

COURSES

ALL COURSES

ACCOUNTING (ACC)

ACC 001A Financial Accounting (4.0 Units) 4.0 UNITS

Advisory MAT 903. This is the study of accounting as an information system, examining why it is important and how it is used by investors, creditors, and others to make decisions. The course covers recording and reporting of business transactions, generally accepted accounting principles, financial statements, and statement analysis.

ACC 001B Managerial Accounting (4.0 Units) 4.0 UNITS

Advisory MAT 903 Prerequisite ACC 001A This is the study of how managers use accounting information in decision-making, planning, directing operations and controlling. The course covers cost behavior, cost-volume-profit analysis, profit planning, and performance analysis in manufacturing and service environments.

ACC 023 Small Business Accounting (3.0 Units) 3.0 UNITS

Total Lecture: 54 hours Acceptable for credit: California State University This course is designed as a non-theoretical, practical approach to accounting with special emphasis on accounting for the smaller business establishments including the basic bookkeeping cycle, petty cash, bank reconciliations, and payroll accounting. Pass/No Pass Option.

ACC 033 Forecasting Financial Statements Using Excel (1.5 Lecture) 1.5 UNITS

Prerequisite: ACC 001A This course combines the theory and procedure of cash budgeting and financial statement projection with the spreadsheet program Excel. Students build Excel spreadsheet models to project an income statement, balance sheet, and cash flow budget.

ACC 034 Business Financial Planning Using Excel (1.5 Lecture) 1.5 UNITS

Prerequisite ACC 001A This course combines the theory and procedure of financial planning and analysis with the use of the spreadsheet program Excel. Students build Excel spreadsheet models to do loan amortization, capital budgeting, lease vs. buy analysis, and breakeven analysis. ACC 033 is not a prerequisite.

ACC 046 Personal Finance (3.0 Units) 3.0 UNITS

Fundamentals of personal finance including financial planning, money management, income and asset protection, and investments. Course material covered includes calculations and problem solving related to budgeting, managing income taxes, building and maintaining good credit, large personal assets purchases, managing property and liability risk, investment fundamentals, and retirement and estate planning. Students prepare their own personal budgets and statements of net worth. The time value of money and its importance in the financial planning process is stressed. Pass/No Pass Option.

ACC 051A Taxation of Individuals (4.0 Units) 4.0 UNITS

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

ACC 051B Taxation of Business Entities (3.0 Units) 3.0 UNITS

Advisory: MAT 903 Advisory: ACC 001A The course, through problems and case studies, develops a basic understanding of the taxation principles applied to partnerships, corporations, estates and trusts with an emphasis on tax research and written communication skills.

ACC 052 Payroll and Business Tax Accounting (3.0 Units) 3.0 UNITS

Prerequisite ACC 001A Advisory MAT 903 This course offers a thorough study of payroll preparation, payroll taxes, sales taxes, and personal property taxes.

ACC 057A Cost Accounting (4.0 Units) 4.0 UNITS

Prerequisite ACC 001B Advisory MAT 903 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 Units) 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 Units) 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 Units) 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 061 Quickbooks: Online Software (3.0 Units) 3.0 UNITS

Advisory: ACC 001A. Acceptable for credit: California State University. Students use QuickBooks Online accounting software to set up, enter transactions, and produce reports using general ledger, accounts receivable, accounts payable, financial statement analysis, depreciation, inventory and payroll modules. It is recommended that students have either completed, or are concurrently enrolled in, ACC 001A or have practical accounting experience. Pass/No Pass Option.

ACC 066 Accounting for Governmental and Nonprofit Entities (3.0 Units) 3.0 UNITS

Total Lecture: 54 hours Prerequisite: ACC 001A. Advisory: ACC 001B. Acceptable for credit: California State University. Study of the theory and practice of accounting for federal, state, and local governmental entities and nonprofit organizations. Topics include analysis and application of pronouncements from the Governmental Accounting Standards Board (GASB); fund accounting, operational and cash budgeting, and operational control issues; transaction analysis, financial statement preparation and analysis, and external reporting issues. Accounting for Governmental and Nonprofit Entities includes topics tested on the Financial Accounting and Reporting (FAR) section of the CPA exam. This course is part of the CPA Exam Preparation Series, which is intended to meet the education requirement to sit for the CPA exam. Students who intend to transfer should take this course at their transfer school. Pass/No Pass Option.

ACC 067 Advanced Accounting (4.0 Units) 4.0 UNITS

Total Lecture: 72 hours. Prerequisite: ACC 001A Advisory: ACC 058A and ACC 058B. Acceptable for credit: California State University. Advanced Accounting is the last in the series of financial accounting courses. Topics covered in this class include: accounting for consolidations, investments in other corporations, foreign currency transactions, and partnerships. Advanced Accounting includes topics tested on the Financial Accounting and Reporting (FAR) section of the CPA exam. This course is part of the CPA Exam Preparation Series, which is intended to meet the education requirement to sit for the CPA exam. Students who intend to transfer should take this course at their transfer school. Pass/No Pass Option.

ACC 070 Ethics in Accounting (3.0 Units) 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 073 Accounting Information Systems (4.0 Units) 4.0 UNITS

Total Lecture: 72 hours. Prerequisite: ACC 001A. Acceptable for credit: California State University. mUsing 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. Grade only.

ACC 075 Cloud Computing And Analytics In Accounting (4.0 Units) 4.0 UNITS

Total Lecture: 72 hours. Prerequisite: ACC 001A. Acceptable for credit: California State University. Students will learn cloud accounting and analytics theory through hands-on exercises using SAP Business ByDesign. SAP (Systems, Applications, and Products in Data Processing) is the number one Enterprise Resource Planning (ERP) software vendor in the world. Its ByDesign system is a cloud-based ERP solution for small-to-medium enterprises. Students will also use Excel and Power BI for data analytics and visualization capabilities. This course is useful as preparation for higher level business, accounting, and/or analytics courses, for careers in accounting and finance, or for work as an analyst, data scientist, or consultant. Grade only.

ACC 077 Cloud Computing And Analytics In Accounting (4.0 Units) 4.0 UNITS

Total Lecture: 72 hours. Prerequisite: ACC 001A and ACC 073. Advisory: ACC 058A and ACC 058B. Acceptable for credit: California State University. This course examines the relationships and impacts between business processes and enterprise resource planning (ERP) systems to effectively manage major businesses. Students learn the integration concepts, challenges, common practices, and opportunities by doing hands-on configuration cases, using the world's #1 ERP system, SAP. Through various individual and teamwork, students will gain project facilitation exposure, make business decisions, and perform basic analysis utilizing large datasets from the ERP-based business information. This is a key course to take to prepare for the exceptionally marketable SAP Application Associate certification, also known as "TS410 Certified." Pass/No Pass Option.

ANTHROPOLOGY (ANT)**ANT 001 Physical Anthropology (3.0 Units) 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 002 Introduction To Archeology (3.0 Units) 3.0 UNITS

Total Lecture: 54 hours. Acceptable for credit: University of California, California State University. Advisory: ENG 001A or ENG 001AX. This course is an introduction to the study of concepts, theories, data, and models of anthropological archaeology that contribute to our knowledge of the human past. The course includes a discussion of the nature of scientific inquiry; the history and interdisciplinary nature of archaeological research; dating techniques; methods of survey, excavation, analysis, and interpretation; cultural resource management; professional ethics; and selected cultural sequences. This course may include field trips to museums, parks, and field sites. Pass/No Pass Option. C-ID # ANTH 150. CSUGE: D; IGETC: 4.

ANT 003 Introduction to Archeology (3.0 Units) 3.0 UNITS

Total Lecture: 54 hours. Acceptable for credit: University of California, California State University. Advisory: ENG 001A or ENG 001AX. This course is an introduction to the study of concepts, theories, data, and models of anthropological archaeology that contribute to our knowledge of the human past. The course includes a discussion of the nature of scientific inquiry; the history and interdisciplinary nature of archaeological research; dating techniques; methods of survey, excavation, analysis, and interpretation; cultural resource management; professional ethics; and selected cultural sequences. This course may include field trips to museums, parks, and field sites. Pass/No Pass Option. C-ID # ANTH 150. CSUGE: D; IGETC: 4.

ANT 055 Magic, Witchcraft and Religion (3.0 Units) 3.0 UNITS

A cross-cultural study of beliefs and practices dealing with the supernatural pantheism. 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 Units) 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 Units) 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 Units) 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 Units) 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 Units) 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 Units) 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 031A Drawing (3.0 Units) 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; introduction to pictorial composition and perspective; introduction to drawing media; pencil, charcoal, conte, pen and ink, pastels and chalk. Studio practice emphasizes basic shading techniques.

ART 031B Intermediate Drawing (3.0 Units) OR 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 of objects and is an introduction to color drawing media; colored pencil, pen and ink, watercolor, pastels and chalk.

ART 032 Digital Drawing (3.0 Units) 3.0 UNITS

This is a beginning digital drawing course for students. Using mobile devices and stylus pens, students work from observation, directed toward realistic rendering of objects through line, shading, pictorial composition and perspective. Areas of exploration include storyboarding, character design, logo, icon, and hand lettering. Students will learn how to use illustration software programs to create commercial screen graphics, video recordings, and printmaking. This course is cross-listed with GDS 032. Pass/No Pass Only.

ART 033A Basic Design: Two-Dimensional (3.0 Units) 3.0 UNITS

Basic introductory course to principles & elements of 2-dimensional design.

ART 033B	Basic Design: Three-Dimensional (3.0 Units)	3.0 UNITS	ART 048C	Airbrush Painting (3.0 Units)	3.0 UNITS
This course introduces students to the elements and principles of design of three-dimensional forms.			Prerequisite ART 048B This course is high intermediate studio practice which focuses on a continued progression of intermediate techniques and portfolio development. Pass/No Pass Option.		
ART 033C	Basic Design: Color (3.0 Units)	3.0 UNITS	ART 048D	Airbrush Painting (3.0 Units)	3.0 UNITS
Prerequisite ART 033A This course is an introduction to the principles and elements of color.			Prerequisite ART 048C This course is advanced studio practice which focuses on advanced techniques and portfolio development. Pass/No Pass Option.		
ART 034A	Introduction to Digital Art (3.0 Units)	3.0 UNITS	ART 049A	Painting (3.0 Units)	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.			Basic introduction to traditional & current painting techniques & media.		
ART 034B	Advanced Digital Art (3.0 Units)	3.0 UNITS	ART 049B	Painting (3.0 Units)	3.0 UNITS
Prerequisite ART 034A This is an advanced design course combining computer graphics and fine arts image processing.			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.		
ART 035A	Life Drawing (3.0 Units)	3.0 UNITS	ART 049C	Painting (3.0 Units)	3.0 UNITS
Prerequisite ART 031A This course is a fundamental study of the human figure as the main subject matter of drawings.			Prerequisite ART 049B This course is high intermediate studio practice which focuses on mixed media, self-expression, composition, and content.		
ART 035B	Life Drawing (3.0 Units)	3.0 UNITS	ART 049D	Painting (3.0 Units)	3.0 UNITS
Prerequisite ART 035A This course is a low intermediate study of the human form and structure rendered in realistic terms.			Prerequisite ART 049C This course is advanced studio practice which focuses on developing individual style and direction in painting.		
ART 035C	Life Drawing (3.0 Units)	3.0 UNITS	ART 065A	Ceramics-Handbuilding (3.0 Units)	3.0 UNITS
Prerequisite ART 035B This course is a high intermediate 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.			Introductory course in ceramics emphasizing hand-building techniques.		
ART 035D	Life Drawing (3.0 Units)	3.0 UNITS	ART 065B	Ceramics-Handbuilding (3.0 Units)	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.			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.		
ART 039A	Survey of Printmaking (3.0 Units)	3.0 UNITS	ART 065C	Ceramics-Handbuilding (3.0 Units)	3.0 UNITS
A beginning course in printmaking media and techniques with an emphasis on monotype and the intaglio press.			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.		
ART 047A	Watercolor (3.0 Units)	3.0 UNITS	ART 065D	Ceramics-Handbuilding (3.0 Units)	3.0 UNITS
This course is an introduction to painting using various water base media with a focus on color mixing, composition, and content.			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.		
ART 047B	Watercolor (3.0 Units)	3.0 UNITS	ART 067A	Ceramics-Potter's Wheel (3.0 Units)	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.			Covers basic skills & techniques using potter's wheel. Pass/No Pass Option.		
ART 047C	Watercolor (3.0 Units)	3.0 UNITS	ART 067B	Ceramics-Potter's Wheel (3.0 Units)	3.0 UNITS
Prerequisite ART 047B This is a high intermediate level painting course with various water base media.			Prerequisite ART 067A This is an advanced course on the potter's wheel directed toward refinement of throwing skills and ceramic design.		
ART 047D	Watercolor (3.0 Units)	3.0 UNITS	ART 067C	Ceramics-Potter's Wheel (3.0 Units)	3.0 UNITS
Prerequisite ART 047C This course is advanced level painting with various water base media.			Prerequisite ART 067B This course focuses on advanced aspects of working with the potter's wheel.		
ART 048A	Airbrush Painting (3.0 Units)	3.0 UNITS	ART 067D	Ceramics-Potter's Wheel (3.0 Units)	3.0 UNITS
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.			Focus on advanced aspects of working with potter's wheel. Pass/No Pass Option.		
ART 048B	Airbrush Painting (3.0 Units)	3.0 UNITS	ART 075A	Metalsmithing (3.0 Units)	3.0 UNITS
Prerequisite ART 048A This course is low intermediate studio practice which focuses on strengthening the basic skills learned in ART 048A.			Advisory ART 033A and/or Advisory ART 033B This course is an introduction to the elements of design and metalsmith techniques.		
			ART 075B	Metalsmithing (3.0 Units)	3.0 UNITS
			Prerequisite ART 075A This course continues to apply the elements of design to metal and introduces new metalsmith techniques.		
			ART 075C	Metalsmithing (3.0 Units)	3.0 UNITS
			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.		

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ART 075D Metalsmithing (3.0 Units) 3.0 UNITS

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.

ART 078A Furniture Design and Woodworking (3.0 Units) 3.0 UNITS

Advisory ART 033B This course covers basic skills in furniture design, construction and finishing.

ART 078B Furniture Design and Woodworking (3.0 Units) 3.0 UNITS

Prerequisite ART 078A This course introduces more advanced techniques for design and furniture construction. Students build on skills learned in ART 078A.

ART 078C Furniture Design and Woodworking (3.0 Units) 3.0 UNITS

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.

ART 078D Furniture Design and Woodworking (3.0 Units) 3.0 UNITS

Prerequisite ART 078C This is an advanced course in woodworking and furniture design that allows students to work independently to continue to refine previously mastered design and technical skills, and to prepare for careers in the industry.

ART 085A Sculpture (3.0 Units) 3.0 UNITS

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.

ART 085B Sculpture (3.0 Units) 3.0 UNITS

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.

ART 085C Sculpture (3.0 Units) 3.0 UNITS

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.

ART 085D Sculpture (3.0 Units) 3.0 UNITS

Prerequisite ART 085C This is an advanced course which focuses on different aspects of sculpture with supervised participatory experience.

ART 088A Metal Sculpture Casting (3.0 Units) 3.0 UNITS

This is a basic course in metal sculpture casting.

ART 088B Metal Sculpture Casting (3.0 Units) 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 (3.0 Units) 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 (3.0 Units) 3.0 UNITS

Prerequisite ART 088C This course focuses on different aspects of metal sculpture casting along with supervised participatory experience.

ASTRONOMY (AST)

AST 001 Astronomy (3.0 Units) 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 003 Astronomy With Lab (3.0 Units/1.0 Unit) 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 Units/1.0 Unit) 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 Units) 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 Units/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 Units/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 Units/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 Units/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 Units) 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 Unit) 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 Units/1.0 Unit) 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 Units) 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 Units) 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 014H Introductory Neuroscience Honors (3.0 Units) 3.0 UNITS

Total Lecture: 54 hours. Advisory: (ENG 001A or ENG 001AX) and REA 054. Acceptable for credit: University of California, California State University. This honors 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. Pass/No Pass Option

BIO 016 Marine Biology (3.0 Units/1.0 Unit) 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 Units) 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 Units) 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>.

BIO 018 The Biology Of Cancer (3.0 Units) 3.0 UNITS

Total Lecture: 54 hours. Acceptable for credit: University of California, California State University. This course introduces the basic principles underlying the development and treatment of cancer. Normal cell biology processes are contrasted with the genetic and cellular changes that lead to the development of cancer. Current topics in scientific and clinical research on cancer biology will be explored. Pass/No Pass Option. CSUGE: B2; IGETC: 5B.

