONCREDIT) 0.0 UNITS
NCB 003: Preparing for the GED: Skills Development Lab. This course focuses on the development of basic skills needed to prepare for the General Educational Development Tests (GED) for high school equivalency. Students develop reading skills such as main idea, supporting details, point of view, meaning of words and phrases, inferences, and validity of claims. These skills will enable readers to understand complex texts.

NCB 004  Ged Preparation: Writing & Reasoning (NONCREDIT) 0.0 UNITS
This course focuses on the basic skills needed to prepare for the General Educational Development Tests (GED) for high school equivalency. Emphasis is placed on the development of writing skills, including grammar, editing, development, organization, analyzing arguments and using evidence to support a claim.

NCB 005  GED Preparation: Math Skills (NONCREDIT) 0.0 UNITS
This course focuses on basic skills needed to prepare for the math portion of the General Education Development Tests (GED) for high school equivalency. Emphasis is placed on developing math and calculator skills.

NCB 901  Strategies to Improve Writing (NONCREDIT) 0.0 UNITS
Prerequisite ESL 960RW Or equivalent Prerequisite ESL 960LS Or equivalent Prerequisite ESL 960G Or equivalent Advisory ENG 905. This course gives basic skills students practice using various writing techniques that prepare them for transfer-level courses. Sentence-level strategies are the focus of this class.

NCB 902  Strategies to Improve Writing (NONCREDIT) 0.0 UNITS
Advisory ENG 905. Prerequisite ESL 970RW Advisory ESL 970LS Advisory ESL 970G. This course gives basic skills students practice using various writing techniques that prepare them for their transfer-level courses. Essay-level strategies are the focus of this class.

NONCREDIT ESL (NCE)

NCE 905  Preparation for Academic ESL 0.0 UNITS
This is a study skills course for beginning ESL students. In this class, students will learn to improve their academic preparation and study skills for greater success in ESL courses.

NCE 910  Foundations in ESL 0.0 UNITS
This noncredit course is a beginning pre-academic ESL Level 0. This course provides basic functional practice in reading, writing, listening, speaking, and grammar for very low beginning ESL students.

NCE 910A  Foundations in ESL I (NONCREDIT) 0.0 UNITS
This is a self-paced course to provide students with techniques and strategies for effective academic peer tutoring in a community college setting.

NCE 910B  Foundations in ESL II (NONCREDIT) 0.0 UNITS
This course is a continuation of NCE 910A. This course continues to develop very low beginning students’ skills in basic reading, writing, listening, speaking, and grammar.

NCE 910L  Foundations in ESL Lab (NONCREDIT) 0.0 UNITS
This lab course is designed for students at the NCESL 910 skill level. In the lab, students practice listening, speaking, writing, grammar, reading, and vocabulary skills in order to help them succeed in NCESL courses and in the workplace.

NCE 920  Beginning ESL 0.0 UNITS
This noncredit course provides basic functional practice in reading, writing, listening, speaking, and grammar for beginning ESL students. It also provides preparation for placement in Level 930 ESL classes.

NCE 920A  Beginning ESL I (NONCREDIT) 0.0 UNITS
This noncredit course provides basic functional practice in reading, writing, listening, speaking, and grammar for beginning ESL students.

NCE 920B  Beginning ESL II (NONCREDIT) 0.0 UNITS
This course is a continuation of NCE 920A. It builds on the topics learned in NCE 920A, but it also introduces more complex structures and provides more practice in reading, writing, listening, speaking, and grammar for beginning ESL students. It also provides preparation for placement in Level 930 ESL classes.

NCE 920L  Beginning ESL Lab (NONCREDIT) 0.0 UNITS
This lab course is designed for students at the NCE 920 skill level. In the lab, students practice listening, speaking, writing, grammar, reading, and vocabulary skills in order to help them succeed in NCE courses and in the workplace.

NCE 925  Preparation for Academic ESL (NONCREDIT) 0.0 UNITS
This is a study skills course for beginning ESL students. In this class, students learn to improve their academic preparation and study skills for greater success in ESL courses.

NONCREDIT IMMIGRATION ED (NCI)

NCI 010  U.S. Citizenship Preparation (NONCREDIT) 0.0 UNITS
In this course students learn the basics involved in American citizenship. Topics include a general survey of U.S. history, government, and civics, including culture, institutions, and ideals. The course also includes practice of the English oral/aural/literacy skills necessary to pass an oral and written citizenship exam.

NONCREDIT OLDER ADULT (NCO)

NCO 1611  Older Adult Art (NONCREDIT) 0.0 UNITS
This non-credit course explores art, crafts and creative artistic expression. Practical skills using a variety of artistic techniques are highlighted. Cultural, seasonal and holiday themes are emphasized in the production of arts and crafts items for personal use, sale or gifts.

NCO 3900  Senior Preparedness (NONCREDIT) 0.0 UNITS
This non-credit course expands the student's knowledge of economic, social, governmental, historic, geographic, and cultural issues. Students also expand communication skills as they expand knowledge of world, national and local issues and become better informed community members.

NUTRITIONAL SCIENCE (NTR)

NTR 015  Human Nutrition (3.0 Lecture) 3.0 UNITS
Basic scientific principles of human nutrition in maintaining health & preventing disease are discussed. Biochemical functions & interrelationships of nutrients are examined. Designed for the student with no science background.

NTR 040  Nutrition and Disease (3.0 Lecture) 3.0 UNITS
This course covers basic scientific principles of human nutrition as they relate to disease. This course is designed for individuals entering the health care field or for those with an interest in diet and disease. Eligibility for ENGL 001A and REA 054
Prerequisite: PHY 004B. This course is an introduction to quantum physics, the electronic structure of atoms, solids, band theory, radiation, and relativity.

PHILOSOPHY (PHI)

PHI 001 Introduction to Philosophy (3.0 Lecture) 3.0 UNITS
Advisory: Eligibility for ENG 908 and REA 054. This course focuses on traditional philosophical systems and how they are relevant to solving the problems of contemporary existence. Pass/No Pass Option.

PHI 002 Introduction to Logic (3.0 Lecture) 3.0 UNITS
Advisory: Eligibility for ENG 001A and REA 054. Students are introduced to techniques for evaluating the quality and correctness of a chain of thought. Challenges in the logic of reasoning are considered.

PHI 003 Introduction to Ethics (3.0 Lecture) 3.0 UNITS
Prerequisite: ENG 001A. This course explores prominent ethical theories and addresses contemporary moral problems.

PHI 005 Introduction to Social and Political Philosophy (3.0 Lecture) 3.0 UNITS
This course will introduce students to a critical study of some major social and political problems. Pass/No Pass Option.

PHYSICS (PHY)

PHY 002A General Physics - Mechanics and Thermodynamics (4.0 Lecture/1.0 Lab) 5.0 UNITS
Prerequisite: MAT 000D Prerequisite: PHY 002 or higher This is a first lecture/lab course in physics for non-majors. Topics covered include Newton's laws of motion, the concepts of potential and kinetic energy, momentum, thermodynamics, hydrodynamics, and wave motion.

PHY 002B General Physics - Electricity, Magnetism And Optics (4.0 Lecture/1.0 Lab) 5.0 UNITS
Prerequisite PHY 002A This lecture/lab course is a continuation of PHY 002A as a lecture/lab course with the study of electricity, magnetism, geometrical and wave optics and atomic physics.

PHY 004A Engineering Physics-Mechanics (4.0 Lecture/1.0 Lab) 5.0 UNITS
Prerequisite MAT 003A This course is a calculus-based study of forces, energy, momentum and gravity.

PHY 004B Engineering Physics-Electricity and Magnetism (3.0 Lecture/1.0 Lab) 4.0 UNITS
Prerequisite PHY 004A Prerequisite MAT 003B This lecture/laboratory course, in the second in the engineering physics series, is a calculus-based study of electricity and magnetism that develops the concepts and applications of Maxwell's equations, including DC and AC circuits.

PHY 004C Engineering Physics-Light and Heat (3.0 Lecture/1.0 Lab) 4.0 UNITS
Prerequisite MAT 003B Prerequisite PHY 004A This lecture/laboratory course is the third course in the calculus-based engineering physics series. Topics include classical thermodynamics, geometrical and wave optics and modern physics.

PHY 004D Engineering Physics-Atomic (2.0 Lecture) 2.0 UNITS
Prerequisite: PHY 004B. This course is an introduction to quantum physics, the electronic structure of atoms, solids, band theory, radiation, and relativity.

PHY 010 Introduction to Physics (3.0 Lecture/1.0 Lab) 4.0 UNITS
Prerequisite: MATH 903 This course is a descriptive, conceptual approach to mechanics, thermodynamics, electricity and magnetism, optics, and modern physics.

(PLM)

PLM 101 Plumbing Apprenticeship: Safety/OSHA/Tools/Heritage/Service (0.5 Lecture/2.5 Lab) 3.0 UNITS
First-year course of the Plumber & Pipefitter Apprenticeship program. Provides students with a working knowledge of plumbing industry materials and standards. Learn use and care of pipe trade tools, practice safety and heritage of the United Association. Also provides OSHA 30 certification.

PLM 102 Plumbing Apprenticeship: Mathematics/Science for the Plumbing Trade (1.5 Lecture/1.5 Lab) 3.0 UNITS
First year of the Plumber & Pipefitter Apprenticeship program. This course provides students with a working knowledge of mathematics and science as it applies to the plumbing industry.

PLM 103 Plumbing Apprenticeship: Plumbing Code/Water Supply Systems (1.5 Lecture/1.5 Lab) 3.0 UNITS
Second year of the Plumber & Pipefitter Apprenticeship program. This course provides students with a working knowledge of Plumbing Code I and Water Supply Systems.

PLM 104 Plumbing Apprenticeship: Drawing I for the Plumbing Trade (1.0 Lecture/2.0 Lab) 3.0 UNITS
Second year course of the Plumber & Pipefitter Apprenticeship program. This course provides students with a working knowledge of plumbing and piping layouts, drainage systems, piping and fixture supports as it applies to mechanical drawings.

PLM 105 Plumbing Apprenticeship: Drawing II/Drainage (1.0 Lecture/2.0 Lab) 3.0 UNITS
Third year course of the Plumber & Pipefitter Apprenticeship program. This course provides students with a working knowledge of Technical Drawings, Isometric Drawings and the creation of Building Plans as it applies to the Plumbing trade.

PLM 106 Plumbing Apprenticeship: Welding/Oxy-Acetylene Training (0.5 Lecture/2.5 Lab) 3.0 UNITS
Third year course of the Plumber & Pipefitter Apprenticeship program. This course provides students with a working knowledge of welding principles, as it relates to Metal ARC welding, Gas ARC welding, TIG Welding, MIG Welding and Oxygen/Acetylene burning and welding.

PLM 107 Plumbing Apprenticeship: Hydronic & Steam Systems/Pipe Fitting & Service (0.5 Lecture/2.5 Lab) 3.0 UNITS
Fourth year of the Plumber & Pipefitter Apprenticeship program. This course provides students with a working knowledge of Layout, Cut, and Fit for Hydronic Water Piping and Steam fitting systems.

PLM 108 Plumbing Apprenticeship: Medical Gas/Rigging/Signal Person (1.0 Lecture/2.0 Lab) 3.0 UNITS
Fourth year course of the Plumber & Pipefitter Apprenticeship program. This course provides students with a working knowledge of Medical Gas, Brazing, Rigging and Crane Signaling.

PLM 109 Plumbing Apprenticeship: ADV. Draw./Layout Plumb. Trade/UA Foreman (1.0 Lecture/2.0 Lab) 3.0 UNITS
Fifth year course of the Plumber & Pipefitter Apprenticeship program. This course provides students with a working knowledge of Advanced Drawing, Plumbing Layout and Building Detailing. Practical field knowledge of plumbing duties, processes, objectives and code callouts is covered in-depth.
POLITICAL SCIENCE (POL)

POL 001 American Government (3.0 Lecture) 3.0 UNITS
Advisory: Eligibility for ENG 001A and REA 054. This course studies democratic structures and functions of American national, state, and local governments. Pass/No Pass Option.

POL 001H American Government - Honors (3.0 Lecture) 3.0 UNITS
Advisory: Eligibility for ENG 001A and REA 054. This honors course studies democratic structures and functions of American national, state, and local governments. Students cannot get credit for both POL 001 and POL 001H. This section requires enrollment in the Honors Transfer Project. More information and the online application can be found at http://honors.missioncollege.edu.

POL 002 Comparative Government (3.0 Lecture) 3.0 UNITS
This course offers an introduction to Comparative Governments. Students will look at the governments, politics and public policies of other nations from Europe to Asia, from Africa to South America, to compare similarities and differences. Particular emphasis will be placed on contemporary political problems and how different nations confront and seek to solve them. Pass/No Pass Option.

POL 003 Introduction to Social and Political Philosophy (3.0 Lecture) 3.0 UNITS
This course introduces students to a critical study of some major social and political problems. What is society? What is a state? What is freedom? What is authority? What is the nature of political obligation? What constitutes justice? What constitutes a right? What are the relationships, if any, between the individual and society? This course is cross-listed as PHIL 005. Pass/No Pass Option.

POL 004 International Relations (3.0 Lecture) 3.0 UNITS
This course offers an introduction to the understanding of International Relations. This class will look at the how and why of world politics, surveying the history, theory, players, processes and structures in International Relations. Pass/No Pass Option.

POL 005 Political Science Research Methodology (3.0 Lecture) 3.0 UNITS
Advisory: Eligibility for ENG 001A, REA 054 and POL 001 or a college level course in any political or social science field. This course is an exploration of the research methodologies used in political science. Pass/No Pass Option.

POL 006 Politics of Race, Class and Gender (3.0 Lecture) 3.0 UNITS
An introduction to the role that race, economic class, and gender play in American politics. The political history, perspectives and experiences of women, Asian Americans, African Americans, Native Americans, Gay and Lesbians, immigrants, Hispanics, and the poor will be variously explored, compared and analyzed. Pass/No Pass Option.

POL 007 International Films (3.0 Lecture) 3.0 UNITS
This course provides a critical look at the world its problems through some of the finest international films. Films from Asia, Africa, Europe, South America and the United States will be viewed and analyzed to explore such topics as nationalism, sovereignty, war and peace, ethnic conflict, economics and immigration. (Co-listed as HUM 007). Pass/No Pass Option.

POL 020 Controversial Legal Issues (3.0 Lecture) 3.0 UNITS
Advisory: POL 001. This course includes a critical exploration of civil rights and liberties in a modern context. Pass/No Pass Option.
**REA 054** Critical College Reading and Thinking (3.0 Lecture) 
3.0 UNITS
Prerequisite: REA 961 or Prerequisite Qualifying score on Reading Placement Test. This course enables students to examine, develop and apply the concepts involved in critical reading and thinking. The emphasis is on the ability to interpret, analyze and evaluate college text.

**REA 063** Developing College Vocabulary 3.0 UNITS
Advisory: Eligibility for ENGL 001A and READ 053. Prerequisite: READ 961. This course teaches methods of expanding college vocabulary through oral and written practice, and through reading. Pass/No Pass Option.

**REA 960** Reading Fundamentals (2.5 Lecture/0.5 Lab) 3.0 UNITS
Advisory: A qualifying score on the Reading Placement Test. Concurrent enrollment in READ 975S or READ 947 is recommended for students who need additional time to work on their skills. This reading course is for students who wish to develop word attack (phonics), vocabulary and comprehension skills. This course includes a lab component. Pass/No Pass Only.

**REA 961** Building College Reading Strategies (2.5 Lecture/0.5 Lab) 3.0 UNITS
Prerequisite: REA 960, or Prerequisite ESL 970RW, Prerequisite ESL 970G and Prerequisite ESL 970LS or qualifying score on placement test. This course develops and improves reading skills and strategies including expanding vocabulary, improving reading comprehension, and building effective study habits.

**REA 983** Reading Classroom Texts (1.0 Lecture) 1.0 UNIT
This course teaches methods of improving comprehension of college textbook reading. Academic vocabulary development is also included. Students must be concurrently enrolled in another college course in which to practice their skills.

**RFL 024** Introduction to Floral Design 3.0 UNITS
Students learn how to identify, care for and use cut flowers and foliage in creating displays. This course covers basic design elements, principles, and routine shop procedures used by florists in the industry to successfully sell flowers. Students take home arrangements each week.

**RFL 028** Interior Plant Identification 1.5 UNITS
Students are introduced to the basic botany and plant taxonomy of indoor plants. Plant identification and care of the most commonly utilized house plants and indoor flowering plants are studied. Basic control of pests and diseases is reviewed. One Saturday field trip required. Designed for students aspiring to complete the Retail Floristry Program.

**RFL 032** Advanced Floral Designs 2.0 UNITS
This hands on course covers advanced principles and techniques used in Traditional, Contemporary, European, Asian, Tropical, and Hi-Tech designs. This course builds on information and techniques presented in previous courses. Students provide their own materials.

**RFL 033** Dry and Silk Floral Design 1.0 UNIT
This hands-on course demonstrates beginning and advanced techniques utilizing dry and silk flowers. Topics include sculpture, topiary, spheres, high style, and wall sprays, among others. Students are responsible for providing their own flowers.

**RFL 037** Flower Shop Operations 2.0 UNITS
This course introduces the students to the minimum steps and procedures necessary for individuals to establish a retail floristry shop. A wide variety of practical topics will be reviewed to enable students to work in or to establish a retail floristry shop.