BIO 018H The Biology Of Cancer - Honors (3.0 Units) 3.0 UNITS

Total Lecture: 54 hours. Acceptable for credit: University of California, California State University. This honors course introduces the basic principles underlying the development and treatment of cancer. Normal cell biology processes are contrasted with the genetic and cellular changes that lead to the development of cancer. Current topics in scientific and clinical research on cancer biology will be explored. This is the honors version of BIO 018. Students cannot get credit for both BIO 018 and BIO 018H. Enrollment in the Honors Program is required. Pass/No Pass Option. CSUGE: B2; IGETC: 5B.

BIO 019 Oceans: Life in the Sea (3.0 Units) 3.0 UNITS

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 Units/1.0 Unit) 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 Units) 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 Units) 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 031L Tropical Ecology Field Studies (1.0 Unit) 1.0 UNIT

Total Lab: 54 hours Acceptable for credit: University of California (Pending), California State University In this introductory level laboratory class, students carry out research methods that ecologists use to observe and investigate tropical ecosystems. This course includes a field trip to Costa Rica. Students who take this course are not required to complete BIO 30, the lecture course in Tropical Ecology. Pass/No Pass Option.

BIO 032 California Plants and Animals (3.0 Units/1.0 Unit) 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 042 Principles of Plant Biology (3.0 Units/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 047 Human Anatomy (3.0 Units/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 Units/2.0 Lab) 5.0 UNITS

Prerequisite BIO 047 ; and Prerequisite CHM 001A or Prerequisite CHM 001AH 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 Units/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>.

BUSINESS (BUS)**BUS 010 Global Business (3.0 Units) 3.0 UNITS**

This course provides a comprehensive overview of global business including international management, finance, law, global strategy and marketing.

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- BUS 011 International Business Law (3.0 Units) 3.0 UNITS**
Total Lecture: 54 hours Acceptable for credit: California State University
This course introduces the legal environment of international business, explains the basic principles of international business law and challenges students to consider legal implications of any international business strategy or transaction. Pass/No Pass Option.
- BUS 012 International Financial Management (3.0 Units) 3.0 UNITS**
Total Lecture: 54 hours Acceptable for credit: California State University
This course will focus on the fundamental principles of corporate finance in today's global business environment. It introduces international finance with a focus on the important role of modern multinational corporations in global commerce. This class provides a wide range of managerial topics and emphasizes the most recent changes in the international environment. Pass/No Pass Option.
- BUS 021 Introduction to Business Computing (3.0 Units) 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 Unit) 1.0 UNIT**
This course provides hands-on training in business applications.
- BUS 022 Principles of E-Business (3.0 Units) 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 Units) 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 Units) 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 037 Fundamentals of Project Management (3.0 Units) 3.0 UNITS**
This course focuses on the fundamentals of project management.
- BUS 040 Professional Selling (3.0 Units) 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 051 Introduction to American Business (3.0 Units) 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 Units) 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 056A Marketing Principles (3.0 Units) 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 061 Business and Society (3.0 Units) 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 Units) 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 074 Purchasing & Supply Chain Management (3.0 Units) 3.0 UNITS**
This course is an introduction to the basic principles of supply chain management.
- BUS 078B Business Communications (3.0 Units) 3.0 UNITS**
Prerequisite ENG 001A This course develops writing skills to improve communication ability in the business environment.
- BUS 084 Internet Marketing (3.0 Units) 3.0 UNITS**
This course introduces students to Internet marketing.
- BUS 102 Leadership (3.0 Units) 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 104 Project Risk Management (3.0 Units) 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 105 Agile Project Management (2.0 Units) 2.0 UNITS**
Total Lecture: 36 hours Corequisite: BUS 03. Acceptable for credit: California State University. The Agile Project Management course is designed for business students, project team members, product owners and project leaders looking to understand and apply the Agile approach and practices to new product development, software development and knowledge work projects. This course teaches management of projects using agile methods with a detailed focus on SCRUM and Kanban. Students will explore SCRUM roles, artifacts, events, and processes thereby learning how products can be delivered economically and how customers are brought in the loop of product development. Students will learn Kanban and how this flowed-based method is used to achieve efficient and smooth work management improving time-to-market. Even if you are currently using other project management methodologies, you will discover how Agile methods can make your projects more successful. Pass/No Pass Option.
- BUS 107 Soft Skills for Project Managers (2.0 Units) 2.0 UNITS**
Total Lecture: 36 hours. This course is designed for students who want to build their soft skills. Soft skills, sometimes known as "people skills," can provide an edge to project managers who have learned to use them well. This course will concentrate on the three pillars of Soft skills, Leadership, Communication and Collaboration. In this course we take a deep dive into these critical skills. Topic include, leading teams, coaching, mentoring, negotiating skills, motivating people, decision making and influencing, reading body language, team dynamics, conflict, power, and organizational behavior. Since, project managers typically spend over 80% of their time interfacing with people – these skills are critical to successful project managers. This course is part of the new certificate for Project Management. Pass/No Pass Option.
- BUS 108 PMP and CAPM Exam Prep (2.0 Units) 2.0 UNITS**
Total Lecture: 36 hours. This course will prepare students for the for CAPM® (Certificate Associate in Project Management) or PMP® (Project Management Professional) exams. Also, students will receive substantial Project Management Education (PDUs) hours. This course emphasizes PMBOK Guide® (Project Management Body of Knowledge) and is structured

around the ten knowledge areas, and it is focused on exactly what is necessary to pass the exam. The Project Management Professional (PMP®) certification is the profession's most globally recognized and respected certification credential based on the Project Management Institute (PMI®) well-known Project Management Body of Knowledge (PMBOK®). Pass/No Pass Option.

BUS 109 Business Law For Entrepreneurs (2.0 Units) 2.0 UNITS

Total Lecture: 36 hours. Acceptable for credit: California State University.

This course provides students a foundation to understand legal attributes of an entrepreneurship enterprise. The course materials are a diverse mixture of different topical areas in law. These areas include commercial law, tort law, business structure, employment and contract law, the legal framework of finance, intellectual property and laws governing the sale of a business. The students will be able to identify the specific legal issues that an entrepreneur face during the various stages of the organization. Pass/No Pass Option.

BUS 111 The Entrepreneurial Mindset (3.0 Units) 3.0 UNITS

Total Lecture: 54 hours. Acceptable for credit: California State University.

This course is designed for students to learn about the principles contained in the entrepreneurial mindset and the unlimited opportunities it can provide. So, what is an entrepreneurial mindset? An entrepreneurial mindset is a specific set of beliefs, knowledge, and thought processes that drives entrepreneurial behavior (The Learning Initiative 2018). This course also takes the approach that anyone (not just those who want to start businesses) can benefit from understanding and applying an entrepreneurial mindset to any situation. Pass/No Pass Option.

BUS 112 Business Modeling (3.0 Units) 3.0 UNITS

Total Lecture: 54 hours. Acceptable for credit: California State University.

This course covers practical business model techniques used by leading companies in different industries. The business model describes how companies create, deliver and capture value. The students will learn about the nine building blocks in creating and implementing a business model. These blocks include Customer Segments, Value Propositions, Channels, Customer Relationship, Revenue Streams, Key Resources, Key Activities, Key Partnerships and Cost Structure. Furthermore, the student shall understand disruptive innovation as a sensation and strategy in today's business environment. Lastly, students will develop their own business model and understand the importance of sustainable. Pass/No Pass Option.

BUS 114 Entrepreneurship Finance (2.0 Units) 2.0 UNITS

Total Lecture: 54 hours. Total Lecture: 36 hours. Acceptable for credit: California State University. This course introduces financial thinking, tools, and techniques adapted to the area of entrepreneurship. Students will be introduced to the theories, knowledge, and financial tools an entrepreneur needs to start, build, and harvest a profitable venture. Students will learn how and where to obtain the financing necessary to launch and develop the venture. Also, we will highlight the discipline financial management practices that are vital to a venture's operation. Pass/No Pass Option.

BUS 115 Operations Management (3.0 Units) 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 Units) 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 160 International Marketing (3.0 Units) 3.0 UNITS

Total Lecture: 54 hours. Acceptable for credit: California State University. This course focuses on marketing management techniques, and strategies necessary to incorporate the marketing concept when doing business in international markets. The challenges of competing in markets of different cultures and different legal and political environments are also explored. Pass/No Pass Option.

COMPUTER APPLICATIONS (CAP)

CAP 010A Learning the Keyboard (1.0 Unit) 1.0 UNIT

Advisory: Eligibility for ENG 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 033A Word Processing - Course 1 (3.0 Units) 3.0 UNITS

This course teaches word processing applications using Microsoft Word. Students learn basic word processing features.

CAP 044 Using Project Management Software to Manage a Project 1.0 UNIT

Advisory: CAP 070 This course covers the basic concepts of project management and the essential components of project management software. Students research and evaluate a number of project management software applications including but not limited to SmartSheet, Microsoft Planner, Microsoft Project, and Liquid Planner. Students will choose a project management software application to design and create a basic project plan. Pass/No Pass Option.

CAP 046D Introduction to Microsoft Powerpoint (1.0 Unit) 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 062B An Introduction to Microsoft Excel (1.0 Unit) 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 Units) 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 Unit) 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 Unit) 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 092B Google Apps for Personal Productivity (2.0 Units) 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 100 Learning The Keyboard Noncredit (0.0 Units) 0.0 UNITS

Total: 54 hours. This noncredit 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. Satisfactory Progress.

CAP 101 Computers Simplified For Beginning Learners Noncredit (0.0 Units) 0.0 UNITS

Total: 18 hours. This noncredit course takes students through the basics of using a computer to perform essential tasks for workforce and academic survival. Highlights of the course include: operating system basics,

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applications software, e-mail basics, computer peripherals, and Internet basics. Satisfactory Progress.

CAP 111 Collaborate And Integrate With Sharepoint and Ms Office 365 (3.0 Units) 3.0 UNITS

Total Lecture: 45 hours, Total Lab: 27 hours. Advisory: BUS 021L or CAP 062B. Acceptable for credit: California State University. This course provides students with the fundamental knowledge and skills required to collaborate with business teams using Microsoft SharePoint and Office 365 web apps and office software. Students create, edit and maintain collaboration sites, including webpages, user communities, wikis, calendars, and blogs in office environments that require multi-user access. This course is designed for students majoring in Business, Computer Applications, or Computer Information Systems as well as for business professionals seeking to update their technology skills. Pass/No Pass Option.

CHILD DEVELOPMENT (CHD)

CHD 001 Child Growth and Development (3.0 Units) 3.0 UNITS

This course is a study of typical and atypical child growth and development in all domains from conception through adolescence. There is an emphasis on interactions between maturational processes and environmental factors within the family cultural context. Students observe children using investigative research methods, evaluate differences and analyze characteristics of development at various stages.

CHD 002 Child, Family, and Community (3.0 Units) 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 Units) 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 aides in designing language activities and experiences.

CHD 004 Cognitive Experiences for Children (3.0 Units) 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 Units) 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 Units) 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 Units) 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 Prerequisite CHD 002 and Prerequisite CHD 010 and Prerequisite CHD 015 and Prerequisite CHD 026 This course gives students the opportunity to interact with children and demonstrate developmentally appropriate early childhood teaching competencies.

Students work under the supervision of a practicum supervisor at the Mission College Child Development Center.

CHD 010 Principles and Practices in Education (3.0 Units) 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 Units) 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 Units) 3.0 UNITS

Students examine theories of artistic development and learn how creativity affects the child's overall development. Students will design developmentally appropriate lesson plans focusing on creative expression. Observation of children will be required.

CHD 015 Observation and Assessment of Children (3.0 Units) 3.0 UNITS

This course focuses on the appropriate use of assessment and observation strategies to document development, growth, play and learning in order to join with families and professionals in promoting children's success. Weekly observations are required. Eligibility for ENG 001A and REA 054 Prerequisite CHD 001 Prerequisite CHD 002

CHD 016 Infant and Toddler Development (3.0 Units) 3.0 UNITS

Advisory CHD 001 This course provides students with an in-depth study of the child from years 0-3. It meets the Infant/Toddler State licensing requirement. Observation of children is required.

CHD 017 Child Health and Safety (3.0 Units) 3.0 UNITS

This course is designed to give students the skills needed to be able to identify children's health problems. The 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. The course meets State AB 962 requirements.

CHD 018 Parenting Issues for Teachers (1.0 Unit) 1.0 UNIT

This course is designed to give the student the skills needed as teachers to effectively work with parents and diverse families of the children in their care.

CHD 020 The Child with Special Needs in the Community (3.0 Units) 3.0 UNITS

This course is designed for students who are considering a career or certificate in special education or who desire to work with children with special needs and their families. The course introduces atypical development, disabilities, laws and policies and the impact a child with disabilities has on families. Eligibility for ENGL 001A and READ 054 Advisory CHD 001 , Advisory CHD 002

CHD 021 Children and Play (3.0 Units) 3.0 UNITS

Students examine the history and theories of play and explore how developmental stages of play affect the child's overall growth. Students gain skills to analyze the child's development and to design lesson plans that include developmentally appropriate play experiences that further the child's growth. Observations of children's play are required. Eligibility for ENGL 001A and REA 054 Advisory CHD 001

CHD 022 Adult Supervision in Early Childhood Programs (2.0 Units) 2.0 UNITS

This course gives students the skills necessary to assess program and staff performance and supervise adults in early childhood settings. Students have opportunities to review program assessment models such as the National Association for the Education of Young Children (NAEYC) Accreditation self-study and to conduct self-assessments on leadership and communication styles. Career development strategies are also examined. This class partially fulfills the Site Supervisor or Program Director Permit requirements.

CHD 024 Positive Guidance in Early Childhood Programs: Managing Challenging Behaviors (3.0 Units) 3.0 UNITS

This course assists students in learning positive guidance techniques to support children who are having challenging behaviors in early childhood programs. The course includes genetic, environmental, and cultural factors that impact the behavior of young children and practical strategies for intervention and prevention.

CHD 025 Inclusion Strategies and Curriculum in Early Childhood Education (3.0 Units) 3.0 UNITS

This course focuses on the theories, research, and practical applications from the fields of both early childhood education and special education. This course assists students in designing effective curriculum and intervention strategies for children with disabilities who are being served in inclusive and natural environments. Advisory: CHD 001, CHD 002

CHD 026 Introduction to Curriculum (3.0 Units) 3.0 UNITS

Prerequisite CHD 001 Advisory CHD 002 This course presents an overview of knowledge and skills related to providing appropriate curriculum and environments for young children from birth to age 8.

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.

CHEMISTRY (CHM)**CHM 001A General Chemistry (3.0 Units/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 Units/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 Units/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 Units/2.0 Lab) 5.0 UNITS

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. Students cannot get credit for both CHM 001B and CHM 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 Units) 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 Unit) 1.0 UNIT

Corequisite CHM 002 or Prerequisite CHM 002 This course is a laboratory component to accompany CHM 002: Introductory Chemistry.

CHM 012A Organic Chemistry I (3.0 Units/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 Units/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 CHM 012A and CHM 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 Units/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 Units/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 Units/1.0 Unit) 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 060 Survey of General, Organic, and Biological Chemistry (3.0 Units/1.0 Unit) 4.0 UNITS

Prerequisite MAT 903 or Prerequisite MAT 903M or any higher math Chemistry 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 001 Introduction To Computer Science And Technology (4.0 Units) 4.0 UNITS**

Total Lecture: 54 hours, Total Lab: 54 hours. Acceptable for credit: University of California, California State University. This course is an introduction to the concepts of computer science and information technology. It covers computer architecture, the Internet and networking, and basic programming and data manipulation. Students develop a practical, realistic understanding of computer science and information technology. This course is recommended for students in any major who want to learn about computers and programming. Pass/No Pass Option.

CIS 008 Advanced Python Programming (3.0 Units/1.0 Unit) 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 (client-side and server-side), database programming and persistence, text processing and regular expressions, and HTML and XML parsing.

CIS 033 Robotics and Embedded System (3.0 Units/1.0 Unit) 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 needed to build a robot and introduces the components needed for the drone hardware. In addition it includes programming of the microcontroller.

CIS 034 Robotics and Embedded System (4.0 Units) 4.0 UNITS

Total Lecture: 54 hours, Total Lab: 54 hours. Advisory: CIS 033. Acceptable for Credit: California State University. This is an intermediate course in Robotics and embedded systems. This course covers Raspberry PI and Python programs to control the robot camera, get sensor information and send control signals to the robot. It covers remote communication using Zigbee, graphical LCD, locating robot using GPS, interfacing I2C and SPI devices. Robot Operating System (ROS) and artificial intelligence applied to robots is introduced. Pass/No Pass Option.