**RFL 038** Weddings, High Style and Memorial Designs 1.0 UNIT
This course assists students in learning techniques used in bridal consultations, wedding designs and construction of arrangements for traditional and non-traditional weddings or other events that need high style arrangements. Memorial consultations and the construction of casket covers, sprays, container arrangements and family pieces are also covered.

**RFL 039** Display Design for Florists 1.0 UNIT
This course covers the basic display techniques for a florist to use when featuring the use of fresh flowers, silk flowers and dried materials. A variety of display pieces (e.g. baskets, pottery, glassware and textiles) will be utilized.

**RFL 041** Holiday Flower Arranging for the Home 1.0 UNIT
Students will learn to create holiday arrangements for the home. Topics will include wall, door and table designs. All materials are provided by student. Pass/No Pass Option. Floral materials fee of $30.00.

**RFL 041A** Holiday Floral Design I 1.0 UNIT
This is a hands-on course covering the design of floral arrangements for fall and winter holidays. Students learn to create holiday arrangements and designs. Topics covered include wreaths, door decorations, fruit and vegetable designs and centerpieces.

**RFL 041B** Holiday Floral Design II 1.0 UNIT
This is a hands-on course covering the design of floral arrangements for spring and summer holidays. Students learn to create holiday arrangements and designs. Topics covered include tabletop arrangements, bouquets, and seasonally appropriate materials and designs.

**RFL 045** Ikebana/Oriental Style Flower Arranging 0.5 UNITS
Students will obtain an overview and appreciation of the basics of the oriental style flower design. The course emphasizes the creative use of materials and encourages students to experiment and explore a variety of design concepts.

**RFL 057** Introduction to Flower Arranging 1.0 UNIT
Overview of fundamental design concepts to develop an appreciation for flowers and other materials used in creating arrangements. Students will provide materials and must bring a bud vase to first class meeting. No previous floral experience necessary. May be repeated three times. Pass/No Pass Option.

**RFL 061** European Design Techniques 0.5 UNITS
A hands-on design class in European techniques for students interested in learning European styles, including hand-tied bouquets and contemporary techniques.

**RFL 062** Designs Without Flowers Preservation 1.0 UNIT
This course is a hands-on design class, including contemporary high-style techniques such as linear and parallel designs.

**RFL 065** Advanced Silk Flowers 0.5 UNITS
Prerequisite: RFL 030. This class enables students to advance their design skills using silk flowers. Topics include the latest styles of design. Students provide their own materials to complete their floral designs. Pass/No Pass Option.

**RFL 066** Directed Studies 1.0 UNIT
Students develop the ability to incorporate materials from nature into arrangements taking advantage of a wide variety of textures.

**RFL 091** Directed Studies 1.0 UNIT
Prerequisite: An interview to determine objectives & a written contract must be made with instructor. Directed Studies are investigations of special interests to the student. Pass/No Pass Option.

**RLS 090** Principles of Real Estate (3.0 Lecture) 3.0 UNITS
This is a basic Real Estate course and is a requirement for the California Salesperson license and it is a required course for the Real Estate Certificates and the AA Degree in Real Estate.

**RLS 091** Real Estate Practice (3.0 Lecture) 3.0 UNITS
The students study the operations of a real estate business. This course applies toward the educational requirements of the California Real Estate Salesperson and Broker license examinations.
### COURSES

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<thead>
<tr>
<th>COURSE</th>
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<tbody>
<tr>
<td>RLS 093A</td>
<td>Legal Aspects of Real Estate I</td>
<td>3.0</td>
<td>RLEST 090. Student will study California real estate law, including rights incident to property ownership &amp; management, agency, contracts, &amp; application of real estate transfer. Meets the California broker license requirement. Pass/No Pass Option.</td>
</tr>
<tr>
<td>RLS 094A</td>
<td>Real Estate Appraisal I</td>
<td>3.0</td>
<td>RLEST 090. Course covers the purposes of appraisals, the appraisal process. Emphasis is on the Market Approach to Residential Appraisals. Meets the Real Estate Broker and Appraiser license and certification education requirements. Pass/No Pass Option.</td>
</tr>
<tr>
<td>RLS 095A</td>
<td>Real Estate Finance I</td>
<td>3.0</td>
<td>RLEST 090 or Real Estate license, or demonstrated subject matter proficiency. MATH 903 or BUS 064B. This course covers real estate financing, which includes lending policies, problems in financing transactions in residential, apartment, commercial and special purpose properties. Pass/No Pass Option.</td>
</tr>
<tr>
<td>RLS 096A</td>
<td>Real Estate Investment I</td>
<td>3.0</td>
<td>RLEST 090 or Real Estate license, or demonstrated subject matter proficiency. MATH 903 or BUS 064B. This course is designed to acquaint the real estate student with the specific advantages and disadvantages of the various types of real estate investments. Pass/No Pass Option.</td>
</tr>
<tr>
<td>RLS 100</td>
<td>Property Management</td>
<td>3.0</td>
<td>RLEST 090. Study of successful techniques &amp; practices in the management of income property from acquisition to disposal. Meets the California Broker License requirement. Pass/No Pass Option.</td>
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### SOCIOLOGY (SOC)

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
<th>PREREQUISITES</th>
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</thead>
<tbody>
<tr>
<td>SOC 001</td>
<td>Introduction to Sociology (3.0 Lecture)</td>
<td>3.0</td>
<td>The study of interplay of the individual and society. Pass/No Pass Option.</td>
</tr>
<tr>
<td>SOC 001H</td>
<td>Introduction to Sociology - Honors (3.0 Lecture)</td>
<td>3.0</td>
<td>This course is the study of the interplay between the individual and society. The honors component involves an in-depth analysis of specific topics, using current information from research journals and is more rigorous than SOC 001. Students cannot get credit for both SOC 001 and SOC 001H. This section requires enrollment in the Honors Transfer Project. More information and the online application can be found at <a href="http://honors.missioncollege.edu">http://honors.missioncollege.edu</a>.</td>
</tr>
<tr>
<td>SOC 002</td>
<td>Social Problems (3.0 Lecture)</td>
<td>3.0</td>
<td>A sociological analysis of contemporary social problems. Pass/No Pass Option.</td>
</tr>
<tr>
<td>SOC 002H</td>
<td>Social Problems - Honors (3.0 Lecture)</td>
<td>3.0</td>
<td>Advisory: SOC 001H or SOC 001. This course is a sociological analysis of contemporary social problems. The honors component involves an in-depth analysis of specific topics, using current information from research journals and is more rigorous than SOC 002. Students cannot get credit for both SOC 002 and SOC 002H. This section requires enrollment in the Honors Transfer Project. More information and the online application can be found at <a href="http://honors.missioncollege.edu">http://honors.missioncollege.edu</a>.</td>
</tr>
<tr>
<td>SOC 016</td>
<td>Introduction to Statistics in Social And Behavioral Sciences (3.0 Lecture)</td>
<td>3.0</td>
<td>Prerequisite MAT 000C or any higher math course; and Prerequisite PSY 001 or Prerequisite PSY 001H or Prerequisite SOC 001 or Prerequisite SOC 001H. For students majoring in psychology, sociology, and other behavioral sciences. Introduces students to the basic statistical techniques and design methodologies used in behavioral social sciences. This course is not equivalent to MAT 101. Pass/No Pass Option.</td>
</tr>
<tr>
<td>SOC 021</td>
<td>Introduction to Race and Ethnicity (3.0 Lecture)</td>
<td>3.0</td>
<td>This course introduces the student to the sociological analysis of race, ethnicity, and racism.</td>
</tr>
<tr>
<td>SOC 040</td>
<td>Introduction to Marriage and Family (3.0 Lecture)</td>
<td>3.0</td>
<td>Advisory: SOC 001, Eligibility for ENG 908 and REA 054. An analysis of love and marriage in the 2000’s. Pass/No Pass Option.</td>
</tr>
<tr>
<td>SOC 045</td>
<td>Introduction to Human Sexuality (3.0 Lecture)</td>
<td>3.0</td>
<td>Advisory: Eligibility for ENG 001A and REA 054. This course is an introduction to human sexuality, including basic health issues, attitudes, and behavior in western society. Pass/No Pass Option.</td>
</tr>
<tr>
<td>SOC 047</td>
<td>Sociology of Criminology (3.0 Lecture)</td>
<td>3.0</td>
<td>Advisory: SOC 001. The course is a sociological analysis of crime and criminal behavior in the United States; emphasis is placed on the study of victims, prevention of crime, prosecution, and rehabilitation. Opportunities to visit correctional facilities, trials, police informational meetings, or rehabilitation centers will be offered. Pass/No Pass Option.</td>
</tr>
<tr>
<td>SOC 050</td>
<td>Introduction to Criminal Justice (3.0 Lecture)</td>
<td>3.0</td>
<td>Advisory: Eligibility for ENG 001A and REA 054. This course introduces students to the characteristics of the criminal justice system in the United States. Pass/No Pass Option.</td>
</tr>
<tr>
<td>SOC 054</td>
<td>Concepts of Criminal Law (3.0 Lecture)</td>
<td>3.0</td>
<td>Prerequisite: SOC 050. This course offers an analysis of criminal liability in the United States.</td>
</tr>
<tr>
<td>SOC 058</td>
<td>Introduction to Corrections (3.0 Lecture)</td>
<td>3.0</td>
<td>Advisory: Eligibility for ENG 001A and REA 054. This course provides a history of and critical analysis of punishment and the alternatives to punishment. Pass/No Pass Option.</td>
</tr>
<tr>
<td>SOC 060</td>
<td>Community and Justice System (3.0 Lecture)</td>
<td>3.0</td>
<td>Advisory: Eligibility for ENGL 001A and READ 053. This course examines the complex relationship between communities and the justice system. Pass/No Pass Option.</td>
</tr>
</tbody>
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### SPANISH (SPA)