CIS 037A Introduction to C Programming (3.0 Units/1.0 Unit) 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 Units/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 Units/1.0 Unit) 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 class includes control structures, functions, object-oriented programming concepts and topics.

CIS 043 Software Development With Java Programming (3.0 Units/1.0 Unit) 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 applets, GUI (graphical user interface), arrays lists, arrays, streams and exception handling.

CIS 044 Intro to Data Structures Using Java (3.0 Units/1.0 Unit) 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 045 Linux Essentials I (2.5 Units/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 047 Linux System Administration I (3.0 Units/1.0 Unit) 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 051 Introduction To Data Analysis (4.0 Units) 4.0 UNITS

Total Lecture: 54 hours, Total Lab: 54 hours. Advisory: CIS 007. Acceptable for credit: California State University. This is an introductory course on data analysis. It provides a foundation for understanding data analysis principles, tools and applications. Topics include data loading and storage, data manipulation, data cleaning and preparation, data wrangling, plotting, visualization and analysis. Students will use Python programming language and Python libraries such as NumPy, Pandas, Matplotlib in the course. Pass/No Pass Option.

CIS 052 Data Visualization (4.0 Units) 4.0 UNITS

Total Lecture: 54 hours, Total Lab: 54 hours. Acceptable for credit: California State University. In this course students will learn how to become a master at communicating business-relevant implications of data analyses. After finishing this course, students will be able to effectively import data, clean and transform it and convey the results of the analysis to the stakeholders. Students will learn how to best convey the story behind the data using the most effective visuals as well as using Tableau to make effective and interactive dashboards. Pass/No Pass Option.

CIS 053 Introduction To Machine Learning (4.0 Units) 4.0 UNITS

Total Lecture: 54 hours, Total Lab: 54 hours. Advisory: CIS 051. Acceptable for credit: California State University. This course is an introductory course in machine learning and predictive analytics. Students will learn the fundamentals of developing models with cleaned and prepared data. They will gain an understanding of the algorithms of machine learning and learn to build predictive models using Python. Topics included-supervised learning, forecasting numeric values with multiple linear regression, decision trees and unsupervised learning. Students will use machine learning Python libraries such as scikit-learn to implement machine learning algorithms. Pass/No Pass Option.

CIS 055 Introduction to Database and SQL (2.5 Units/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 Units/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 063 Mobile Apps Programming - Android (3.0 Units/1.0 Unit) 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.

COMPUTER INFORMATION TECHNOLOGY (CIT)**CIT 011 Introduction to Computer Hardware and Software (A+) (3.0 Units/1.0 Unit) 4.0 UNITS**

Advisory: MAT 903. 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 Units/1.0 Unit) 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 013 AWS 1 Cloud Practitioner - Foundational (3.0 Units) 3.0 UNITS

Total Lecture: 45 hours, Total Lab: 27 hours. Prerequisite: CIT 021. Acceptable for credit: California State University. This introductory course provides an overall understanding of cloud computing concepts, AWS core services, security, architecture, storage, networking, pricing, and support. Pass/No Pass Option.

CIT 014 AWS 2 Cloud Practitioner - Associate (4.0 Units) 4.0 UNITS

Total Lecture: 54 hours, Total Lab: 54 hours. Prerequisite: CIT 013. Acceptable for credit: California State University. This course will help students develop technical expertise in cloud computing and prepare them for the AWS Certified Solutions Architect – Associate certification exam. The curriculum is delivered through instructor-led classes, knowledge assessments, hands-on labs, and project work. The course covers AWS Cloud, management console, S3 storage, Networking and VPC, cloud migration, continuity, Scalability, database. Pass/No Pass Option.

CIT 016 CyberSecurity and Ethical Hacking (3.0 Units/1.0 Unit) 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 017 Cyber Security Essentials (4.0 Units) 4.0 UNITS

Total Lecture: 54 hours, Total Lab: 54 hours. Prerequisite: CIT 021. Acceptable for credit: California State University. The Cybersecurity Essentials course develops foundational understanding of cybersecurity and how it relates to information and network security. This course explores the importance of cybersecurity, data confidentiality, and best practices for using the internet and social media safely. This course introduces students to characteristics of cybercrime, security principles, technologies, and procedures to defend networks. Through interactive, multimedia content, lab activities, and multi-industry case studies, students build t

CIT 018 CCNA Cyber Security Operations (4.0 Units) 4.0 UNITS

CIT 018 CCNA CYBER SECURITY OPERATIONS 4.0 units. Total Lecture: 54 hours, Total Lab: 54 hours. Prerequisite: CIT 017. Acceptable for credit: California State University. The CCNA Cybersecurity Operations course introduces the knowledge and skills needed for a Security Analyst working with a Security Operations Center team. It teaches core security skills needed for monitoring, detecting, investigating, analyzing, and responding to security events, thus protecting systems and organizations from cybersecurity risks, threats, and vulnerabilities. Pass/No Pass Option.

CIT 021 Cisco Network Fundamentals (CISCO-1) (3.0 Units/1.0 Unit) 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 Essential (CISCO-2) (3.0 Units/1.0 Unit) 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 Units/1.0 Unit) 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 Units/1.0 Unit) 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 078 Microsoft Server Essentials 1 (3.0 Units/1.0 Unit) 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.

COMMUNICATION STUDIES (COM)**COM 001 Public Speaking (3.0 Units) 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 Units) 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. 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 Units) 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 Units) 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 Units) 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 020 Argumentation and Debate (3.0 Units) 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 Units) 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

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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 080 Interviewing Skills (1.0 Unit) 1.0 UNIT

Total Lecture: 18 hours Acceptable for credit: California State University. In this course students develop practical skills and strategic knowledge to effectively engage in various types of interviews (e.g., informational, employment, performance appraisals). Techniques include pre-interview preparation, dynamics of interviews, salary negotiations and follow-up. Students also learn to conduct interviews. Pass/No Pass Option.

COM 081 Storytelling (1.0 Unit) 1.0 UNIT

Total Lecture: 18 hours. Acceptable for credit: California State University. Students learn strategies for discovering and crafting their personal stories for various occasions such as job interviews, professional events, special occasions, social gatherings, etc. The course provides guidance on how to structure, adapt, and confidently present stories that authentically connect with others. Pass/No Pass Option.

COM 090A Selected Topics and Activities in Communication - Series 1 (1.0 Unit) 1.0 UNIT

Total Lecture: 18 hours. Acceptable for credit: California State University In this course, students will contract with an instructor to complete one or more communication activities adapted to student interest. Examples include professional and/or community speaking, conversation group leader for ESL students, workplace/career skills and projects, speech competition, conflict management, and other communication topics of special interest to the student. Pass/No Pass Option.

COM 090B Selected Topics and Activities in Communication - Series 2 (1.0 Unit) 1.0 UNIT

Total Lecture: 18 hours. Prerequisite: COM 090A. Acceptable for credit: California State University. In this course, students who completed COM090A will complete either a new communication activity or an intermediate level of the previously completed COM 090A activity. Examples include professional and/or community speaking, conversation group leader for ESL students, workplace/career skills and projects, speech competition, conflict management, and other communication topics of special interest to the student. Pass/No Pass Option.

COM 090C Selected Topics and Activities in Communication - Series 3 (1.0 Unit) 1.0 UNIT

Total Lecture: 18 hours. Prerequisite: COM 090A and COM 090B. Acceptable for credit: California State University. In this course, students who completed COM090A and COM090B will complete either a new communication activity or a significantly advanced level of the previously completed COM090A and COM090B activity. Examples include professional and/or community speaking, conversation group leader for ESL students, workplace/career skills and projects, speech competition, conflict management, and other communication topics of special interest to the student. Pass/No Pass Option.

(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 005 Strategies For Success (3.0 Units) 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 Unit) 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 Unit) 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 Units) 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 Unit) 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 Unit) 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.

COU 017 Transfer Success and Life Transitions (3.0 Units) 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.

COU 055 Valuing Diversity (3.0 Units) 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 several 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.

ECONOMICS (ECN)

ECN 001A Principles of Macroeconomics (3.0 Units/1.0 Unit) 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.

ECN 001B Principles of Microeconomics (3.0 Units/1.0 Unit) 4.0 UNITS

Advisory MAT 000C Prerequisite MAT 903 This course is a study of decision making by households, firms, and government in a market-oriented economy. This course includes an online lab component.

ECN 006 The Global Economy (3.0 Units) 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.

ENGINEERING ENGINEERING (EGR)

EGR 010 Introduction to Engineering (3.0 Units/1.0 Unit) 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.

EGR 010H Introduction to Engineering - Honors (3.0 Units/1.0 Unit) 4.0 UNITS

This course is the honors version of Introduction to Engineering. Students explore the field of engineering and develop skills to succeed in engineering. Hands-on design projects introduce engineering design and evaluation. Tours

and guest speakers are included. Students may not receive credit for both ENGR 010 and ENGR 010H. This section requires enrollment in the Honors Transfer Project. More information and the online application can be found at <http://honors.missioncollege.edu>.

EGR 023 Mechanics - Statics (3.0 Units) 3.0 UNITS

Prerequisite MAT 003B or any higher level math, and Prerequisite PHY 004A This course applies the principles of mechanics to evaluate the static equilibrium of two- and three- dimensional engineering structures.

EGR 024 Introduction to Circuit Analysis (3.0 Units) 3.0 UNITS

Prerequisite MAT 003B , Prerequisite PHY 004B Advisory MAT 004A This is an introductory course in the analysis of DC and AC electric circuits using techniques based on Kirchoff's laws, Ohm's law, and Thevenin's and Norton's Theorems.

EGR 024L Introduction to Circuit Analysis Lab Laboratory (1.0 Unit) 1.0 UNIT

Prerequisite MAT 003B Prerequisite PHY 004B Corequisite EGR 024 This course is an introduction to the construction and measurement of electrical circuits. Students use electrical test and measurement instruments including multimeters, oscilloscopes, power supplies, and function generators. Some labs require the use of circuit simulation software. This course is primarily for engineering transfer students.

EGR 025 Engineering Graphics and Design (3.0 Units/1.0 Unit) 4.0 UNITS

Prerequisite MAT 000D ; or Prerequisite MAT 002 ; or Prerequisite MAT 003A ; or Prerequisite MAT 003AH Engineering graphics based on conceptual sketching and computer aided design (CAD) are used to develop visualization tools for design. Graphics principles are taught and integrated into the design projects.

EGR 026 Engineering Materials (3.0 Units/1.0 Unit) 4.0 UNITS

Prerequisite CHM 001A Prerequisite PHY 004A This course presents the internal structures and resulting behaviors of materials used in engineering applications, including metals, ceramics, polymers, composites, and semiconductors. The emphasis is upon developing the ability both to select appropriate materials to meet engineering design criteria and to understand the effects of heat, stress, imperfections, and chemical environments upon material properties and performance. Laboratory work is included.

EGR 030 Introduction to Computing for Engineers (3.0 Units/1.0 Unit) 4.0 UNITS

Advisory: Eligibility for ENG 001A and REA 054, CIS 002, MAT 003A. This course introduces students to engineering problem solving using computer programming. A high level language, such as C/C++, is used. Pass/No Pass Option.

ENGLISH (ENG)

ENG 001A English Composition (3.0 Units) 3.0 UNITS

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.

ENG 001AX English Composition with Additional Support (5.0 Lecture) 5.0 UNITS

Total Lecture: 54 hours. Advisory: ENG 001A or ENG 001AX. Acceptable for credit: University of California, California State University. This course covers major American writers and literary traditions through 1865. It begins with Native American works and ends with the work of Walt Whitman. Pass/No Pass Option. C-ID # ENGL 130. CSUGE: C2; IGETC: 3B.

ENG 001B English Composition and Literature (3.0 Units) 3.0 UNITS

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.

ENG 001C Clear Thinking in Writing (3.0 Units) 3.0 UNITS

Prerequisite ENG 001A English 001C is an advanced composition course that emphasizes critical thinking, particularly in the reading and writing of arguments.

ENG 005A English Literature Through 18th Century (3.0 Units) 3.0 UNITS

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 "Beowulf" and extends through the works of the eighteenth century ending with the writings of Samuel Johnson.

ENG 005B English Literature From 19th Century to Present (3.0 Units) 3.0 UNITS

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.

ENG 006B Survey of World Literature (3.0 Units) 3.0 UNITS

Prerequisite ENG 908 or ENG 905AC World Literature is the study of representative works of world literature from the seventeenth century to the present.

ENG 007A American Literature to 1865 (3.0 Units) 3.0 UNITS

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.

ENG 007B American Literature 1865 to Present (3.0 Units) 3.0 UNITS

Prerequisite ENG 908 or Prerequisite Qualifying score on the English placement test. This course covers major American writers from 1865 to the present.

ENG 012 African American Literature 3.0 UNITS

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.

ENG 013 Chicana/o-Latina/o Literature (3.0 Units) 3.0 UNITS

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.

ENG 015 Introduction to Film Analysis (3.0 Units) 3.0 UNITS

Critical analysis of film as a literary art form is covered in this course.

ENG 043 Classical Mythology (3.0 Units) 3.0 UNITS

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.

ENG 048 Introduction to Shakespeare (3.0 Units) 3.0 UNITS

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.

ENG 070 Creative Writing (3.0 Units) 3.0 UNITS

. 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.

ENG 905 English Fundamentals (3.0 Units) 3.0 UNITS

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.

ESL (ESL)**ESL 930LC High Beginning Listening and Culture (3.0 Units) 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 940LC Low Intermediate Listening and Culture (3.0 Units) 3.0 UNITS

Prerequisite 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 Units/0.5 Lab) 3.5 UNITS

Advisory Concurrent enrollment in ESL 940GW and ESL 940RV Prerequisite 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 940RW Low Intermediate Reading and Writing (6.0 Units) 6.0 UNITS

Total Lecture: 108 hours. Prerequisite: Completion of the Mission College ESL Placement process. This course develops students' reading, writing, grammar and vocabulary skills at the low-intermediate level. Students develop strategies to comprehend level-appropriate texts and write fluent and accurate simple and compound sentences as well as paragraphs. Pass/No Pass Option, Non-degree applicable course.

ESL 945GE Low Intermediate Grammar and Editing (2.0 Units) 2.0 UNITS

Total Lecture: 36 hours. Prerequisite: Completion of the Mission College ESL Placement process. In this intensive intermediate level ESL course students review and apply level-appropriate grammatical structures to develop sentence accuracy and fluency in standard written and spoken English. The course focuses on the understanding and practice of sentences in various tenses, varied placement of sentence elements, and error correction. Pass/No Pass Option, Non-degree applicable course.

ESL 950EC ESL for Child Development: Introduction (3.0 Units) 3.0 UNITS

Qualifying score (at the ESL 950 level) on the ESL placement test, or ESL 930ECC and ESL 940ECC. 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 950LS Intermediate Listening and Speaking (3.0 Units) 3.0 UNITS

Prerequisite ESL 940LS or a qualifying score on the ESL placement test. Advisory Concurrent enrollment in ESL 950RW and ESL 950G In this intermediate level course, students receive guidance and extensive practice in effective oral communication in a variety of social and/or vocational situations.

ESL 950PL Intermediate Pronunciation and Listening (3.0 Units/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 the sound system of standard American English. This course emphasizes intelligible spoken communication. This course consists of two-thirds lecture and one-third lab work that facilitates skill development.

ESL 950RW Intermediate Reading and Writing (6.0 Units) 5.0 UNITS

Total Lecture: 108 hours. Prerequisite: Completion of the Mission College ESL Placement process. This course develops writing fluency and reading, grammar and vocabulary skills at the intermediate level. Students develop strategies to comprehend level-appropriate texts using fiction and nonfiction reading materials and increase their ability to write accurate compound and complex sentences and effective paragraphs on familiar and academic topics. Pass/No Pass Option. Non-degree applicable course.

ESL 955EC English For Chd: Factors In Child Development (3.0 Units) 3.0 UNITS

Total Lecture: 54 hours. Prerequisite: Completion of the Mission College ESL Placement process. This intermediate course develops oral and written English language skills to describe a child's development, appearance, and environment as well as to identify and reflect on factors that affect development. (Crosslisted with NCE 955EC). Pass/No Pass Option. Non-degree applicable course.

ESL 960EC ESL for Child Development: Domains (3.0 Units) 3.0 UNITS

Advisory ESL 950EC , or qualifying score (at the ESL 960 level) on the ESL placement test. This high intermediate course develops oral and written English language skills necessary to describe and reflect on a child's socio-emotional, motor, and cognitive development.

ESL 960LS High Intermediate Listening and Speaking (3.0 Units) 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 960RW High Intermediate Reading and Writing (6.0 Units) 6.0 UNITS

Total Lecture: 108 hours. Prerequisite: Completion of the Mission College ESL Placement process. This course develops fluency in reading, writing, grammar and vocabulary skills for English language learners at the high-intermediate level. Students develop strategies to comprehend and analyze level-appropriate fiction and nonfiction texts and write developed, well-organized, and grammatically correct sentences and paragraphs on familiar and abstract topics. Pass/No Pass Option, Non-degree applicable course.

ESL 965EC English For Chd: Domains Of Child Development, Part II (3.0 Units) 3.0 UNITS

Total Lecture: 54 hours. Prerequisite: Completion of the Mission College ESL Placement process. This high intermediate course develops oral and written English language skills to identify, describe, and support children's cognitive and language development. (Crosslisted with NCE965EC) Pass/No Pass Option. Non-degree applicable course.

ESL 965GE Intermediate Grammar and Editing (2.0 Units) 2.0 UNITS

Prerequisite: Completion of the Mission College ESL Placement process. In this intensive intermediate level ESL course students review and apply level-appropriate grammatical structures to develop sentence accuracy and fluency in standard written and spoken English. The course focuses on the understanding and practice of sentences in various tenses, varied placement of sentence elements, and error correction. Pass/No Pass Option, Non-degree applicable course.

ESL 970AM Accent Modification (3.0 Units) 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

Prerequisite A qualifying score on the ESL placement test or Prerequisite ESL 960G , Prerequisite ESL 960RW and Prerequisite ESL 960LS Advisory CA 010A Students review English grammar and learn to edit grammatical, mechanical and word usage errors in their writing. This includes intensive review and editing of verb tenses; modals; conditionals; active and passive voice; articles and nouns; prepositional, adjectival and adverbial phrases; word forms; word usage; subject-verb-pronoun agreement; sentence parts; sentence patterns; sentence boundaries; and mechanics.

ESL 970LS Advanced Listening and Speaking (3.0 Units) 3.0 UNITS

Advisory Concurrent enrollment in ESL 970GW and ESL 970RV. 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 970RW Advanced Reading and Writing (6.0 Units) 6.0 UNITS

Prerequisite: Completion of the Mission College ESL Placement process. This course develops reading, writing, vocabulary, grammar and editing skills for advanced English language learners. Students develop strategies to comprehend, analyze, and evaluate level-appropriate texts, and they read and write paragraphs and essays in a variety of rhetorical styles. Students gain skills for writing thesis statements and paragraphs with appropriate topic sentences, supporting ideas, and details. Pass/No Pass Option, Non-degree applicable course.

ESL 980 Effective Writing for Advanced EsL Students (4.0 Units) 4.0 UNITS

Prerequisite ESL 970LS or Corequisite ESL 970LS ; Prerequisite ESL 970RV 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 Units) 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

HOSPITALITY MANAGEMENT (FDR)**FDR 050 Introduction to the Hospitality Industry (3.0 Units) 3.0 UNITS**

Total Lecture: 54 hours. Acceptable for credit: California State University. This course is an overview of the structure and relationship of components within the hospitality and tourism industry with an emphasis on career opportunities, customer service, and cultural and economic trends. Students survey the economic and employment impact of food service, lodging, resorts, recreation, meetings and conventions, attractions, cruise, and travel-related businesses. Information about the Hospitality Management Program is explained. Pass/No Pass Option. C-ID # HOSP 100.

FDR 051 Basic Food Preparation (2.0 Units/3.0 Units) 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 Unit/5.0 Lab) 6.0 UNITS

Prerequisite FDR 051 Prerequisite FDR 055 Prerequisite FDR 058 Prerequisite FDR 075 Prerequisite INF 050 Corequisite FDR 052S 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.angelllearning.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 Unit/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. <http://wvmccd.angelllearning.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 Units) 3.0 UNITS

Study of the basic principles of Hotel and Restaurant accounting.

FDR 055 Food Purchasing (3.0 Units) 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 Units) 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 Units) 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 060 Food Service Facilities Planning (3.0 Units) 3.0 UNITS

Total Lecture: 54 hours. Acceptable for credit: California State University. The course is designed to familiarize the student with the complexities of planning, designing and equipping a food service operation. Pass/No Pass Option.

FDR 072 Intermediate Cuisine (3.0 Units) 3.0 UNITS

Advisory: FDR 051 Advanced cooking techniques and international cuisines are explored in this class.

FDR 073 Fundamentals of Baking and Confectionery (1.0 Unit/1.0 Unit) 2.0 UNITS

An introduction to baking & pastry work. A uniform is required.

FDR 074 Intermediate Baking and Confectionery (1.0 Unit/1.0 Unit) 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 Units) 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 Units) 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 Unit/1.0 Unit) 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 (3.0 Units) 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 Units) 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 Unit/1.0 Unit) 2.0 UNITS

This class introduces students to chocolate and sugar confectionary work.

FDR 085 Sustainable Operations for Hosp Industry (2.0 Units) 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 Unit/1.0 Unit) 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 Unit/1.0 Unit) 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 Unit/1.0 Unit) 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 Units) 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.

FDR 106B Food Trucks: Mobile Food Operations (1.0 Unit/0.5 Lab) 1.5 UNITS

Corequisite 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 Units) 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 Units) 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 Units) 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 Units) 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 Units) 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 Units) 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 (3.0 Units) 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; extrication 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 Units) 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 1 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 180 Emergency Medical Technician-I Refresher Course (2.0 Units) 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.

FPT 200 Fire Fighter 1 Fire Academy (14.5 Units) 14.5 UNITS

Total Lecture: 144 hours, Total Lab: 360 hours. Prerequisite: (FPT 065 and FPT 065C and FPT 065L and HOC 002 and KIN 039A) or (FPT 065 and FPT 065C and FPT 065L and HOC 002 and KIN 039B) or (FPT 065 and FPT 065C and FPT 065L and HOC 002 and KIN 039C). Co-requisite: KIN 039D. Acceptable for credit: California State University. This course provides the skills and knowledge needed for the entry level Professional and Volunteer Fire Fighter to perform his/her duties safely, effectively, and competently. The curriculum is based on the most current edition of NFPA 1001 Standard for Fire Fighter Professional Qualifications, the most current edition of NFPA 1051 Standard for Wildland Fire Fighter Professional Qualifications, and the most current edition of NFPA 472 Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents. The seven overarching themes of the California State Fire Fighter I curriculum are: general knowledge germane to the profession, fire department communications, fire ground operations, rescue operations, preparedness and maintenance, wild land suppression activities, and hazardous materials/WMD. Grade Only.

FPT 300A Fire Prevention Internship Course 1 (3.0 Units) 3.0 UNITS

Total Lecture: 54 hours. Prerequisite: FPT 055. Corequisite: WRK 300FP. Acceptable for credit: California State University. This is the first course in the Fire Prevention Internship Program. Students will cover the process and documentation required for annual fire and life safety inspections in business, residential and recreational settings. Topics covered include: Assigned Department Information, Authority and Duties Standards, Codes and Permits, Fire Behavior, Building Construction, and the Inspection process. Fire Prevention Interns are required to take WRK 300FP as a co-requisite to this course and will complete 10-14 hours paid employment per week at a fire agency, Monday through Friday during normal business hours. Interns may be assigned to 2 different agencies. Grade Only.

FPT 300B Fire Prevention Internship Course 2 (3.0 Units) 3.0 UNITS

Total Lecture: 54 hours. Prerequisite: FPT 300A. Corequisite: WRK 300FP. Acceptable for credit: California State University. This is the second course in the Fire Prevention Internship Program. Students will continue the process and documentation required for annual fire and life safety inspections in business, residential and recreational settings. The subject areas involved are: Means of Egress, Portable Fire Extinguishers, Hazardous Conditions, Site Access and Emergency Access, Water Supply, Fire Hydrants, Occupancy Classifications and Load. Fire Prevention Interns are required to take WRK 300FP as a co-requisite to this course and will complete 10-14 hours paid employment per week at a fire agency, Monday through Friday during normal business hours. Interns may be assigned to 2 different agencies. Grade Only.

FPT 300C Fire Prevention Internship Course 3 (3.0 Units) 3.0 UNITS

Total Lecture: 54 hours. Prerequisite: FPT 300B. Corequisite: WRK 300FP. Acceptable for credit: California State University. This is the third course in the Fire Prevention Internship Program. Students will continue the process and documentation required for annual fire and life safety inspections in business, residential and recreational settings. Topics covered; Fire Suppression Systems, Fire Detection and Alarm Systems, Plan Review, WUI (Wildland Urban Interface) Inspections, Hazardous Materials, Tent Inspections, and Complaints. Fire Prevention Interns are required to take WRK 300FP as a co-requisite to this course and will complete 10-14 hours paid employment per week at a fire agency, Monday through Friday during normal business hours. Interns may be assigned to 2 different agencies. Grade Only.

FPT 300D Fire Prevention Internship Course 4 (3.0 Units) 3.0 UNITS

Total Lecture: 54 hours. Prerequisite: FPT 300C. Corequisite: WRK 300FP. Acceptable for credit: California State University. This is the fourth and final course in the Fire Prevention Internship Program and is the capstone course. Students will continue the process and documentation required for annual fire and life safety inspections in business, residential and recreational settings. Topics covered are: Hood and Duct Systems, Private Underground Systems, Fire Investigation, Knox Box Inspections, Community Education, Emergency Planning and Preparedness Measures and Fire ground Operations. Fire Prevention Interns are required to take WRK 300FP as a co-requisite to this course and will complete 10-14 hours paid employment per week at a fire agency, Monday through Friday during normal business hours. Interns may be assigned to 2 different agencies. Grade Only.

FPT 301 Fire Inspector 1A: Duties And Administration (1.5 Units) 1.5 UNITS

Total Lecture: 27 hours. Advisory: FPT 051 or FPT 055. Acceptable for credit: California State University. This course provides students with a basic knowledge of the roles and responsibilities of a Fire Inspector I including legal responsibilities and authority, codes and standards, the inspection process, confidentiality and privacy requirements, and ethical conduct, and administrative tasks including preparing inspection reports, recognizing the need for a permit or plan review, investigating common complaints, and participating in legal proceedings. Grade Only.

FPT 302 Fire Inspector 1B: Fire And Life Safety (1.5 Units) 1.5 UNITS

Total Lecture: 27 hours. Prerequisite: FPT 301. Advisory: FPT 055. Acceptable for credit: California State University. This course provides students with a basic knowledge of fire and life safety aspects related to the roles and responsibilities of a Fire Inspector I including building construction, occupancy classifications, occupancy load, means of egress, hazardous conditions, fire growth potential, fire flow, and emergency planning and preparedness measures. Grade Only.

FPT 303 Fire Inspector 1C: Field Inspection (1.5 Units) 1.5 UNITS

Total Lecture: 27 hours. Prerequisite: FPT 302. Advisory: FPT 055. Acceptable for credit: California State University. This course provides students with a basic knowledge of the field inspection roles and responsibilities of a Fire Inspector I, including basic plan review, emergency access for an existing system, hazardous materials, and the operational readiness of fixed fire suppression systems, existing fire detection and alarm systems, and portable fire extinguishers. Grade Only.

FPT 304 Fire Inspector 1d: Field Inspection CA (1.0 Unit) 1.0 UNIT

Total Lecture: 27 hours. Prerequisite: FPT 302. Advisory: FPT 055. Acceptable for credit: California State University. This course provides students with a basic knowledge of the field inspection roles and responsibilities of a Fire Inspector I, including basic plan review, emergency access for an existing system, hazardous materials, and the operational readiness of fixed fire suppression systems, existing fire detection and alarm systems, and portable fire extinguishers. Grade Only.

FRENCH (FRN)

FRN 001 First Semester French (Elementary Level) (5.0 Lecture) 5.0 UNITS

Total Lecture: 90 hours. Advisory: FRN 001L. Acceptable for credit: University of California, California State University Students acquire the basic skills for

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communication in French: listening, speaking, reading, and writing. Students are also exposed to a general overview of Francophone civilization and culture. It is strongly recommended that the student take FRN 001L along with FRN 001. Pass/No Pass Option. CSUGE: C2; IGETC: 6A.

FRN 001L French Laboratory (0.5 Lab) 0.5 UNITS

Total Lab: 27 hours. Advisory: FRN 001. Acceptable for credit: California State University. This is a laboratory course offered online. The class is designed to improve language skills and reinforce grammar. Students review the cultures of French-speaking countries through films, current publications, Internet research and listening activities. This course is recommended for students enrolled in FRN 001 and is designed to further enhance class material. FRN 001L may also be taken independently by students who are not enrolled in a foreign language course. Pass/No Pass Option. CSUGE: C2.

FRN 002 Second Semester French (Elementary Level) (5.0 Lecture) 5.0 UNITS

Total Lecture: 90 hours. Prerequisite: FRN 001 or two years high-school French or equivalent with a grade of "C" or better. Acceptable for credit: University of California, California State University FRN 002 is a continuation of FRN 001. The student continues to develop basic skills for communication in French: listening, speaking, reading, and writing. The student is exposed to a general overview of francophone civilization and culture. It is highly recommended that the student takes FRN 002L with FRN 002. Pass/No Pass Option. CSUGE: C2; IGETC: 3B, 6A.

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.

GRAPHIC DESIGN (GDS)

GDS 011 The History of Modern Design (3.0 Units) 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 Units) 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 015 Photo-Media and Social Change (3.0 Units) 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 022 Digital Media for Marketing (3.0 Units/1.0 Unit) 3.0 UNITS

This is a beginning digital media course to prepare students to produce material to be used for marketing purposes, especially social media marketing. Students will create images, videos and other media used in online marketing. Techniques, skills, hardware and software accessible to small business owners and entrepreneurs will be emphasized. The basic principles of photography, lighting, video production and layout are explored. Pass/No Pass Option. CSUGE: C1.

GDS 032 Digital Drawing (3.0 Units) 3.0 UNITS

Total Lecture: 36 hours, Total Lab: 54 hours. Advisory: ART 031A. Acceptable for credit: California State University, University of California.

This is a beginning digital drawing course for students. Using mobile devices and stylus pens, students work from observation, directed toward realistic rendering of objects through line, shading, pictorial composition and perspective. Areas of exploration include storyboarding, character design, logo, icon, and hand lettering. Students will learn how to use illustration software programs to create commercial screen graphics, video recordings, and printmaking. This course is cross-listed with ART 032. Pass/No Pass Option

GDS 035 Beginning Graphic Design (3.0 Units) 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 (3.0 Units) 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 040 Game Design I (3.0 Units) 3.0 UNITS

Advisory: GDS 039A. Acceptable for credit: California State University This course presents techniques for the development of interactive game environments. Students will create multiple levels, integrate game mechanics, and apply visual design concepts in the development process. The course follows basic industry production structure to immerse students in the game design process and will introduce node based programming tool sets to be applied to level designs. Pass/No Pass Option.

GDS 041 Mobile Game Design and Development (3.0 Units) 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 (3.0 Units) 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 And Development 1 (3.0 Units) 3.0 UNITS

Total Lecture: 36 hours, Total Lab: 54 hours. Acceptable for credit: California State University. 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. Pass/No Pass Option.

GDS 046 Web Design and Development 2 (3.0 Units) 3.0 UNITS

Total Lecture: 36 hours, Total Lab: 54 hours. Advisory: GDS 045. Acceptable for credit: California State University. This intermediate-level course is a continuation of the GDS 045. Web Design and Development 1 course. The focus is both on the creative design and the appropriate software and coding skills required in web design and front-end web development. Advanced design principles of type, color, illustration, and layout are explored along with intermediate to advanced HTML, CSS, and an introduction to JavaScript and other relevant technologies. A basic understanding of computer system operation is required. Pass/No Pass Option.

GDS 047 Web Animation (3.0 Units) 3.0 UNITS

Total Lecture: 36 hours, Total Lab: 54 Hours. Advisory: GDS 045. Acceptable for credit: University of California. California State University. This introductory

course focuses on the skills required to create effective web animations using a variety of software applications. Principles of animation, visual communication, user interface design and web optimization are explored. The student develops an understanding of the role of animation on the internet in a series of hands-on exercises. A basic understanding of computer systems is assumed. Pass/No Pass Option.