<table>
<thead>
<tr>
<th>COURSE</th>
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</tr>
</thead>
<tbody>
<tr>
<td>SPA 001</td>
<td>First Semester Spanish (Elementary Spanish) (5.0 Lecture)</td>
<td>5.0</td>
<td>Basic skills and structures in a cultural context.</td>
</tr>
<tr>
<td>SPA 001L</td>
<td>Spanish Laboratory (0.5 Lab)</td>
<td>0.5</td>
<td>SPA 001L is a requirement for students enrolled in SPA 001, and is designed to further enhance class material.</td>
</tr>
<tr>
<td>SPA 002</td>
<td>Second Semester Spanish (Elementary Level) (5.0 Lecture)</td>
<td>5.0</td>
<td>Prerequisite SPA 001. Corequisite SPA 002L. This class is a continuation of SPA 001 with further development of basic skills and structure. Students enrolled in SPA 002 must also enroll in the lab component SPA 002L.</td>
</tr>
<tr>
<td>SPA 002L</td>
<td>Second Semester Spanish Laboratory (0.5 Lab)</td>
<td>0.5</td>
<td>SPA 002L is a requirement for students enrolled in SPA 002, and is designed to further enhance class material.</td>
</tr>
<tr>
<td>SPA 003</td>
<td>Third Semester Spanish (5.0 Lecture)</td>
<td>5.0</td>
<td>Prerequisite SPA 002 or equivalent. This course is a continuation of SPA 002 emphasizing intensive oral and written drills.</td>
</tr>
<tr>
<td>SPA 004</td>
<td>Fourth Semester Spanish (5.0 Lecture)</td>
<td>5.0</td>
<td>Prerequisite SPA 003 or its equivalent. SPA 004 is a continuation of SPA 003 emphasizing composition and oral skills in the cultural context.</td>
</tr>
<tr>
<td>SPA 005</td>
<td>Fifth Semester Spanish (Advanced Level) (5.0 Lecture)</td>
<td>5.0</td>
<td>Prerequisite: SPAN 004 or its equivalent. SPAN 005 is a continuation of SPAN 004. Emphasis is on development of reading and writing proficiency. Pass/No Pass Option.</td>
</tr>
<tr>
<td>SPA 049A</td>
<td>Spanish for Native Speakers (2.0 Lecture)</td>
<td>2.0</td>
<td>Fundamentals of pronunciation, grammar, vocabulary and idioms as they are used in our Southwestern states. Pass/No Pass Option.</td>
</tr>
</tbody>
</table>
SPA 049B  Spanish for Spanish Speakers  2.0 UNITS
Advisory: SPAN 049A. A continuation of SPAN 49A, designed for those whose first language is Spanish. Pass/No Pass Option.

SPA 050A  Basic Conversational Spanish and Culture (3.0 Lecture)  3.0 UNITS
This course focuses on conversation and vocabulary building in a cultural context.

SPA 050B  Basic Conversational Spanish and Culture (3.0 Lecture)  3.0 UNITS
Emphasis on conversation & vocabulary building in a cultural context.

(TRN)

TRN 010  Introduction to Transit Industry Careers (1.0 Lecture)  1.0 UNIT
Introduction to careers in the public transit industry. Gain knowledge of departments and career pathways in public transit.

TRN 101  Foundations of Public Service for Transit Workers (1.0 Lecture/1.0 Lab)  2.0 UNITS
Students are introduced to public transit agencies and the personal and interpersonal skills needed in serving the public. Per California Code of Regulations, this course is limited to students admitted to the Coach Operator Apprenticeship Program or the Public Transit Leadership Certificate Program.

TRN 102  Public Service and Stress Management for Public Transit Employees (1.0 Lecture)  1.0 UNIT
Students are introduced to the relationship between delivering professional public service and managing stress factors inherent in the transit industry. This course is limited to students admitted to the Public Transit Leadership Certificate program.

TRN 103  Community Health Issues for Public Transit Employees (1.0 Lecture)  1.0 UNIT
Students are introduced to common community health problems and issues they are likely to encounter on the job in the public transit industry. This course is limited to students admitted to the Public Transit Leadership Certificate program.

TRN 104  Peer Mentoring for Public Transit Workers: One-on-One Skills  1.0 UNIT
Students are introduced to the basic elements of one-on-one peer mentoring in a transit industry environment. This course is limited to students admitted to the Public Transit Leadership Certificate program.

TRN 105  Group Facilitation and Training Skills for Peer Mentors (1.0 Lecture)  1.0 UNIT
This course focuses on the theory and practice of facilitating effective meetings in a public transit environment. This course is limited to students admitted to the Public Transit Leadership Certificate program.

TRN 106  Interpersonal Communication for Transit Workers (1.0 Lecture)  1.0 UNIT
Students are introduced to the principles of effective interpersonal communication in public transit professions. This course is limited to students admitted to the Public Transit Leadership Certificate program.

TRN 107  Labor/Management Problem Solving in Public Transit (1.0 Lecture)  1.0 UNIT
Students are introduced to the principles of effective labor/management problem solving in public transit professions. This course is limited to students admitted to the Public Transit Leadership Certificate program.

TRN 108  Performance Coaching for Public Transit Leaders (1.0 Lecture)  1.0 UNIT
Students are introduced to the principles of effective performance coaching in unionized public transit professions. This course is limited to students admitted to the Public Transit Leadership Certificate program.

TRN 109  Transit Business Technology and Practices for Transit Employees (0.5 Lecture/0.5 Lab)  1.0 UNIT
Students acquire fundamental technology skills necessary in today's public transit agencies, including computer basics, simple usage of Microsoft Office applications, and accessing the Internet. This course is limited to students admitted to the Public Transit Leadership Certificate Program.

TRN 110  Transit Operations for New Leaders (2.0 Lecture)  2.0 UNITS
Students are introduced to major support departments in public transit bus (coach) operations: bus maintenance, transit planning and scheduling, transit radio dispatching, and field supervision. This course is limited to students admitted to the Public Transit Leadership Certificate program.

TRN 121  Way, Power, & Signal Maintenance Core Training I (0.5 Lecture/0.5 Lab)  1.0 UNIT
Students are introduced to the Way, Power, and Signal shop floor and basic safety protocols. Per California Code of Regulations, this course is limited to students admitted to light rail apprenticeship programs at Santa Clara Valley Transportation Authority.

TRN 122  Way, Power, & Signal Maintenance Core Training II (1.0 Lecture)  1.0 UNIT
Students are introduced to ladder safety, basic Traffic Control, electrical safety, and lockout/tag out security. Per California Code of Regulations, this course is limited to students admitted to light rail apprenticeship programs at Santa Clara Valley Transportation Authority.

TRN 123  Way, Power, & Signal Maintenance Core Training III (1.0 Lecture)  1.0 UNIT
Students are introduced to rail certification (rules and regulations) and roadway worker protection (safety in the railroad environment). Per California Code of Regulations, this course is limited to students admitted to light rail apprenticeship programs at Santa Clara Valley Transportation Authority.

TRN 131  Basic Principles of Track Maintenance I (1.5 Lecture/0.5 Lab)  2.0 UNITS
Students are introduced to track structure, safety and use of track, track tools, roadbed, crossties, and ballast. Per California Code of Regulations, this course is limited to students admitted to the Track Worker Apprenticeship Program.

TRN 132  Basic Principles of Track Maintenance II (1.5 Lecture/0.5 Lab)  2.0 UNITS
Students are introduced to rail maintenance, rail joint maintenance, track alignment and gage, track surface, turnouts, and roadway maintenance. Per California Code of Regulations, this course is limited to students admitted to the Track Worker Apprenticeship Program.