GDS 049 Wordpress and Content Management Systems (3.0 Units) 3.0 UNITS

Total Lecture: 36 hours, Total Lecture: 54 hours. Advisory: GDS 046. Acceptable for credit: California State University. 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 and MySQL, theme customization, child themes, and an overview of popular CMS platforms. Pass/No Pass Option.

GDS 051 Mobile Application and Web Development With Web Standards (3.0 Units) 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 056 Advanced Presentation Design (3.0 Units) 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 3.0 UNITS

Total Lecture: 36 hours, Total Lecture: 54 hours. Advisory: GDS 035. Acceptable for credit: California State University. This introductory level course in page layout and design uses Adobe InDesign software. Students assemble a variety of 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. Pass/No Pass Option.

GDS 061 Page Layout 3.0 UNITS

Total Lecture: 36 hours, Total Lecture: 54 hours. Advisory: GDS 035. Acceptable for credit: California State University. This introductory level course provides instruction in page layout and design as well as training in software such as Adobe InDesign. Students assemble a variety of 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. Pass/No Pass Option.

GDS 062 Introduction to Adobe Illustrator (3.0 Units) 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 Typography (3.0 Units) 3.0 UNITS

Total Lecture: 36 hours, Total Lab: 54 Hours. Advisory: GDS 064. Acceptable for credit: California State University. This is a course for graphic designers on the study and demonstration of letterforms and typography. Practical design projects examine the interaction of form and message, with emphasis on fundamental theory, i.e., elements, principles, and attributes of typographical design. Students may create work for inclusion in a portfolio. This course requires both non-digital attention to hands-on craftsmanship and basic knowledge of Adobe CC software. Pass/No Pass Option.

GDS 064 Introduction to Adobe Photoshop (3.0 Units) 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.

GDS 065 Typography (3.0 Units) 3.0 UNITS

Total Lecture: 36 hours, Total Lab: 54 hours. Advisory: GDS 035 and GDS 061. Acceptable for credit: California State University. This is a course for graphic designers on the study and demonstration of letterforms and typography. Practical design projects examine the interaction of form and message, with emphasis on fundamental theory, i.e., elements, principles, and attributes of typographical design. Students may create work for inclusion in a portfolio. This course requires both non-digital attention to hands-on craftsmanship and basic knowledge of Adobe CC (Creative Cloud) software. Pass/No Pass Option.

GDS 066 Advanced Adobe Illustrator (3.0 Units) 3.0 UNITS

Advisory: GDS 062 This advanced level course uses Adobe Illustrator software. Designed for the student who wishes to continue with techniques and methods beyond the GDES 062 beginning course, students produce a variety of sophisticated digital illustrations. Emphasis is on technique as well as methodologies for creating illustrations with a distinctive style.

GDS 067 Graphic Design II (3.0 Units) 3.0 UNITS

Total Lecture: 36 hours, Total Lab: 54 Hours. Advisory: GDS 035 and GDS 061 and GDS 065. Acceptable for credit: California State University. This mid-level design course will develop the students' confidence and competence in form and concept for visual communication. Projects emphasize the creation of professional level pieces using industry standard techniques and best practices. This course assumes competency in Adobe Photoshop, Illustrator, and InDesign. Pass/No Pass Option.

GDS 068 Portfolio Production Studio (3.0 Units) 3.0 UNITS

Total Lecture: 36 hours, Total Lab: 54 Hours. Advisory: GDS 062 and GDS 064. Acceptable for credit: California State University In this course students create original portfolio content necessary for graduation and for procuring employment. Students develop and showcase their individual design/illustration approach, demonstrated via intermediate to advanced-level creative projects. Visual communication principles, processes and methodology are explored in lecture and in lab. Previous experience with Adobe Photoshop and Adobe Illustrator is advised. Pass/No Pass Option.

GDS 070 User Experience, Interface, and Multimedia Design (3.0 Units) 3.0 UNITS

In this course students are introduced to the fields of User Experience Design and Interface Design. Key topics covered in this course are interaction design, mobile and desktop interface design, information architecture, user research, as well as UX planning documents such as wireframes and personas. Students learn many of the principles, processes, and techniques used to develop effective user interfaces.

GDS 072 Digital Imaging And User Interface Design (3.0 Units) 3.0 UNITS

Total Lecture: 36 hours, Total Lab: 54 Hours. Advisory: GDS 070. Acceptable for credit: California State University. In this course, students apply design principles to the creation of digital product designs using industry standard software. Students design interfaces and other assets used in User Interface Design and User Experience Design. Pass/No Pass Option.

GDS 073 Digital Photography (3.0 Units) 3.0 UNITS

This introductory course focuses on photography as a creative medium. Emphasis is placed on aesthetics, composition, content and the technical and creative design skills required to create effective digital images using digital cameras and a variety of software packages. Students also critically evaluate photographic images according to the principles of photographic theory. A basic understanding of Adobe Photoshop and computer system operation is required. Students must have access to a digital camera.

GDS 074 Digital Video Production 1 (3.0 Units) 3.0 UNITS

Total Lecture: 36 hours, Total Lab: 54 hours Acceptable for credit: California State University This introductory course focuses on video production and related hardware and software. The students develop an understanding of video production and post-production in a series of hands on exercises. Camera operation, video and audio production techniques, special effects, the basic principles of motion graphics, video editing and audio editing are explored. Access to a camera capable of recording video, and a basic understanding of computer system operation are required. Pass/No Pass Option.

- GDS 076 Emerging Trends In Interaction Design (3.0 Units) 3.0 UNITS**
Total Lecture: 36 hours, Total Lab: 54 hours. Advisory: GDS 070. Acceptable for credit: California State University. In this course, students will apply interaction design principles to the design and prototyping of emerging technologies in mobile, wearable, voice activated and smart appliances. Students will explore trends and best practice for interaction and interface design for emerging technology. Pass/No Pass Option.
- GDS 077 Interactive Projects and Explorations In UXD (3.0 Units) 3.0 UNITS**
Total Lecture: 36 hours, Total Lab: 54 hours. Advisory: GDS 070 and GDS 072. Acceptable for credit: California State University. In this capstone course, students will utilize UXD (User Experience Design) and Interaction design principles to rapidly design and prototyping projects to include in a UX Design portfolio. Students will design and develop hi-fidelity mobile, wearable, voice activated and smart appliances in project-based setting. Pass/No Pass Option.
- GDS 080 Packaging Design (3.0 Units) 3.0 UNITS**
Advisory: GDS 035 This course introduces the student to the skills required to create effective packaging designs. The role of typography, color and the use of materials such as paper, plastics, and other materials are examined and design solutions created using both traditional and computer generated techniques. The variety of packaging styles available and the environmental implications of packaging are discussed.
- GDS 081 Motion Graphics (3.0 Units) 3.0 UNITS**
Advisory: GDS 064, GDS 074 This course focuses on the preparation and production of motion graphics/visual effects for video, film and the internet. The student develops an understanding of the principles of type 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 (3.0 Units) 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 process 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 084 Portfolio Production Studio (3.0 Units) 3.0 UNITS**
Total Lecture: 36 hours, Total Lecture: 54 hours. Advisory: (GDS 062 and GDS 064) or (GDS 862 and GDS 864). Acceptable for credit: California State University. In this course, students create original portfolio content necessary for graduation and for procuring employment. Students complete intermediate to advanced-level capstone projects, i.e. case studies, showcasing their individual creative approach and technical abilities. Originality, communication, and presentation are subjects of emphasis. As a group, students assist one another with extensive constructive criticism via regular lab critiques. This course is approved for credit by exam. Pass/No Pass Option.
- GDS 085 Professional Portfolio and Design (3.0 Units) 3.0 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 086 Visual Effects I (3.0 Units) 3.0 UNITS**
Total Lecture: 36 hours, Total Lab: 54 hours Acceptable for credit: California State University. This hands-on course introduces students to visual effects in film and digital media production. Creative projects explore visual effects techniques including keyframing, compositing, and shooting for visual effects. Pass/No Pass Option.
- GDS 087 Virtual Production I (3.0 Units) 3.0 UNITS**
Acceptable for credit: California State University This course introduces many aspects of 3D Virtual Film and TV Production: Motion Capture, Cinematography, Lighting, Props, Art Direction, Technical and Visual aspects of 3D Virtual Production, including pre-production, storyboards, blocking, lighting, sets and props; technical skills, including Realtime 3D engines, workflows, camera functions and movement, industry terminology, duties; and responsibilities of the camera, lighting and art teams. Pass/No Pass Option.
- GDS 089 Javascript 1 (3.0 Units) 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.
- GDS 089B Javascript II and Web Development (3.0 Units) 3.0 UNITS**
Total Lecture: 36 hours, Total Lab: 54 hours. Advisory: GDS 089. Acceptable for Credit: California State University. This course provides an intermediate to advanced level content continuation of the GDS 089 JavaScript 1 course. The course also provides instruction on other aspects of web development, such as server interactions and version control. Topics include: Review of JavaScript basics, DOM scripting, front-end frameworks, asynchronous programming, JavaScript on the back end, APIs and Web Services. Technologies may include: JSON, React, XML, REST, jQuery, Angular, Node.js, package managers and AJAX. Pass/No Pass Option.
- GDS 862 Illustration with Adobe Illustrator (Noncredit) 0.0 UNITS**
This is a beginning digital illustration course for artists, illustrators and graphic designers. Students learn how to create original art, illustrations, and graphic designs using a variety of software applications. Basic art and design principles are explored. Students examine the history and application of illustration, in a variety of cultures and times, as a medium for social change, self-expression and marketing purposes. Pass/No Pass Option. Noncredit version of GDS 062.
- GDS 864 Intro to Adobe Photoshop (Noncredit) 0.0 UNITS**
This is a beginning digital imaging course for graphic designers, artists, and photographers. Students learn how to create original artwork, refine photographs and manipulate digital imagery using Adobe Photoshop. Basic art and design principles are explored. Students examine the history and application of graphic design, in a variety of cultures and times, as a medium for social change, self-expression and marketing purposes. Pass/No Pass Option. Noncredit version of GDS 064
- GDS 869 3D for Designers and Illustrators 3D (Noncredit) 0.0 UNITS**
This is a beginning 3D course for illustrators and designers. Students will learn the fundamentals of working within a 3D space including modeling, sculpting, rigging, texturing, lighting, and rendering. Special areas of focus include character design, packaging design, typographic illustration, and animation. Pass/No Pass Option.
- GDS 873 Digital Photography (Noncredit) 0.0 UNITS**
This introductory course focuses on photography as a creative medium. Emphasis is placed on aesthetics, composition, content and the technical and creative skills required to create effective digital images using digital cameras and a variety of software packages. Students also critically evaluate photographic images according to the principles of photographic theory. A basic understanding of computer system operation is required. Students must have access to a digital camera. Pass/No Pass Option. Noncredit version of GDS 073.
- GDS 874 Digital Video Production I (Noncredit) 0.0 UNITS**
This introductory course focuses on video production and related hardware and software. The students develop an understanding of video production and post-production in a series of handson exercises, camera operation, video and audio production techniques, special effects, the basic principles of motion graphics, video editing and audio editing are explored. Access to a camera capable of recording video, and a basic understanding of computer system operation are required. Pass/No Pass Option. Noncredit version of GDS 074.

GDS 881 Motion Graphics (Noncredit) 0.0 UNITS

This course focuses on the preparation and production of motion graphics/visual effects for video, film and the internet. The student develops an understanding of the principles of type 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. Pass/No Pass Option.

GDS 884 Portfolio Production Studio (Noncredit) 0.0 UNITS

Total Lecture: 36 hours, Total Lab: 54 hours. Advisory: (GDS 862 and GDS 864) or (GDS 062 and GDS 064). In this course, students create original portfolio content necessary for graduation and for procuring employment. Students complete intermediate to advanced-level capstone projects, i.e. case studies, showcasing their individual creative approach and technical abilities. Originality, communication, and presentation are subjects of emphasis. As a group, students assist one another with extensive constructive criticism via regular lab critiques. Pass/No Pass Option.

GEOGRAPHY (GEO)**GEO 001 Introduction to Physical Geography (3.0 Units) 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.

HISTORY (HIS)**HIS 004A History of Western Civilization (3.0 Units) 3.0 UNITS**

Cultural contribution's in western civilization from Mesopotamia & Egypt to European Renaissance.

HIS 004AH History of Western Civilization - Honors (3.0 Units) 3.0 UNITS

This honors course covers the development of Western society and culture from prehistoric times to 1600. Students cannot get credit for both HIST 004A and HIST 004AH. This section requires enrollment in the Honors Transfer Project. More information and the online application can be found at <http://honors.missioncollege.edu>.

HIS 004B History of Western Civilization (3.0 Units) 3.0 UNITS

Study of political and cultural contributions in Western Civilization from 1500 to present.

HIS 004BH History of Western Civilization - Honors (3.0 Units) 3.0 UNITS

This honors course covers the development of Western society and culture from 1600 to the present. Students cannot get credit for both HIST 004B and HIST 004BH. This section requires enrollment in the Honors Transfer Project. More information and the online application can be found at <http://honors.missioncollege.edu>.

HIS 015 World History to 1500 (3.0 Units) 3.0 UNITS

This course is a survey of World Civilization from prehistoric times to 1500. Emphasis is on the major political, economic, social, cultural and intellectual movements that have molded world societies.

HIS 015H World History to 1500 - Honors (3.0 Units) 3.0 UNITS

This honors course is a survey of World Civilization from prehistoric times to 1500. This section requires enrollment in the Honors Transfer Project. More information and the online application can be found at <http://honors.missioncollege.edu>.

HIS 016 World History Since 1500 (3.0 Units) 3.0 UNITS

This course covers the development of world civilizations and cultures from 1500 to the present.

HIS 016H World History Since 1500 - Honors (3.0 Units) 3.0 UNITS

This course covers the development of world civilizations and cultures from 1500 to the present. Students cannot get credit for both HIST 016 and HIST 016H. This section requires enrollment in the Honors Transfer Project. More information and the online application can be found at <http://honors.missioncollege.edu>.

HIS 017A History of the United States to 1877 (3.0 Units) 3.0 UNITS

This course covers the development of American government and culture from colonial through Civil War and Reconstruction periods.

HIS 017AH History of the United States to 1877 - Honors (3.0 Units) 3.0 UNITS

This course studies the development of American government and culture from colonial through Civil War and Reconstruction periods. HIST 017AH is more rigorous in the course work and research than HIST 017A. This section requires enrollment in the Honors Transfer Project. More information and the online application can be found at <http://honors.missioncollege.edu>.

HIS 017B History of the United States Since 1877 (3.0 Units) 3.0 UNITS

This course covers the emergence of the United States as a world power in the late 19th and 20th centuries.

HIS 017BH History of the United States Since 1877 - Honors (3.0 Units) 3.0 UNITS

This honors course covers the emergence of the United States as a world power in the late 19th and 20th centuries. HIST 017BH is more rigorous in the coursework and research than 017B. This section requires enrollment in the Honors Transfer Project. More information and the online application can be found at <http://honors.missioncollege.edu>.

HIS 020 History and Geography of California (3.0 Units) 3.0 UNITS

This course examines California's geographic regions, Native Americans of California, institutions of Spanish California, developments during Mexican and early American period, economic foundations of the state, political growth and institutions of American California, diversity in California history through the 20th Century, and state and local government.

HIS 031 History of East Asia (3.0 Units) 3.0 UNITS

This course is a survey of the history of China, Japan, Korea, Vietnam and related countries in East Asia with emphasis on the political, social, and economic development of these countries and their interaction with the West.

HIS 033 Women's Issues Past and Present (3.0 Units) 3.0 UNITS

This course is an introduction to the historical study of major women's issues and movements from colonial times to the modern era.

HIS 033H Women's Issues Past and Present - Honors (3.0 Units) 3.0 UNITS

This honors course introduces students to the historical study of major women's issues and movements from colonial times to the modern era. Students cannot get credit for both HIST 033 and HIST 033H. This section requires enrollment in the Honors Transfer Project. More information and the online application can be found at <http://honors.missioncollege.edu>.

HIS 044 African American History (3.0 Units) 3.0 UNITS

Total Lecture: 54 hours. Anti-Requisite: ETH 044 and ETH 044H and HIS 044H Acceptable for credit: University of California, California State University. This course surveys the political, economic, and social developments of African Americans from the 1619 to the present. Topics include Africans before European contact and slavery in the US, abolitionism, the Civil War, Reconstruction, the rise and resistance to Jim Crow, WWI, WWII, the Civil Rights movement, and the present state of African Americans. The course is cross listed as ETH044. Pass/No Pass Option. CSUGE: D, F, US-1; IGTC:4, 7..

HIS 044H African American History - Honors (3.0 Units) 3.0 UNITS

Total Lecture: 54 hours. Anti-Requisite: ETH 044 and ETH 044H and HIS 044 Acceptable for credit: University of California, California State University. This course surveys the political, economic, and social developments of

COURSES

African Americans from the 1619 to the present. Topics include Africans before European contact and slavery in the US, abolitionism, the Civil War, Reconstruction, the rise and resistance to Jim Crow, WWI, WWII, the Civil Rights movement, and the present state of African Americans. This course is crosslisted with ETH 044H. Students cannot get credit for both HIS 044 and HIS 044H. Enrollment in the Honors Program is required. Pass/No Pass Option. CSUGE: D,F, US-1; IGETC: 4, 7.

(HMT)

HMT 075 Housekeeping in Hotels, Motels and Institutions (3.0 Units) 3.0 UNITS

In a hotel, housekeeping is the largest department and is responsible for the delivery of the hotel's basic product, a clean room. A highly diverse workforce in this department necessitates skilled managers, according to hotel industry advisory board members. Standards today are such that managers whose ultimate goal is to achieve the executive position as general manager must have experience successfully managing the housekeeping department. This course provides students with fundamental principles for managing housekeeping operations. This is an elective course that is part of the Associate of Sciences Degree Foodservice/Restaurant Management, as well as the Hospitality Management transfer major.

HMT 076 Hotel and Motel Front Office Management (3.0 Units) 3.0 UNITS

This course is an introduction to the principles of effective front office management. Students examine the guest services role, reservations, registration, account settlement, the audit process and evaluate a hotel operation. Computer simulation provides a hands-on interactive learning experience.

HEALTH OCCUPATIONS (HOC)

HOC 001 Medical Terminology (3.0 Units) 3.0 UNITS

This course offers 14 modules over the semester, with the scheduled requirement that one module be completed each week. The modules introduce medical terminology related to medical specialties, diagnostic and therapeutic procedures, and an overview of each body system.

HOC 001A Health Occupations Bootcamp (2.0 Units) 2.0 UNITS

Total Lecture: 36 hours. This course is designed to prepare the potential Health Occupations student for entry into and successful completion of a Health Occupations program. The course content focuses on competencies expected upon entry, study skills, test-taking strategies, stress management, mathematics for dosage calculation, critical thinking, critical reasoning, and introduction to the nursing process. Pass/No Pass Option.

HOC 002 Cardiopulmonary Resuscitation (0.5 Lecture) 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 003 Emergency Disaster Preparedness for Allied Health Professionals (0.5 Lecture) 0.5 UNITS

This course is designed to assist health workers in assessing and developing plans for emergency and disaster situations.

HOC 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 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.

HOC 005 Introduction to Community Health Worker (3.0 Units) 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 Units) 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 Units) 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 Units) 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 012 Community Health Worker Internship (1.0 Unit / 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 019AL Nursing Assistant Fundamentals Laboratory (0.5 Units) 0.5 UNITS

Total Lab: 27 Hours. Corequisite: HOC 019A and HOC 019B. Acceptable for credit: California State University. This laboratory course provides hands-on skills training to support HOC 019H, Nursing Assistant Fundamentals and gives the student a foundation in the basic skills required to provide health care in a skilled nursing facility. Students who successfully complete this course, along with HOC 019H and HOC 019B, are eligible to apply for the California Certified Nurse Assistant (CNA) examination. Pass/No Pass Only.

HOC 019B Nursing Assistant Clinical Experience (2.0 Lab) 2.0 UNITS

This clinical practicum provides the Nurse Assistant student with experience in the application of basic patient care 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 REA 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.

<p>HOC 019G Home Health Aide Clinical (0.5 Arranged Lab) 0.5 UNITS</p> <p>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.</p>	<p>HOC 028 Care of the Geriatric Patient (1.0 Unit) 1.0 UNIT</p> <p>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.</p>
<p>HOC 020 Introduction to Professional Health Care (0.5 Lecture) 0.5 UNITS</p> <p>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.</p>	<p>HOC 032 Care of Obstetrical and Neonatal Patients (2.0 Units) 2.0 UNITS</p> <p>Prerequisite: HOC 022; HOC 023A; HOC 023B; HOC 024; HOC 025A; HOC 026A; HOC 027; HOC 028; PSY 001; Corequisite: HOC 033A; HOC 033B; HOC 034; HOC 035A; HOC 036A; NTR 015 or NTR 040. This course is designed for the student to focus on intermediate concepts in caring for child-bearing families. Concepts include family communications, teaching, the nursing process, critical thinking, legal-ethical issues, and the advocacy role within the VN scope of practice.</p>
<p>HOC 022 Patient Nursing Care Fundamentals (1.5 Lecture) 1.5 UNITS</p> <p>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 assessments, nutritional requirements, elimination needs, respirations and oxygen delivery, wound prevention and care, and administration of medications.</p>	<p>HOC 033A Int. Medical/Surgical Nursing Theory (2.0 Units) 2.0 UNITS</p> <p>This course focuses on intermediate level nursing care and interventions for clients with diseases or disorders of the cardiac, vascular, respiratory, and urinary systems.</p>
<p>HOC 023A Beg. Medical-Surgical Nursing Theory (2.5 Unitss) 2.5 UNITS</p> <p>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 AHL 914, AHL 001A, AHL 003, 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.</p>	<p>HOC 033B Int. Project-Based Medical/Surgical Reasoning (1.5 Lecture) 1.5 UNITS</p> <p>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.</p>
<p>HOC 023B Beg. Cognitive Disabilities - Mental Health Theory (1.0 Unit) 1.0 UNIT</p> <p>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.</p>	<p>HOC 034 Pharmacology B (1.0 Unit) 1.0 UNIT</p> <p>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.</p>
<p>HOC 024 Pharmacology A (1.0 Unit) 1.0 UNIT</p> <p>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>	<p>HOC 035A Int. Nursing Skills/Simulation Lab (1.0 Unit) 1.0 UNIT</p> <p>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 the medical-surgical and geriatric patients with respiratory, cardiac, vascular, and urinary disorders, and obstetrical and neonatal patients in inpatient and outpatient settings.</p>
<p>HOC 025A Fundamentals Skills/Simulation Lab (1.0 Unit) 1.0 UNIT</p> <p>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.</p>	<p>HOC 036A Int. Clinical Practicum (5.0 Lab) 5.0 UNITS</p> <p>This is a clinical experience course in which intermediate vocational nursing students apply theoretical concepts, basic nursing skills, the nursing process and therapeutic communication to delivery of safe, quality healthcare to medical-surgical, obstetrical and newborn patients in a variety of community healthcare settings under direct supervision of the instructor.</p>
<p>HOC 027 Nursing Process and Communication (2.0 Units) 2.0 UNITS</p> <p>Vocational nursing and psychiatric technician students participate in activities designed to integrate therapeutic communication through each step of the nursing process that facilitates active engagement of the patient and family in health care management while supporting effective, collaborative teamwork among interdisciplinary healthcare members.</p>	<p>HOC 042 Care of the Pediatric Patient (2.0 Units) 2.0 UNITS</p> <p>This course is designed for the nursing student to focus on advanced concepts in caring for children from infancy through adolescence and their families/care givers. Concepts include communication skills, client teaching, the nursing process, critical thinking, legal-ethical issues, the advocacy role within the VN scope of practice.</p>
	<p>HOC 043A Adv. Medical/Surgical Theory (2.0 Units) 2.0 UNITS</p> <p>This course focuses on advanced level nursing care and interventions for clients with diseases or disorders of particular body systems. The nursing process is used as a critical thinking tool in understanding 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.</p>
	<p>HOC 043B Advanced Project-Based Medical Surgical Reasoning (1.5 Lecture) 1.5 UNITS</p> <p>This course is designed to provide practice for the advanced level vocational nursing student with principal problem-solving and critical reasoning</p>

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through a variety of group activities and projects related to patients with gastrointestinal, integumentary, endocrine, and hematological disorders.

HOC 044 Pharmacology C (1.0 Unit) 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 Unit) 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 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 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 Units) 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 Unit) 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 Units) 2.0 UNITS

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 Units) 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 Unit) 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 Units) 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 Units) 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 Unit) 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 905 Math for Health Occupations (1.0 Unit) 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.

HUMANITIES (HUM)

HUM 001A Human Values in and From the Arts (3.0 Units) 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 Units) 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 Units) 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 015 Introduction to Film Analysis (3.0 Units) 3.0 UNITS

Critical analysis of film as a literary art form. Eligibility for ENG 001A and REA 054

HUM 016A Hispanic Roots and Culture (3.0 Units) 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 Units) 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 Units) 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 Units) 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 Units) 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 Units) 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 Units) 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.

INSTITUTIONAL FOODS (INF)**INF 050 Sanitation and Safety (2.0 Units) 2.0 UNITS**

Total Lecture: 36 hours. Acceptable for credit: California State University. This class uses the National Restaurant Association Education Foundation's ServSafe® materials to certify students as food service safety managers. This course includes personal hygiene, types of hazards in food service, prevention and control of pathogens and other contaminants in food. Proper storage and cleaning and sanitizing are also covered. Systems for tracking food safety including HACCP and responding to outbreaks and inspections are taught. Students completing the final exam with 75% correct will be certified food safety managers in all 50 states for 5 years. Pass/No Pass Option. C-ID # HOSP 110.

INSTRUCTIONAL SUPPORT (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 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 810 Peer Tutor and Mentor Training (Noncredit) 0.0 UNITS

Total Lecture: 27 hours. This course provides students with effective learning strategies and academic assistance techniques for peer tutoring and mentoring in a community college setting. This course also emphasizes skills in communication, problem solving, critical thinking, structuring learning experience and handling challenging situations, as well as online tutoring. This course is cross-listed with INS 010. Pass/No Pass Only.

INS 815 Advanced Peer Tutors and Mentors Training (Noncredit) 0.0 UNITS

Total Lecture: 27 hours. This is a second level peer tutor and mentor training course. Topics include use of probing questions, intercultural communication, strategies for working with adult students and assessing their needs, establishing positive study behaviors, communication strategies, group facilitation strategies, and tutoring in subject areas and/or specific Skills. This course is cross-listed with INS 015. Pass/No Pass Only.

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 Unit) 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.

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 be 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.

KINESIOLOGY (KIN)**KIN 001A Adapted Weight Training (1.0 Unit) 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 001C Adapted Aerobics (1.0 Unit) 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 014A Volleyball - Introduction (1.0 Unit) 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 Unit) 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 014C Volleyball - Intermediate (1.0 Unit) 1.0 UNIT

Total Lab: 54 hours Advisory: KIN 014B. Acceptable for credit: University of California, California State University. This course is designed to enhance the fundamental skills of volleyball and add jump-serving hitting, swing-blocking, setting, and tipping to the players' repertoire. Players work on improving the depth and accuracy of their skills while employing specific strategies of the game. Pass/No Pass Option. CSUGE: E.

KIN 014D Volleyball - Advanced (1.0 Unit) 1.0 UNIT

Total Lab: 54 hours. Advisory: KIN 014C. Acceptable for credit: University of California, California State University. This course is designed to enhance the fundamental skills of volleyball and add jump-serving hitting, swing-blocking,

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jump-setting and tipping techniques to the players' repertoire. Players work on fine tuning the depth and accuracy of their skills while employing specific, advanced strategies of the game. Pass/No Pass Option. CSUGE: E.

KIN 015A Basketball - Introduction (1.0 Unit) 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 Unit) 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 Unit) 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 Unit) 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 017A Pickleball - Introduction (1.0 Unit) 1.0 UNIT

Acceptable for credit: University of California, California State University. This class is an Introductory pickleball class. Throughout this class we will focus on developing basic skills and implementing them into game situations. We will cover skills such as ball control, forehand/backhand drive, drive/lob serve, forehand/backhand volley, smash, and strategy. Pass/No Pass Option. CSUGE: E.

KIN 017B Volleyball - Beginning (1.0 Unit) 1.0 UNIT

Total Lab: 54 hours. Advisory: KIN 014A. Acceptable for credit: California State University, University of California. 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. Pass/No Pass Option. CSUGE: E.

KIN 019A Soccer - Introduction (1.0 Unit) 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 Unit) 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 Unit) 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 Unit) 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 Unit) 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 Unit) 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 Unit) 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 Unit) 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 Unit) 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 Unit) 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 023A Archery: Introduction (1.0 Unit) 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 Unit) 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 023C Archery: Intermediate (1.0 Unit) 1.0 UNIT

Total Lab: 54 hours. Acceptable for credit: University of California, California State University. This course is designed to improve the shooting technique, targeting systems, and knowledge of the intermediate Archery student. Archery requires repetition and feedback to refine and master these skills. Intermediate students will continue to develop their archery skills by shooting longer distances and using various targeting strategies. Pass/No Pass Option. CSUGE: E.

KIN 023D Archery: Advanced (1.0 Unit) 1.0 UNIT

Total Lab: 54 hours. Acceptable for credit: University of California, California State University This course is designed for the advanced archery student to further improve their skills by applying various shooting techniques and by increasing the distances when target shooting. Pass/No Pass Option. CSUGE: E.

KIN 024A Bowling - Introduction (1.0 Unit/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 Unit) 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 Unit) 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 Unit) 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 Unit) 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 032A	Aerobics-Introduction (1.0 Unit)	1.0 UNIT	KIN 037C	Cardio-Cross Training - Intermediate (1.0 Unit)	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.			This course is designed to enhance the student's cardiovascular condition by providing a variety of methods of training at an intermediate level.		
KIN 032B	Aerobics- Beginning (1.0 Unit)	1.0 UNIT	KIN 037D	Cardio-Cross Training - Advanced (1.0 Unit)	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.			This course is designed to enhance the student's cardiovascular condition by providing a variety of methods of training at an advanced level.		
KIN 032C	Aerobics - Intermediate (1.0 Unit)	1.0 UNIT	KIN 038A	Lower Body Conditioning Introduction (1.0 Unit)	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.			This course is designed to improve middle and lower extremity muscular strength, condition, and shape at the introductory level.		
KIN 032D	Core and Cardio Fitness - Advanced (1.0 Unit)	1.0 UNIT	KIN 038B	Lower Body Conditioning Beginning (1.0 Unit)	1.0 UNIT
Total Lab: 54 hours. Acceptable for credit: University of California, California State University. This advanced level course is designed for students to satisfy the needs for cardiovascular activity including maintaining and improving cardiovascular fitness through the use of continuous aerobic movements. Students will engage in a comprehensive fitness program which includes aerobic activity, core strengthening exercises that help develop agility, improve coordination, and increase core and overall body strength. Pass/No Pass Option. CSUGE: E.			This course is designed to improve middle and lower extremity muscular strength, condition, and shape for the beginning level of lower body conditioning.		
KIN 033A	Kickboxing Fitness- Introduction (1.0 Unit)	1.0 UNIT	KIN 038C	Lower Body Conditioning - Intermediate (1.0 Unit)	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.			This course is designed to improve middle and lower extremity muscular strength, condition, and shape at the intermediate level.		
KIN 033B	Kickboxing Fitness - Beginning (1.0 Unit)	1.0 UNIT	KIN 038D	Lower Body Conditioning Advanced (1.0 Unit)	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.			This course is designed to improve middle and lower extremity muscular strength, condition, and shape for the advanced level of lower body conditioning.		
KIN 033C	Kickboxing Fitness - Intermediate (1.0 Unit)	1.0 UNIT	KIN 038E	Lower Body Conditioning - Endurance Training (1.0 Unit)	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.			This course is designed for the introductory, intercollegiate level of lower body conditioning. Students improve middle and lower extremity training through muscular strength and endurance training and cardio conditioning.		
KIN 035A	Weight Training - Introduction (1.0 Unit)	1.0 UNIT	KIN 038F	Lower Body Conditioning - Speed Training (1.0 Unit)	1.0 UNIT
Total Lab: 54 hours. Acceptable for credit: University of California, California State University. This course advances students' kickboxing skills for aerobic fitness. Basic punches, kicks and stances are taught. Techniques are taken from karate, tai chi and boxing as ways to improve cardiovascular fitness. Pass/No Pass Option. CSUGE: E.			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 035B	Weight Training - Beginning (1.0 Unit)	1.0 UNIT	KIN 038G	Lower Body Conditioning - Agility Training (1.0 Unit)	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.			Advisory: KIN 038F This course is designed to improve core strength and lower extremity agility for lower body conditioning at the intermediate collegiate level.		
KIN 035C	Weight Training - Intermediate (1.0 Unit)	1.0 UNIT	KIN 038J	Lower Body Conditioning - Plyometric Training (1.0 Unit)	1.0 UNIT
This course is designed for students at the intermediate level. Topics include advance training techniques such as pyramids and super sets.			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 037A	Cardio-Cross Training - Introduction (1.0 Unit)	1.0 UNIT	KIN 039A	Fire Agility - Introduction (2.0 Lab)	2.0 UNITS
This course is designed to enhance the student's cardiovascular condition by providing a variety of methods of training at an introductory level.			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 037B	Cardio-Cross Training - Beginning (1.0 Unit)	1.0 UNIT	KIN 039B	Fire Agility - Beginning (2.0 Lab)	2.0 UNITS
This course is designed to enhance the student's cardiovascular condition by providing a variety of methods of training at the beginning level.			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.		