TRN 133  Advanced Principles of Track Maintenance I (1.5 Lecture/0.5 Lab)  2.0 UNITS
Students are introduced to rail replacement, cutting and welding, turnouts and trackwork, track construction, railroad grade crossing, and management and security. Per California Code of Regulations, this course is limited to students admitted to the Track Worker Apprenticeship Program.

TRN 134  Advanced Principles of Track Maintenance II (1.5 Lecture/1.0 Lab)  2.5 UNITS
Students are introduced to operation work equipment, vegetation control, rail defects, track inspection, FRA track standards, and derailment work. Per California Code of Regulations, this course is limited to students admitted to the Track Worker Apprenticeship Program.

TRN 141  Principles of Electricity and Test Equipment (2.5 Lecture/0.5 Lab)  3.0 UNITS
This course covers basic principles of electricity and use of electrical test equipment. Per California Code of Regulations, this course is limited to students admitted to the Overhead Line Core apprenticeship program at Santa Clara Valley Transportation Authority.

TRN 142  Electrical Safety for the Trades (2.5 Lecture)  2.5 UNITS
This course covers the dangers of electricity and how to recognize and avoid electrical hazards. Per California Code of Regulations, this course is limited to students admitted to the Overhead Line Core apprenticeship program at Santa Clara Valley Transportation Authority.
This course covers DC (Direct Current) theory and various power components used in overhead line work. Per California Code of Regulations, this course is limited to students admitted to the Overhead Line Core apprenticeship program at Santa Clara Valley Transportation Authority.

TRN 144 Traction Power Safety Practices (2.5 Lecture) 2.5 UNITS

This course covers safe practices for the use of traction power systems. Per California Code of Regulations, this course is limited to students admitted to the Overhead Line Core apprenticeship program at Santa Clara Valley Transportation Authority.

TRN 151 Overhead Line Worker Apprenticeship Fundamentals I (2.5 Lecture) 2.5 UNITS

This class focuses on the fundamentals of being an overhead line worker.

TRN 152 Overhead Line Worker Apprenticeship Fundamentals II (1.5 Lecture/1.0 Lab) 2.5 UNITS

This course covers traction power tools and test equipment, traction power substations, power distribution and control, and overhead contact systems. Per California Code of Regulations, this course is limited to students admitted to the Overhead Line Worker apprenticeship program at Santa Clara Valley Transportation Authority.

TRN 153 Overhead Line Worker Apprenticeship Fundamentals III (2.0 Lecture/0.5 Lab) 2.5 UNITS

This course covers fall protection, rigging and hoisting, hi-rail vehicles, bucket truck and bucket rescue, grounding, and confined space entry. Per California Code of Regulations, this course is limited to students admitted to the Overhead Line Worker apprenticeship program at Santa Clara Valley Transportation Authority.

TRN 154 Catenary Safe Work Practices (4.0 Lecture/1.0 Lab) 5.0 UNITS

This course covers the hazards of working on overhead catenary lines, and how to effectively protect against them. Per California Code of Regulations, this course is limited to students admitted to the Overhead Line Worker apprenticeship program at Santa Clara Valley Transportation Authority.

TRN 155 Mobile Crane - Boom Truck (1.5 Lecture/0.5 Lab) 2.0 UNITS

This course covers safe use of the mobile crane (boom truck). Per California Code of Regulations, this course is limited to students admitted to the Overhead Line Worker apprenticeship program at Santa Clara Valley Transportation Authority.

TRN 201 Service Mechanic: Orientation & Safety (2.5 Lecture) 2.5 UNITS

This course covers an orientation to VTA, the mechanic helper program, the shop floor, familiarization with the fleet, and electrical safety. Per California Code of Regulations, this course is limited to students admitted to the Service Mechanic apprenticeship program at Santa Clara Valley Transportation Authority.

TRN 202 Service Mechanic: Tools & Fasteners (2.5 Lecture) 2.5 UNITS

This course focuses on tools and fasteners: correct work methods, care and selection of tools, common tools and uses, and common fasteners and uses. Per California Code of Regulations, this course is limited to students admitted to the Service Mechanic apprenticeship program at Santa Clara Valley Transportation Authority.

TRN 203A Service Mechanic: Electrical/Electronics 1 (2.5 Lecture) 2.5 UNITS

This course covers direct current, circuits, Ohm's Law, and Watt's Law. Per California Code of Regulations, this course is limited to students admitted to the Service Mechanic apprenticeship program at Santa Clara Valley Transportation Authority.

TRN 203B Service Mechanic: Electrical/Electronics 2 (2.5 Lecture) 2.5 UNITS

This course covers batteries, starters, and the ATEC course on wiring, circuits, and schematics. Per California Code of Regulations, this course is limited to students admitted to the Service Mechanic apprenticeship programs at Santa Clara Valley Transportation Authority.

TRN 204 Service Mechanic: Air Brakes (2.5 Lecture) 2.5 UNITS

This course introduces students to the air brake system used on VTA buses. Per California Code of Regulations, this course is limited to students admitted to the Service Mechanic apprenticeship programs at Santa Clara Valley Transportation Authority.

TRN 205 Service Mechanic: Transmission (2.5 Lecture) 2.5 UNITS

This course covers transmission, including safety, driveline checks, hydraulics, and other related topics. Per California Code of Regulations, this course is limited to students admitted to the Service Mechanic apprenticeship programs at Santa Clara Valley Transportation Authority.

TRN 206 Service Mechanic: Diesel Engine (2.5 Lecture) 2.5 UNITS

This course focuses on diesel engine theory and components. Per California Code of Regulations, this course is limited to students admitted to the Service Mechanic apprenticeship programs at Santa Clara Valley Transportation Authority.

TRN 207 Service Mechanic: Hybrid Familiarization (2.5 Lecture) 2.5 UNITS

This course focuses on hybrid engine systems and the different ways to work with them vs. traditional diesel engines. Per California Code of Regulations, this course is limited to students admitted to the Service Mechanic apprenticeship programs at Santa Clara Valley Transportation Authority.

TRN 208 Service Mechanic: I/O Controls (2.5 Lecture) 2.5 UNITS

This course focuses on Input/Output controls found on hybrid vehicles (onboard computer). Per California Code of Regulations, this course is limited to students admitted to the Service Mechanic apprenticeship programs at Santa Clara Valley Transportation Authority.

TRN 209 Service Mechanic: Preventative Maintenance - PMI (2.5 Lecture) 2.5 UNITS

This course focuses on preventative maintenance practices, such as routine inspections. Per California Code of Regulations, this course is limited to students admitted to the Service Mechanic apprenticeship programs at Santa Clara Valley Transportation Authority.

TRN 210 Service Mechanic: Overhaul & Repair Orientation (2.5 Lecture) 2.5 UNITS

This course focuses on an overview of the Overhaul and Repair Department at public transit agencies. Per California Code of Regulations, this course is limited to students admitted to the Service Mechanic apprenticeship programs at Santa Clara Valley Transportation Authority.

TRN 401 Coach Operator: New Operator Training I (1.5 Lecture/0.5 Lab) 2.0 UNITS

This classroom/lab instruction course for Coach Operator Apprentices focuses on DMV legal regulations as they apply to the mass transit industry. Per California Code of Regulations, this course is limited to students admitted to the Coach Operator apprenticeship programs at Santa Clara Valley Transportation Authority.

TRN 402 Coach Operator: New Operator Training II (2.5 Lecture/2.5 Lab) 5.0 UNITS

This classroom/lab instruction course for Coach Operator apprentices focuses on transit operations - rules and regulations, and processes. Apprentices also complete training in the field. Per California Code of Regulations, this course is limited to students admitted to the Coach Operator apprenticeship programs at Santa Clara Valley Transportation Authority.

TRN 403 Coach Operator: New Operator Training III (1.0 Lecture) 1.0 UNIT

This classroom instruction course for Coach Operator apprentices focuses on customer service, internal relationships between departments, and personal well-being. Per California Code of Regulations, this course is limited to students admitted to the Service Mechanic apprenticeship programs at Santa Clara Valley Transportation Authority.
students admitted to the Coach Operator apprenticeship programs at Santa Clara Valley Transportation Authority.

TRN 404 Coach Operator: New Operator Training IV (1.0 Lecture) 1.0 UNIT
This classroom instruction course for Coach Operator Apprentices focuses on safety and security while driving. Per California Code of Regulations, this course is limited to students admitted to the Coach Operator apprenticeship programs at Santa Clara Valley Transportation Authority.

TRN 405 Coach Operator: New Operator Training V (1.0 Lecture) 1.0 UNIT
This classroom instruction course for Coach Operator Apprentices focuses on technical proficiency with coach equipment, troubleshooting, and vehicle inspection. Per California Code of Regulations, this course is limited to students admitted to the Coach Operator apprenticeship programs at Santa Clara Valley Transportation Authority.

TRN 421 Transit Dispatching and Radio Communications (4.0 Lecture/4.0 Lab) 8.0 UNITS
This intensive course covers the combined classroom and field training sections of Transit Radio Dispatcher (TRD) training. Per California Code of Regulations, this course is limited to students admitted to the Transit Radio Dispatcher apprenticeship programs at Santa Clara Valley Transportation Authority.

TRN 441 Business Technology and Writing for Supervisors (0.5 Lecture/0.5 Lab) 1.0 UNIT
This course covers fundamental technology and professional written communication skills necessary for supervisory roles in today’s public transit agencies. Per California Code of Regulations, this course is limited to students admitted to the Transit Supervisor apprenticeship programs at Santa Clara Valley Transportation Authority.

VIETNAMESE (VIE)

VIE 001 First Semester Vietnamese (5.0 Lecture) 5.0 UNITS
The student acquires the basic skills for communication in Vietnamese: listening, speaking, reading, and writing. The student is exposed to a general overview of Vietnamese civilization and culture.

VIE 001L Vietnamese Laboratory 0.5 UNITS
This is an individualized, self-paced laboratory course offered by arrangement at the student's convenience, which aims to present the culture of Vietnam through a variety of media. The student will review the customs and culture of Vietnam through audio and video tapes, and selected reading materials. Pass/No Pass Option.

VIE 002 Second Semester Vietnamese (5.0 Lecture) 5.0 UNITS
Prerequisite: VIE 001 or Prerequisite Completion of two years of Vietnamese at high school level or approval from instructor of the course. In this course, the student continues development of listening, speaking, reading, and writing skills. The student also increases vocabulary and knowledge of Vietnamese grammar.

VIE 002L Vietnamese Laboratory 0.5 UNITS
This is an individualized, self-paced laboratory course offered by arrangement at the student's convenience, which aims to present the culture of Vietnam through a variety of media. The student will review the customs and culture of Vietnam through audio and video tapes, and selected reading materials. Pass/No Pass Option.

VIE 049A Vietnamese for the Vietnamese-Speaking (3.0 Lecture) 3.0 UNITS
Course designed for the native speaker of Vietnamese. Emphasis on fundamentals of formal spoken and written language. Includes study of culture, traditions, and interpersonal etiquette.

VIE 049B Vietnamese Language and Culture for Fluent Speakers (3.0 Lecture) 3.0 UNITS
Prerequisite: VIE 049A. This course is a continuation of VIE 049A for fluent Vietnamese speakers to study their language, culture, and Vietnamese Americans.

VIE 050A Basic Conversational Vietnamese and Culture 3.0 UNITS
Vietnamese 050A is designed for anyone desiring a basic, practical conversational approach to learning the Vietnamese language and culture. This course is not designed for the native speaker. Pass/No Pass Option.

(WHP)

WHP 001B Adaptive Physical Education 0.5 UNITS
This course will allow the student to focus on individual goals along with developing a better level of cardiovascular endurance, muscular strength, and flexibility. Pass/No Pass Option.

WHP 001F Adaptive PE Aerobics 1.0 UNIT
This course is designed to introduce and teach skills needed for daily cardiovascular activity through the use of rhythmic aerobics for students with disabilities. Pass/No Pass Option.

WHP 003E Hip Hop Performance 2.0 UNITS
This is a performance based class for advanced dance students. Students have an opportunity to choreograph, rehearse, and perform dances in informal settings, as well as formal settings such as the West Valley College theater and other venues. The emphasis is on group and individual participation in all areas of dance production including performance and technical aspects of performance. Pass/No Pass Option.

WHP 003F Dance: Hip Hop - Funk Styles 1.0 UNIT
Advisory: WHP 003X. This course will teach the student the fundamentals and choreography of hip hop funk styles (example: locking, popping, boogalooing, waving, etc.). Students will be expected to perform a hip hop routine reflecting their own style and interpretation. Misconceptions about the hip hop/funk dance culture will be presented. Pass/No Pass Option.

WHP 003L Beginning Modern Dance 1.0 UNIT
Advisory: Eligibility for ENGL 001A and READ 054. This course is an introduction to the varied styles, techniques, and forms of modern dance style. Pass/No Pass Option.

WHP 003S Beginning Social Dance 1.0 UNIT
This course is designed to acquaint the student with the basic forms of social dance. Dance posture, rhythm and social practice as related to the dance experience. It will also be introduced to help students become proficient in this basic dance style. Pass/No Pass Option.

WHP 003V Intermediate Social Dance 1.0 UNIT
Advisory: WHP 003S. This course is designed to introduce the student to more advanced steps and techniques of social dance. Emphasis is placed on dance style and more elaborate dance patterns. Pass/No Pass Option.

WHP 003X Dance: Intermediate Hip Hop 1.0 UNIT
Advisory: WHP 003W. This course will introduce the student to intermediate movements and patterns of hip hop/street funk. Students will be expected to choreograph a routine based upon their own style and interpretation. Pass/No Pass Option.

WHP 003Z Social Dance: Swing 1.0 UNIT
Advisory: WHP 003S or equivalent. This course is designed to provide the students with an opportunity to concentrate their study of social dance to Swing including West Coast, East Coast, Jive, Jitterbug, Shag and Lindy Hop. Instruction, history, and open dancing will be included within the class structure. Pass/No Pass Option.

WHP 004B Fitness: Stretch and Flex 1.0 UNIT
This course is designed to enhance the student's flexibility by having them learn and follow a series of stretching and breathing exercises delivered through video instruction. In addition, students will be introduced to contraindicated exercises that could be potentially harmful and stress reduction techniques associated with stretching.

WHP 004F Fitness: Lower Body Conditioning (Legs, Abs, and Glutes) 1.0 UNIT
This course is designed to provide a high level workout for those students who want to take seriously the conditioning and look of their lower body. This will include strength training, cardiovascular conditioning, and dynamic exercises targeting specific muscle groups. Pass/No Pass Option.
COURSES

WHP 004G  Fitness: Step Aerobics  1.0 UNIT
This course is designed to utilize the step as a means for improving cardiovascular fitness. A thorough warm-up and cool-down will be included in each class. Knowledge of proper step technique as well as an understanding of ways to improve all aspects of fitness will also be covered in this course. Pass/No Pass Option.

WHP 004H  Fitness: Aerobic Dance  1.0 UNIT
Advisory: Eligibility for ENGL 001A and READ 054. This course is designed to provide safe cardiovascular activity and to develop and maintain physical and cardiovascular fitness through the medium of dance. Movement to popular music is used to achieve these goals. This section requires enrollment in the Honors Transfer Project. More information and the online application can be found at http://honors.missioncollege.edu.

WHP 004I  Fitness: Cardio-Kickboxing  1.0 UNIT
This course is an introduction to aerobic kickboxing. Cardio-kickboxing uses techniques from karate, tai chi and boxing as ways to achieve an aerobic workout. In this course, there will be an appropriate warm-up and cool-down. Pass/No Pass Option.

WHP 004J  Fitness: Competitive Athlete  1.0 UNIT
Advisory: Eligibility for ENGL 001A and READ 053. This course is designed to develop a highly condition body for strength, flexibility, and endurance for the competing varsity athlete. Pass/No Pass Option.

WHP 004Q  Fitness: Stretch and Strengthen  1.0 UNIT
This course is designed to introduce strengthening and stretching exercises for the entire body. The class will begin with strengthening exercises and then be followed by stretching exercises to promote flexibility and stress reduction. Credit/No Credit Option.

WHP 004S  Weight Training Internship (0.5 Lab)  0.5 UNITS
This class is part of the Fitness Specialist Certificate program. It allows students, to serve as an intern in a weight training class presently offered at the college. Each intern will serve as an assistant to the instructor and acquire the skills and confidence needed to be a personal trainer.

WHP 004T  Fitness: Conditioning  1.0 UNIT
This course is designed to introduce the student to the various components of physical fitness and have them work on developing a better level of cardiovascular endurance, muscular strength, body composition and flexibility. Pass/No Pass Option.

WHP 004U  Fitness: Weight Training  1.0 UNIT
Course is designed to enhance the development muscular fitness and overall body tone. Information will be presented to increase student understanding of various aspects of weight training from safety through proper lifting techniques. Pass/No Pass Option.

WHP 005A  Fitness: Stress Reduction Through Exercise and Physical Fitness  3.0 UNITS
This course is designed to understand and identify the stress process and how it relates to personal health and exercise. The relationship between stress reduction and exercise will be discussed. Exercise routines and intervention strategies and techniques will be developed and practiced during this course to help students effectively deal with stress. Pass/No Pass Option.

WHP 005H  Self-Defense  1.0 UNIT

WHP 005K  Tai Chi: Beginning  1.0 UNIT
This course will introduce the student to the forms and beginning concepts of Tai Chi for health improvement and stress reduction. Participation in class will provide the student with an opportunity to learn an exercise system which is the basis for lifelong health. Pass/No Pass Option.