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KIN 039D	Fire Agility: Advanced (2.0 Lab)	2.0 UNITS	KIN 046C	Ballroom Dancing - Intermediate (1.0 Unit)	1.0 UNIT
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.			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 040A	Modern Dance - Introduction (1.0 Unit)	1.0 UNIT	KIN 046D	Ballroom Dancing - Advanced (1.0 Unit)	1.0 UNIT
This course is an introduction to the varied theories, styles, and techniques of the modern dance idiom.			This is an advanced level course covering various ballroom dances. Advanced techniques for styling and performance are emphasized.		
KIN 040B	Modern Dance - Beginning (1.0 Unit)	1.0 UNIT	KIN 047A	Hip Hop - Introduction (1.0 Unit)	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.			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 040C	Modern Dance - Intermediate (1.0 Unit)	1.0 UNIT	KIN 047B	Hip Hop - Beginning (1.0 Unit)	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.			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 040D	Modern Dance - Advanced (1.0 Unit)	1.0 UNIT	KIN 047C	Hip Hop - Intermediate (1.0 Unit)	1.0 UNIT
Total Lab: 54 hours Advisory: KIN 040C. Acceptable for credit: University of California, California State University. This course is the study and practice of the varied theories, styles, and techniques of the modern dance idiom at an advanced level. Pass/No Pass Option. CSUGE: E.			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 041A	Ballet - Introduction (1.0 Unit)	1.0 UNIT	KIN 047D	Hip Hop - Advanced (1.0 Unit)	1.0 UNIT
This course is designed to introduce the student to the discipline, aesthetics, traditions, and historical background of classical ballet.			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 041B	Ballet - Beginning (1.0 Unit)	1.0 UNIT	KIN 048A	Latin Dance/Salsa - Introduction (1.0 Unit)	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.			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 041C	Ballet - Intermediate (1.0 Unit)	1.0 UNIT	KIN 048B	Latin Dance/Salsa - Beginning (1.0 Unit)	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.			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 041D	Ballet - Advanced (1.0 Unit)	1.0 UNIT	KIN 050A	Tai Chi - Introduction (1.0 Unit)	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.			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 042A	Jazz Dance - Introduction (1.0 Unit)	1.0 UNIT	KIN 050B	Tai Chi - Beginning (1.0 Unit)	1.0 UNIT
This course is designed to introduce the student to the varied theories, styles and techniques of the jazz dance idiom.			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 042B	Jazz Dance - Beginning (1.0 Unit)	1.0 UNIT	KIN 050C	Tai Chi - Intermediate (1.0 Unit)	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.			Total Lab: 54 hours. Advisory: KIN 050B. Acceptable for credit: University of California, California State University. This course reviews the fundamentals and health enhancing aspects of Tai Chi at an intermediate level including Pushing Hands exercises and various Qi Gong exercises. Pass/No Pass Option. CSUGE: E.		
KIN 042C	Jazz Dance - Intermediate (1.0 Unit)	1.0 UNIT	KIN 050D	Tai Chi - Advanced (1.0 Unit)	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.			Total Lab: 54 hours. Advisory: KIN 050C. Acceptable for credit: University of California, California State University This course reviews the fundamentals and health enhancing aspects of Tai Chi at an advanced level. An advanced form of Pushing Hands practice and additional Qi Gong exercises are included. Pass/No Pass Option. CSUGE:E.		
KIN 046A	Ballroom Dancing - Introduction (1.0 Unit)	1.0 UNIT	KIN 051A	Aikido - Introduction (1.0 Unit)	1.0 UNIT
This course introduces students to various ballroom dances. Alignment and posture, etiquette, and spontaneous leading and following are emphasized.			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 046B	Ballroom Dancing - Beginning (1.0 Unit)	1.0 UNIT	KIN 051B	Aikido - Beginning (1.0 Unit)	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.			This course reviews the philosophy, principles, and physical techniques of Aikido. The course emphasizes harmony and natural movements to resolve		

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 Unit) 1.0 UNIT

This course reviews the philosophy, principles and physical techniques of Aikido.

KIN 053A Karate - Introduction (1.0 Unit) 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 Unit) 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, the traditional forms from the Taikyoko and Pinan series, and self-defense.

KIN 053C Karate - Intermediate (1.0 Unit) 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 Unit) 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 Unit) 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 Unit) 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 Unit) 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. Relaxation and meditation techniques are also incorporated into the practice of poses.

KIN 061C Hatha Yoga - Intermediate (1.0 Unit) 1.0 UNIT

This class provides instruction in the physical practice of yoga at an intermediate level. Strength, flexibility and balance are emphasized within the physical practice. Breath control and meditation techniques are also incorporated.

KIN 061D Hatha Yoga - Advanced (1.0 Unit) 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 Unit) 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 Unit) 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 Unit) 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 Unit) 1.0 UNIT

This course introduces the student to beginning walking and jogging. Students improve aerobic and muscular fitness.

KIN 066 Exercise Assessment And Program Design (1.0 Unit) 1.0 UNIT

Total Lecture: 54 hours. Acceptable for credit: California State University.

This course will cover assessment and testing protocols, physical fitness guidelines and the designing of anatomically and physiologically safe and effective exercise programs for sport and fitness participants. The human physiological responses and adaptations to the acute and/or chronic stress of exercise and physical training will also be addressed. Pass/No Pass Option.

KIN 067 Techniques of Fitness Instruction (3.0 Units) 3.0 UNITS

This course is designed to provide theoretical knowledge and practical skills in preparation for a national certification exam in fitness instruction. Topics will include guidelines for instructing safe, effective, and purposeful exercise using a variety of methods and equipment, essentials of the instructor-participant relationship, principles of motivation to encourage adherence in the group fitness setting, effective instructor-to-participant communication techniques, methods for enhancing group leadership, and the group fitness instructor's professional role. Students will be exposed to and practically apply the knowledge and skills associated with planning/designing, implementing, leading, and managing others, and the environmental elements using safe and effective exercises for a variety of fitness levels and special populations. Safety, liability, employment, client retention, and business management will also be discussed. CSUGE: E.

KIN 068 Sport Psychology (3.0 Units) 3.0 UNITS

This course will review the psychological factors associated with participation and performance in sport activities. Sport psychology research will be examined to understand how sport performance is affected by psychological principles. Topics will include historical and contemporary perspectives of sport psychology, research methods, team and group dynamics, and the relationship between sport performance and various personality, motivational, and social psychological variables. Gender and age issues, as well as the effects and management of stress and anxiety, unhealthy behaviors, and psychological burnout will be discussed. CSUGE: E.

KIN 069 Stress Management through Exercise (1.0 Unit/1.0 Unit) 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 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 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 076 Weight Training Principles and Routines (0.5 Lecture/1.0 Unit) 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 Units) 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 079 Lifetime Fitness (3.0 Units) 3.0 UNITS

Total Lecture: 54 hours Acceptable for credit: University of California, California State University. This course provides an overview and application

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of fitness, wellness and lifestyle management techniques, aiding one in making informed decisions about how to obtain optimal physical, mental, emotional and social well-being. Accurate and reliable information on topics such as fitness, body composition, weight management, nutrition, stress management, sleep, substance use and abuse, disease prevention, behavior change protocols, relationships and the societal impact of poor health will be covered. Using the six dimensions of health, a personal and societal approach to developing a lifetime of fitness will be explored through personal reflection, critical thinking, and practical application of behavior change strategies to improve overall health. Pass/No Pass Option. CSUGE: E.

KIN 080 Dance Appreciation (3.0 Units) 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 081 Sport in Society (3.0 Units) 3.0 UNITS

Sport in Society is a sociological analysis of sport in contemporary American Society. Sport roles and sport institutions are examined to help explain the impact of sport on basic social institutions including family, church, school, government, and economics. Different patterns of involvement in sport, the social forces that have created sports organizations, the societal impact of sports and the consequences of sports participation are also investigated. The course uncovers the ethical consequences of the modern pressures on athletes in schools and the commercialism of professional sport.

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 Units) 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 Units) 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 Units) 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 088 Intercollegiate Softball (3.0 Units) 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 Units) 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 Units) 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 092 Intercollegiate Tennis-Men (3.0 Units) 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 Unit) 1.0 UNIT

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 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 099 Athletic Training (1.0 Unit) 1.0 UNIT

This course is designed to develop a highly conditioned body for strength, flexibility, and endurance for the competing varsity athlete.

LINGUISTICS LINGUISTICS (LNG)

LNG 001 Introduction To Language And Linguistics (3.0 Units) 3.0 UNITS

Total Lecture: 54 hours. Acceptable for credit: University of California, California State University. This introductory course serves as a foundation for understanding language from an anthropological perspective, addressing such core questions as how, what, when, where, why and with whom we communicate. This course surveys three core areas in linguistic anthropology--structural linguistics: phonetics, phonology, morphology, and syntax, as well as the biocultural basis of language; historical linguistics: origins and evolution/change, dialects, and language families; and sociocultural linguistics: language acquisition in cultural context, emphasizing the relationship between language and culture, and issues of language conservation and loss. Pass/No Pass Option. CSUGE: C2; IGETC: 3B.

LEARNING SERVICES (LSR)

LSR 001A Writing For LSR Students In English 001A (3.0 Units) 3.0 UNITS

Total Lecture: 54 hours. Corequisite: ENG 001A or ENG 001AX. This course is for students with disabilities taking English 001A. The course provides disability-specific instruction and practice in writing coherent paragraphs and essays. It focuses on the writing process and college-level, essay development using multi-sensory techniques and disability-specific pedagogy. Pass/No Pass Option. Non-degree applicable course.

LSR 010 Learning Services Statistics Support (3.0 Units) 3.0 UNITS

Total Lecture: 54 hours. Corequisite: MAT 010 or MAT 010H or MAT 010X. This course is for students with disabilities or learning challenges who are taking MATH10. This course will provide disability specific strategies to aid in the successful completion of Statistics. This course is to be taken in conjunction with MAT 010. Pass/No Pass Option. Non-degree applicable course.

LSR 010 Learning Services Statistics Support (3.0 Units) 3.0 UNITS

Total Lecture: 54 hours. Corequisite: MAT 010 or MAT 010H or MAT 010X. This course is for students with disabilities or learning challenges who are taking MATH10. This course will provide disability specific strategies to aid in the successful completion of Statistics. This course is to be taken in conjunction with MAT 010. Pass/No Pass Option. Non-degree applicable course.

LSR 900 Strategies for Basic Skills Math (3.0 Units) 3.0 UNITS

This course is an introduction to basic skills math to assist in the completion of certificated programs.

LSR 940A Learning Strategies for Basic Writing Skills (3.0 Units) 3.0 UNITS

Total Lecture: 54 hours. This course is the first part of a two-part learning sequence for effective college writing. The course focuses on sentence development, effective paragraphs, and grammar using multi-sensory techniques. Grade Only. Non-degree applicable course.

LSR 940B Learning Strategies for Basic Writing Skills (3.0 Units) 3.0 UNITS

Total Lecture: 54 hours. Corequisite: ENG 001A or ENG 001AX. This course is the second part of a two-part learning sequence for effective college writing. The course focuses on college-level, essay development using multi-sensory techniques and other writing strategies. Grade Only. Non-degree applicable course.

LSR 941 Learning Strategies (3.0 Units) 3.0 UNITS

This is an introductory course stressing learning strategies for students with disabilities. Pass/No Pass Option.

LSR 942A Learning Services Math Strategies (3.0 Units) 3.0 UNITS

This course is an introduction to mathematics strategies for students who have had difficulty mastering the basic concepts of mathematics, such as fractions, variables, and simple equations. Pass/No Pass Option.

LSR 942B Learning Services Math Strategies (3.0 Units) 3.0 UNITS

This course is the second of a two-course sequence covering mathematics strategies for students with who have had difficulty mastering the basic concepts of decimals, ratios/proportions, and percents. Pass/No Pass Option.

LSR 942C Learning Services Math Strategies (3.0 Units) 3.0 UNITS

Total Lecture: 54 hours. This is the third class of a three-course learning sequence covering mathematical strategies for students with disabilities or students who have difficulty mastering pre-algebraic, algebraic and statistical concepts. Students are introduced to techniques that focus on developing compensatory strategies for visual processing, short-term memory, long-term memory, and auditory processing disabilities. Manipulative modules, supportive devices, computer software, websites, as well as drill and practice exercises are stressed in order to assist in the understanding and mastery of these basic concepts. Pass/No Pass Option. Non-degree applicable course.

LSR 943 Negotiating the College Web and Technology Environment (3.0 Units) 3.0 UNITS

An introductory course designed for students with perceptual, physical, communication, or learning challenges who wish to obtain 1.) basic information regarding negotiating the college course management system, 2.) keyboarding skills and 3.) the use of assistive technology specific to their challenges. Pass/No Pass Option.

LSR 950 Assistive Technology Lab (1.0 Unit) 1.0 UNIT

This course is designed to offer students with disabilities an opportunity to practice compensating strategy techniques in a laboratory setting.

LSR 952 Distance Learning Success (2.0 Units) 2.0 UNITS

This is an online, hybrid course designed to help students learn strategies and tools to help build success in a distance learning environment. The course will cover essential learning disability tools, tips, and tricks to help all learners be successful in an online environment. Pass/No Pass Option. Non-degree applicable course.

MATH (MAT)**MAT 000C Intermediate Algebra (5.0 Lecture) 5.0 UNITS**

Prerequisite MAT 903 or placement into the course by the Mission College Mathematics Placement Exam. ; or Prerequisite MAT 903M or placement into the course by the Mission College Mathematics Placement Exam. and Prerequisite MAT 903MX or placement into the course by the Mission College Mathematics Placement Exam. The student will study fundamental laws of exponents and radicals, quadratic equations, graphical representations, complex numbers, functions and inverses, logarithmic and exponential functions, conic sections, sequences and series, linear systems and inequalities, and applied problems.

MAT 000D Trigonometry (3.0 Units) 3.0 UNITS

Prerequisite Placement into Math D or higher by the Mission College Mathematics Placement Exam , or Prerequisite MAT 000C ; or Prerequisite MAT 000CM and Prerequisite MAT 00CMX Students study trigonometric functions including applications to triangles, circular functions, radian measure, graphs and polar coordinates, trigonometric identities, inverse trigonometric functions, vectors, and complex numbers.

MAT 000G Mathematics for the Liberal Arts Student (4.0 Units) 4.0 UNITS

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 Units) 4.0 UNITS

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 001X College Algebra With Additional Support (6.0 Units) 6.0 UNITS

Total Lecture: 108 hours. Prerequisite: Completion of the Mission College Placement Process prior to registration. Acceptable for credit: University of California, California State University. This is a college-level course in preparation for the Calculus sequence. Its contents include real and complex number systems, polynomials, algebraic fractions, exponents and radicals, linear and quadratic equations, simultaneous equations, inequalities, functions, theory of equations, exponential and logarithmic equations, sequence and series, induction, and the binomial theorem. Areas of support will include review algebraic and basic geometric topics that underlie College Algebra concepts and practice reading skills and other study skills that promote success in College Algebra. Pass/No Pass Option. CSUGE: B4; IGETC: 2A.

MAT 002 Precalculus and Trigonometry (6.0 Units) 6.0 UNITS

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) 5.0 UNITS

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 003AH Analytic Geometry and Calculus I - Honors (5.0 Lecture) 5.0 UNITS

This course is the honors version of the Calculus I course and is the first part of the three-semester calculus sequence. Topics include functions, limits, continuity, differentiation and integration, and applications for polynomial

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and transcendental functions. Students may not receive credit for both MATH 003A and MATH 003AH. This section requires enrollment in the Honors Transfer Project. More information and the online application can be found at <http://honors.missioncollege.edu>.