WHP 005L  Aikido - Beginning  1.0 UNIT
This course will introduce the student to the philosophy, principles, and physical techniques of Aikido, a non-violent martial art form. The course will emphasize harmony and natural movements to resolve conflicts and integrate mind-body awareness. Pass/No Pass Option.

WHP 005M  Karate: Intermediate  1.0 UNIT
Advisory: WHP 005J, Eligibility for ENGL 001A and READ 053. This class focuses on intermediate level instruction of the Wado Ki Kai Karate system. Students learn forms including: Naihanchi, Jion, Saifa, Passai, Chinto, Unsa, and Empi. A technical breakdown of body movement and development of self defense techniques is incorporated including striking, kicking, groundwork, and conditioning. Pass/No Pass Option.

WHP 005N  Karate: Advanced  1.0 UNIT
Advisory: WHP 005M, Eligibility for ENGL 001A and READ 054. This class is an advanced level instruction of the Wado Ki Kai Karate system. Students learn forms, including Seisan, Kusanku-Sho, weapons staff (bo) and trident (sai). Students also learn technical breakdown of body movement and development of self defense technique. Physical conditioning and flexibility are emphasized. Pass/No Pass Option.

WHP 005O  Karate: Conditioning  1.0 UNIT
Advisory: WHP 005J, Eligibility for ENGL 001A and READ 054. This class focuses on conditioning for the Wado Ki Kai Karate system. Students develop flexibility, stamina, muscular strength, focus, and breathing. Pass/No Pass Option.

WHP 005P  Aikido - Intermediate  1.0 UNIT
Prerequisite: WHP 005L. Advisory: Eligibility for ENGL 908, ENGL 001A and READ 054. This course builds upon the students philosophy, principles, and physical techniques taught in WHP 005L (Aikido-Beginning). The course emphasizes intermediate applications of principles and movements to resolve conflicts and integrate mind-body awareness. Pass/No Pass Option.

WHP 005Q  Aikido Advanced  1.0 UNIT
Prerequisite: WHP 005P Intermediate Aikido or instructor's permission. Advisory: Eligibility for ENGL 001A and READ 053. This course builds upon the student's philosophy, principles, and physical techniques taught in WHP 005P (Aikido-Intermediate). The course emphasizes advanced applications of principles and movements to resolve conflicts and integrate mind-body awareness. Pass/No Pass Option.

WHP 005R  Aikido Conditioning  1.0 UNIT
Advisory: Eligibility for ENGL 001A and READ 054. This course focuses on conditioning for the Art of Aikido. Students develop flexibility, stamina and proper body organization. Pass/No Pass Option.

WHP 005S  Fitness: Hiking  1.0 UNIT
Students are introduced to various hiking techniques as well as experience a variety of hiking trails around the local community. Every session includes a warm-up as well as a cool-down after a vigorous hike. Pass/No Pass Option.

WHP 007A  Fitness: Stability Ball Training  1.0 UNIT
Advisory: Eligibility for ENGL 108A and READ 053. This class is designed to utilize stability balls as a means for improving students' overall fitness levels. Students are introduced to a variety of ball exercises and training programs throughout this course. Pass/No Pass Option.

WHP 007E  Bowling  1.5 UNITS
Advisory: Eligibility for ENGL 001A and READ 053 This class is designed to introduce the student to the basic techniques and theory of Bowling. Emphasis is on approach, delivery, timing, rules, and scoring. Analysis of professional bowlers is required. Pass/No Pass Option.

WHP 007J  Golf-Beginning  1.0 UNIT
Advisory Eligibility for ENGL 001A and READ 053. Pass/No Pass Option.

WHP 007M  Archery: Beginning  1.0 UNIT
Advisory: Eligibility for ENGL 108A and READ 053. This course introduces the student to the sport of archery. Emphasis is placed on the history and etiquette of archery, instinctive shooting techniques, scoring, terminology, proper equipment, and safety. Pass/No Pass Option.

WHP 007T  Tennis-Advanced Beginner  1.0 UNIT
Advisory: WHP 007S. Gain further knowledge and mastery of the fundamentals of the game beyond the beginning level. Pass/No Pass Option. Materials fee of $5.00.
<table>
<thead>
<tr>
<th>COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WHP 007W</strong> Tournament Tennis</td>
<td>1.0 UNIT</td>
</tr>
<tr>
<td>Advisory: Eligibility for ENGL 001A and READ 053. Prerequisite: A demonstration of advanced skill competency. This course is designed for the student, with advanced skill competency, who has played or desires to play tournament tennis. Advanced skills and strategy are reviewed and practiced to increase mastery for tournament play. Pass/No Pass Option. Materials fee of $5.00.</td>
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<tr>
<td><strong>WHP 007X</strong> Tennis Doubles Strategies and Play</td>
<td>1.5 UNITS</td>
</tr>
<tr>
<td>Advisory: Eligibility for ENGL 001A and READ 053. Prerequisite:WHP 007U. Rules of play, strategies, and skill development for doubles in tennis are emphasized. Pass/No Pass Option.</td>
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</tr>
<tr>
<td><strong>WHP 008A</strong> Advanced Baseball</td>
<td>2.0 UNITS</td>
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<tr>
<td>This course is designed to provide an opportunity for men with advanced baseball skills to participate in and learn an activity geared to their level of ability. Ability. Pass/No Pass Option.</td>
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<tr>
<td><strong>WHP 008I</strong> Advanced Soccer Men &amp; Women</td>
<td>1.0 UNIT</td>
</tr>
<tr>
<td>Advisory: Eligibility for ENGL 001A and READ 053. This course is designed to enhance the skills and abilities of students involved competitively in the game of soccer. Extensive soccer conditioning is stressed including strength training and speed conditioning. Skill development is covered in class. Pass/No Pass Option.</td>
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<tr>
<td><strong>WHP 008K</strong> Softball-Beginning</td>
<td>1.0 UNIT</td>
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<tr>
<td>This course is designed to teach the basic skills, techniques and knowledge of the game of softball to students. Pass/No Pass Option.</td>
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<tr>
<td><strong>WHP 008L</strong> Softball-Intermediate</td>
<td>1.0 UNIT</td>
</tr>
<tr>
<td>Advisory: WHP*008K. This course provides the student with the opportunity for mastery of the specific individual skills, team techniques and strategies of softball at the intermediate level. Pass/No Pass Option.</td>
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<tr>
<td><strong>WHP 008P</strong> Basketball: Beginning</td>
<td>1.0 UNIT</td>
</tr>
<tr>
<td>Advisory: Eligibility for ENGL 908 and READ 054. This course is designed to teach the basic skills and techniques of basketball. Pass/No Pass Option.</td>
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</tr>
<tr>
<td><strong>WHP 008Q</strong> Indoor Soccer</td>
<td>1.0 UNIT</td>
</tr>
<tr>
<td>Advisory: Eligibility for ENGL 908 and READ 054. This course is designed to teach the fundamentals of soccer and team play in an indoor setting. Individual ball handling skills and drills are introduced as well as offensive and defensive team strategies. Pass/No Pass Option.</td>
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<tr>
<td><strong>WHP 008S</strong> Badminton: Intermediate/Advanced</td>
<td>1.0 UNIT</td>
</tr>
<tr>
<td>Advisory: WHP 008R,Eligibility for ENGL 001A and READ 053. This course introduces the student to more advanced skills and strategies of the game of badminton. Emphasis is placed on finesse shots, shot placement, court position, and singles and doubles play strategies. Materials Fee of $5.00. Pass/No Pass Option.</td>
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</tr>
<tr>
<td><strong>WHP 008T</strong> Intermediate Basketball: Men and Women</td>
<td>1.0 UNIT</td>
</tr>
<tr>
<td>Advisory:Eligibility for ENGL 001A and READ 053, High school varsity basketball or prior experience playing organized basketball strongly recommended. This class is designed for experienced basketball players who wish to learn advanced strategies of the game. Pass/No Pass Option.</td>
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<tr>
<td><strong>WHP 008U</strong> Volleyball: Intermediate/Advanced</td>
<td>1.0 UNIT</td>
</tr>
<tr>
<td>Advisory: WHP 008O. This course will introduce the student to more advanced fundamentals and strategies of the game of volleyball. Emphasis will be placed on drills and advanced skills such as the overhead serve, set and spike shot, defensive blocks and digs as well as court position, strategy and teamwork. Pass/No Pass Option.</td>
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<tr>
<td><strong>WHP 009A</strong> Intercollegiate Baseball - Men</td>
<td>2.0 UNITS</td>
</tr>
<tr>
<td>Advisory: Eligibility for ENGL 001A and READ 054 This course is intercollegiate baseball competition for men. Pass/No Pass Option.</td>
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<tr>
<td><strong>WHP 009F</strong> Intercollegiate Soccer-Men</td>
<td>2.0 UNITS</td>
</tr>
<tr>
<td>Advisory: Eligibility for ENGL 001A and READ 053. This course is designed to allow men the opportunity to further their soccer skills at a competitive, intercollegiate level. Team work and team strategies are discussed. Skill ability should be commensurate with this level of competition. Pass/No Pass Option.</td>
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<tr>
<td><strong>WHP 009H</strong> Intercollegiate Tennis-Men</td>
<td>2.0 UNITS</td>
</tr>
<tr>
<td>Advisory:Eligibility for ENGL 001A and READ 054, Prerequisite: Demonstrated subject/skill proficiency and consent of coach. This course is designed for men students (at a demonstrated subject/skill proficiency level) interested in competing for an intercollegiate tennis team. Pass/No Pass Option.</td>
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<tr>
<td><strong>WHP 010B</strong> Intercollegiate Soccer - Women</td>
<td>2.0 UNITS</td>
</tr>
<tr>
<td>Advisory:Eligibility for ENGL 001A and READ 053. This course is designed to allow women the opportunity to further their soccer skills at a competitive, intercollegiate level. Team work and team strategies are discussed. Skill and ability should be commensurate with this level of competition. Pass/No Pass Option.</td>
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<tr>
<td><strong>WHP 010C</strong> Intercollegiate Softball-Women</td>
<td>2.0 UNITS</td>
</tr>
<tr>
<td>Competition in softball designed to meet needs/skills of women. Pass/No Pass Option.</td>
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<tr>
<td><strong>WHP 010D</strong> Intercollegiate Tennis-Women</td>
<td>2.0 UNITS</td>
</tr>
<tr>
<td>Advisory: Eligibility for ENGL 001A and READ 054. This course is designed for students interested in intercollegiate tennis competition. Practice consists of both mental and physical training. Pass/No Pass Option.</td>
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</tr>
<tr>
<td><strong>WHP 010E</strong> Intercollegiate Badminton: Women</td>
<td>2.0 UNITS</td>
</tr>
<tr>
<td>Advisory: Eligibility for ENGL 001A and READ 054. This course is designed to allow the student the opportunity to play intercollegiate badminton. Aspects covered include skill development, teamwork, and team strategies. Skill and ability should be commensurate with this level of competition. Pass/No Pass Option.</td>
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<tr>
<td><strong>WHP 010F</strong> Intercollegiate Basketball: Women</td>
<td>2.0 UNITS</td>
</tr>
<tr>
<td>Advisory:Eligibility for ENGL 001A and READ 054, This course is designed to allow the student the opportunity to play intercollegiate basketball. Aspects covered include skill development, teamwork, and team strategies. Skill and ability should be commensurate with this level of competition. Prior experience playing at a competitive level is highly recommended. Pass/No Pass Option.</td>
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<tr>
<td><strong>WHP 021</strong> Sports Injuries</td>
<td>1.5 UNITS</td>
</tr>
<tr>
<td>Advisory: WHP 025. This course is designed specifically for the fitness specialist or enthusiast who wants a basic understanding of the prevention and care of athletic injuries. Emphasis will be on fitness related injuries as well as preventative steps recommended to avoid injuries. Basic awareness of the needs of special populations will also be discussed. Pass/No Pass Option.</td>
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<tr>
<td><strong>WHP 022</strong> Sports Nutrition</td>
<td>1.5 UNITS</td>
</tr>
<tr>
<td>Advisory: Recommend eligibility for ENGL*001A. This course is designed specifically for the fitness specialist or enthusiast who wants a basic understanding of nutritional principles as they relate to exercise and sports. Emphasis will be placed on understanding the role of nutrients in physical performance. Body composition, pre-competition meals and the efficacy of ergogenic aids will also be discussed. Pass/No Pass Option.</td>
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<tr>
<td><strong>WHP 023</strong> Fitness Testing (1.5 Lecture)</td>
<td>1.5 UNITS</td>
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<tr>
<td>This course is designed specifically for the fitness specialist or enthusiast and will cover how to administer fitness tests to evaluate a persons physical fitness.</td>
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<tr>
<td><strong>WHP 026</strong> Weight Training Principles and Routines</td>
<td>1.5 UNITS</td>
</tr>
<tr>
<td>This course is designed specifically for the fitness specialist or enthusiast who wants a more detailed and complete understanding of all aspects of weight training and how to develop specific programs to enhance muscle strength, endurance and definition. Pass/No Pass Option.</td>
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<tr>
<td><strong>WHP 027</strong> Exercise Physiology</td>
<td>1.5 UNITS</td>
</tr>
<tr>
<td>Advisory: Recommend eligibility for ENGL*001A. This course is designed for the fitness specialist or enthusiast who wants a more complete understanding of how the body responds and adapts physiologically to exercise. Pass/No Pass Option.</td>
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</tbody>
</table>
### COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>WHP 028</td>
<td>Body Alignment and Stretching Techniques</td>
<td>1.5</td>
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<tr>
<td></td>
<td>Advisory: Recommend eligibility for ENGL*001A. This course is designed for the fitness specialist or enthusiast. Topics covered in class will include correct posture and alignment, postural deviations, stretching techniques and routines for various sports and activities. Pass/No Pass Option.</td>
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<tr>
<td>WHP 030</td>
<td>Introduction to Physical Education Exercise and Physical Fitness</td>
<td>3.0</td>
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<tr>
<td></td>
<td>Advisory: Eligibility for ENGL 001A and READ 053. This course surveys the basic principles of physical education and its place in and contribution to a comprehensive physical educational program including leadership, aims, objectives, historical perspective, scientific foundations, perceptual motor learning, competitive activities, and current issues in the field. Pass/No Pass Option.</td>
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<tr>
<td>WHP 031</td>
<td>Introduction to Sports Management (3.0 Lecture)</td>
<td>3.0</td>
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<td></td>
<td>This course is designed to introduce all aspects of sports management, including budgeting, marketing, strategic planning, legal aspects and ethics, and procedures of personnel, facility and sports event management. Industry trends and job opportunities are explored.</td>
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</tbody>
</table>

### WORK EXPERIENCE (WRK)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WRK 300CD</td>
<td>Occupational Work Experience for Child Development (3.0 units of Work Experience)</td>
<td>3.0</td>
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<tr>
<td></td>
<td>The student is required to attend an orientation at the beginning of the course. Students earn 1.0 unit of credit for every 60 hours of unpaid work or 75 hours of paid work. Students may earn a maximum of 16 units of occupational work experience during their community college attendance. Note: Students must be working in a job or volunteer position the early childhood special education. Eligibility for ENGL 001A and READ 054</td>
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<tr>
<td>WRK 300HM</td>
<td>Work Experience (1.0 UNIT)</td>
<td>1.0</td>
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<tr>
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<td>The student is required to attend an orientation at the beginning of the course and complete a minimum of 75 hours for paid work or a minimum of 60 hours for unpaid work for each unit earned per semester. Only one Work Experience course may be taken per semester. Students can earn a maximum of 8 units of Work Experience per term. Students may earn a maximum of 16 units of occupational work experience during their community college attendance. Only one Work Experience course may be taken per semester. Note: Students must be working in a job or volunteer position in the hospitality, food service and restaurant industries.</td>
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<tr>
<td>WRK 300PP</td>
<td>Work Experience (9.0 Lecture)</td>
<td>4.0</td>
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<tr>
<td></td>
<td>Work experience for plumbing and pipefitting technology apprenticeship.</td>
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<tr>
<td>WRK 300TN</td>
<td>Work Experience for Transportation Industry NaN UNITS</td>
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<td></td>
<td>Work experience for transportation industry apprenticeship. The number of units varies by certificate.</td>
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<tr>
<td>WRK 300VP</td>
<td>Work Experience (9.0 Lecture)</td>
<td>4.0</td>
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<tr>
<td></td>
<td>Work experience for refrigeration and air conditioning technology (HVC) apprenticeship.</td>
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<tr>
<td>WRK 301</td>
<td>Work Experience Occupational (1.0 UNIT)</td>
<td>1.0</td>
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<tr>
<td></td>
<td>Students establish measurable goals and learning objectives obtained on the job in accordance with a training plan developed cooperatively between the employer, college and student.</td>
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<tr>
<td>WRK 302</td>
<td>Work Experience Occupational (2.0 UNITS)</td>
<td>2.0</td>
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<td></td>
<td>Students establish measurable goals and learning objectives obtained on the job in accordance with a training plan developed cooperatively between the employer, college and student.</td>
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<tr>
<td>WRK 303</td>
<td>Work Experience Occupational (3.0 UNITS)</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>Students establish measurable goals and learning objectives obtained on the job in accordance with a training plan developed cooperatively between the employer, college and student.</td>
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