MAT 003B Analytic Geometry and Calculus II (5.0 Lecture) 5.0 UNITS

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 Units) 4.0 UNITS

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 Units) 4.0 UNITS

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 Units) 4.0 UNITS

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 (3.0 Units) 3.0 UNITS

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 010 Elementary Statistics (4.0 Units) 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 Units) 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 010X Elementary Statistics with Additional Support (6.0 Units) 6.0 UNITS

Total Lecture: 108 hours. Prerequisite: Completion of the Mission College Placement Process prior to registration. Acceptable for credit: University of California, California State University Students study and demonstrate knowledge and understanding of descriptive and inferential statistics including data analysis, correlation and linear regression, probability, probability distributions and assorted hypothesis testing. Particular emphasis is placed on applications. Current technology is used. Areas of support will include review of arithmetic and algebra topics that underlie statistical procedures and concepts, hands-on activities that promote a deeper understanding of statistical ideas, and study skills that promote success in statistics. Pass/No Pass Option. C-ID # MATH 110. CSUGE: B4; IGETC: 2A.

MAT 012 Calculus for Business (4.0 Units) 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 019 Discrete Mathematics (4.0 Units) 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.

MECHATRONIC TECHNOLOGY (MTT)

MTT 010 Introduction to Technology and Careers (2.0 Units) 2.0 UNITS

Total Lecture: 18 hours, Total Lab: 54 hours. This course exposes students to the field of mechatronics and control system disciplines. The course presents basic skills necessary to succeed as mechatronics student. The nature of control system in different process industries and the role of mechatronics technicians are explored. Communication skills for reports are developed. Guest speakers from local process firms and tours to local companies are included. Pass/No Pass Option.

MTT 012 Electronic Systems Measurement and Troubleshooting (2.0 Units) 2.0 UNITS

Total Lecture: 18 hours, Total Lab: 54 hours. Advisory: MTT 010. This course covers the measurement and characterization of electronic systems, data collection, and reporting results in industry-accepted formats. System and component performance are compared to published specifications and troubleshooting techniques are developed. Laboratory practice includes the proper use of standard test instruments. Pass/No Pass Option.

MTT 020 Programmable Logic Controller (PLC) (2.0 Units) 2.0 UNITS

Total Lecture: 18 hours, Total Lab: 54 hours. Advisory: MTT 010. This course covers Programmable Logic Controller (PLC) systems, function, interrelationship, and troubleshooting of systems components. PLC input/output systems and requirements are also discussed. Ladder logic programming is studied using basic I/O instructions, logic instructions, timers, counters, and comparison functions. Students will also develop an understanding of Piping/Process and Instrumentation Diagrams. Pass/No Pass Option.

MTT 022 Programmable Logic Controller (PLC) and Robotic System Components (2.0 Units) 2.0 UNITS

Advisory: MTT 020. This course explores the integration of sensors, indicators, controllers, and final control elements for Programmable Logic Controller (PLC) and robotic systems. Closed loop control theory, Process/Piping and Instrumentation Diagram, loop tuning, and control loop troubleshooting are also covered. Students will also learn process control system design and Proportional-Integral-Derivative (PID) tuning. Pass/No Pass Option.

MTT 030 Electrical Motors and Control Systems (2.0 Units) 2.0 UNITS

Total Lecture: 18 hours, Total Lab: 54 hours. Advisory: MTT 020 and MTT 022. This course covers electrical motors and controls for commercial and industrial applications. Motor types include: Direct Current (DC), stepper, single-phase and three-phase Alternating Current (AC) motors, including Variable-Frequency Drives (VFD). Students will also develop motor theory knowledge through hands-on applications. Pass/No Pass Option.

MTT 032 Microcontroller Systems (2.0 Units) 2.0 UNITS

Total Lecture: 18 hours, Total Lab: 54 hours. Advisory: MTT 010. This course explores single-chip microcontroller architecture. Students will apply their skills by programming microcontrollers and hone their troubleshooting skills on single-chip microcontroller electronic systems. Digital building blocks, number systems, and programming in high-level and assembly language is also covered. Students will also learn about interfacing the microcontroller for practical applications, measurement techniques, and instrumentation. Pass/No Pass Option.

MTT 034 Fluid Power Systems (2.0 Units) 2.0 UNITS

Total Lecture: 18 hours, Total Lab: 54 hours. Advisory: MTT 010. Introduces fluid power systems used in industry. The advantages and disadvantages of fluid power compared to other power transmission systems are examined. The potential dangers are explored and the safety procedures related to fluid power are reviewed and implemented. The application of principles of fluid power transmission and the formulas used in fluid power system analysis and design are experienced in the lab. The fundamental principles,

components, symbols and applications of hydraulic and pneumatic fluid power applications are introduced. Basic power and control circuits are developed using computer aided design. The characteristics and dangers of using air as a fluid power force are explored. Pneumatic system components are studied including: compressors, linear actuators, rotary actuators and pneumatic tubing. The relationship between electrical signals and pneumatic controls for process industry. Hands-on activities using various pneumatic components are assembled in the lab. Pass/No Pass Option.

MTT 040 Analog Circuits and Semiconductor Devices (2.0 Units) 2.0 UNITS

Advisory: MTT 012. This course covers analog circuits, including: amplifiers, oscillators, and filters, using single-chip analog devices, operational amplifiers, field-effect transistors, bipolar transistors. Pass/No Pass Option.

MTT 042 Digital Logic Systems (2.0 Units) 2.0 UNITS

Total Lecture: 18 hours, Total Lab: 54 hours. Advisory: MTT 032. This course explores the architecture, programming, application, and troubleshooting of complex programmable logic device (CPLD) electronic systems. CPLDs will be programmed in VHDL (VHSIC-HDL, Very High Speed Integrated Circuit Hardware Description Language). Fundamentals in number systems and Boolean Algebra are studied while combinational and sequential logic are used to design digital systems. The course also covers integrated logic families, digital circuit measurement techniques and instrumentation, and allows students to develop troubleshooting techniques. Pass/No Pass Option.

MTT 050 Digital Manufacturing (2.0 Units) 2.0 UNITS

Advisory: EGR 025. Introduction to manufacturing with two-dimensional and three-dimensional digital layout input. Creating designs using standard Two-Dimensional (2D) and Three-Dimensional (3D) design software, e.g. AutoCAD and SolidWorks, and 3D scanner. Optimization of project design for construction on 3D printers. Examination of materials available for 3D printing. Pass/No Pass Option.

MUSIC (MUS)

MUS 005 Fundamentals of Music Theory (3.0 Units) 3.0 UNITS

Advisory: Eligibility for ENG 001A and REA 054. Advisory MUS 090. 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 Units) 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 007 Commercial Music Theory II (3.0 Units) 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 Units) 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 009 Jazz Music History (3.0 Units) 3.0 UNITS

Total Lecture: 54 hours. Acceptable for credit: University of California, California State University. This course examines the historical origins and development of jazz, as well as the important elements which comprise the individual styles of Jazz. The class will focus on the important musicians and literature of each era. Attention will also be brought to the social, political, and cultural elements of Jazz history. Pass/No Pass Only.

MUS 010 Music Appreciation (3.0 Units) 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 016 Survey of Rock and Popular Music (3.0 Units) 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 Units) 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 (1.0 Unit) 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 (1.0 Unit) 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 031B Intermediate Piano II (1.0 Unit) 1.0 UNIT

Advisory: MUS 031A. Corequisite: MUS 090. Continuation of MUS 030A & 030B, in which students continue the development of keyboarding skills. Pass/No Pass Option.

MUS 031C Intermediate Piano III (1.0 Unit) 1.0 UNIT

Total Lecture: 9 hours, Total Lab: 27 hours. Advisory: MUS 031B. This course is a continuation of MUS 031B. It is designed for those who wish to improve their keyboard skills through a continued study of pianistic technique, interpretation, and style in the works of various composers from different musical periods, as well as the continued study of the history of the piano and piano music, including famous composers and performers of piano music. Students who are taking the course online will need access to a piano keyboard (acoustic or electronic) that is suitable for piano performance. A piano practice room is available for students during times when the campus is open. Pass/No Pass Option.

MUS 032A Beginning Voice I (1.0 Unit) 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 (1.0 Unit) 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 033B Intermediate Voice II (1.0 Unit) 1.0 UNIT

Total Lecture: 9 hours Total Lab: 27 hours. Prerequisite: MUS 033A. Acceptable for credit: University of California, California State University. This course is a continuation of MUS 033A. Students will further develop their singing voice, vocal presentation, and repertoire. Pass/No Pass Option.

MUS 036A Beginning Guitar I (1.0 Unit) 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 (1.0 Unit) 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.

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MUS 036C Intermediate Guitar I (1.0 Unit) 1.0 UNIT
Prerequisite MUS 036B Advisory MUS 090 An intermediate level course in guitar for students who have successfully completed MUS 036B.

MUS 036D Intermediate Guitar II (1.0 Unit) 1.0 UNIT
Prerequisite MUS 036C Advisory MUS 090 This is an advanced-intermediate course in guitar.

MUS 039A Advanced Piano Masterclass I (1.0 Unit) 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 (1.0 Unit) 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.

MUS 039C Advanced Piano Masterclass III (1.0 Unit) 1.0 UNIT
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.

MUS 039D Advanced Piano Masterclass IV (1.0 Unit) 1.0 UNIT
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.

MUS 041A Mission Chorus I (1.0 Unit) 1.0 UNIT
Advisory: MUS 090, Eligibility for ENG 001A and REA 054 Mission Chorus 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.

MUS 041B Mission Chorus II (1.0 Unit) 1.0 UNIT
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.

MUS 041C Mission Chorus III (1.0 Unit) 1.0 UNIT
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.

MUS 041D Mission Chorus IV (1.0 Unit) 1.0 UNIT
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.

MUS 048A Symphony Orchestra I (1.0 Unit) 1.0 UNIT
Performance of symphonic and repertoire of all styles and periods. Emphasis is on group participation and public performance. Attendance at all public performance required. Enrollment by audition. Pass/No Pass Option.

MUS 048B Symphony Orchestra II (1.0 Unit) 1.0 UNIT
Prerequisite: MUS 048A. Performance of symphonic and repertoire of all styles and periods. Emphasis is on group participation and public

performance. Attendance at all public performance required. Enrollment by audition. Pass/No Pass Option.

MUS 048C Symphony Orchestra III (1.0 Unit) 1.0 UNIT
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.

MUS 048D Symphony Orchestra IV (1.0 Unit) 1.0 UNIT
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.

MUS 050 Mission Steelband (1.0 Unit) 1.0 UNIT
Advisory: Concurrent enrollment in MUSIC 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.

MUS 080 MIDI and Music Production I (3.0 Units) 3.0 UNITS
Advisory: Eligibility for ENG 001A, READ054, 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.

MUS 081 Audio Production I (3.0 Units) 3.0 UNITS
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.

MUS 082 MIDI and Music Production II (3.0 Units) 3.0 UNITS
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

MUS 083 Audio Production II (3.0 Units) 3.0 UNITS
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

NONCREDIT BASIC SKILLS (NCB)

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 010 English for Citizenship (Noncredit) 0.0 UNITS
Total: 48 Hours. In this course, students develop the English speaking, listening, and literacy skills necessary to pass an oral and written U.S. citizenship exam. Topics include a general survey of U.S. history, government, and civics, including culture, institutions, and ideals. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.

<p>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.</p>	<p>NCE 932 High Beginning Grammar And Writing (Noncredit) 0.0 UNITS Total: 72 Hours. This is the second course in a noncredit certificate program in High Beginning ESL. Students develop basic writing and grammar skills of standard written English. Students also practice and write simple and compound sentences using correct word forms, word order, articles, prepositions, spelling, and punctuation within their written compositions. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.</p>
<p>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.</p>	<p>NCE 933 High Beginning Reading And Vocabulary (Noncredit) 0.0 UNITS Total: 72 Hours. This is the third course in a noncredit certificate program in High Beginning ESL. In this course, students develop reading and vocabulary skills necessary for comprehension of simplified articles and stories in English. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.</p>
<p>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.</p>	<p>NCE 934 Bridge To ESL College Success (Noncredit) 0.0 UNITS Total: 32 Hours This is the fourth course in the series of noncredit courses that make up the certificate in High Beginning ESL. Students develop their English language skills as they acquire successful strategies for the credit-level ESL program and other academic college classes. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.</p>
<p>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 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.</p>	<p>NCE 940EC NC ESL For Child Care: Ages And Stages (Noncredit) 0.0 UNITS Total: 64 Hours. Advisory: ESL 930E. This low-intermediate level course develops oral and written communication skills in English within the context of child care and parenting. Students develop listening, speaking, reading and writing skills for communicating with and about infants, toddlers, preschoolers, and school-age children. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.</p>
<p>NCE 920EC ESL for Child Care: Intro (Noncredit) 0.0 UNITS Total: 32 Hours. This beginning level course develops oral and written communication skills in English within the context of child care and parenting. Students develop listening, speaking, reading and writing skills for communicating about a child's day-to-day care, needs, and interests. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.</p>	<p>NCE 940FD NC ESL For Child Care: Ages And Stages (Noncredit) 0.0 UNITS Total: 72 Hours. Advisory: NCE 930FD. This noncredit low-intermediate level ESL course develops oral and written communication skills in English within the context of food service industry. Students study and practice vocabulary for communicating about ordering and serving food. Students learn about American customer service culture and explore opportunities in food-related fields. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.</p>
<p>NCE 920GW Beginning Grammar and Writing (Noncredit) 0.0 UNITS Total: 54 Hours. This course is for beginning-level ESL students with minimal knowledge of English grammar and writing conventions. The course is designed to provide an introduction to English grammar and opportunities to practice basic sentence-level writing skills. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.</p>	<p>NCE 940LS NC ESL For Child Care: Ages And Stages (Noncredit) 0.0 UNITS Total: 72 Hours. Advisory: NCE 930FD. This noncredit low-intermediate level ESL course develops oral and written communication skills in English within the context of food service industry. Students study and practice vocabulary for communicating about ordering and serving food. Students learn about American customer service culture and explore opportunities in food-related fields. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.</p>
<p>NCE 920PL Beginning Pronunciation and Listening (Noncredit) 0.0 UNITS Total: 54 Hours. Beginning level students develop and practice basic aspects of American English pronunciation in order to speak more clearly, confidently, and accurately. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.</p>	<p>NCE 940RW Low Intermediate Reading And Vocabulary (Noncredit) 0.0 UNITS Total: 54 Hours. Prerequisite: Completion of the Mission College ESL Placement process. This course continues the development of reading and vocabulary skills at the low intermediate level. It emphasizes vocabulary expansion and comprehension of short texts, including finding main ideas and details. Students gain knowledge of word forms, parts of speech, affixes, and the relationship of meaning and form. Students develop skills for using a monolingual dictionary. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.</p>
<p>NCE 924 Beginning EsL College Skills (Noncredit) 0.0 UNITS Total: 32 Hours. This course is designed for beginning level ESL students who wish to improve their academic preparation and study skills for greater success in ESL courses. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.</p>	<p>NCE 940RW Low Intermediate Reading and Writing (Noncredit) 0.0 UNITS Total Lecture: 108 hours. Prerequisite: Completion of the Mission College ESL Placement process. This course develops students' reading, writing, grammar and vocabulary skills at the low-intermediate level. Students develop strategies to comprehend level-appropriate texts and write fluent and accurate simple and compound sentences as well as paragraphs. Pass/No Pass Option, Non-degree applicable course.</p>
<p>NCE 930EC NC ESL For Child Care: Health And Safety (Noncredit) 0.0 UNITS Total: 64 Hours. This high-beginning level course develops oral and written communication skills in English within the context of child care and parenting. Students develop listening, speaking, reading and writing skills for communicating about a child's health and safety. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.</p>	<p>NCE 945GE Low Intermediate Reading and Editing (Noncredit) 0.0 UNITS Total Lecture: 36 hours. Prerequisite: Completion of the Mission College ESL Placement process. In this intensive intermediate level ESL course students review and apply level-appropriate grammatical structures to develop</p>
<p>NCE 930FD English for Food Preparation (Noncredit) 0.0 UNITS Total: 72 Hours. This high-beginning ESL course develops oral and written communication skills within the context of food preparation and kitchen safety. Students study and practice vocabulary for communicating about food preparation at work and at home. Students learn about American workplace culture and explore opportunities in food-related fields. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.</p>	
<p>NCE 931 High Beginning Listening And Speaking (Noncredit) 0.0 UNITS Total: 72 Hours. This is the first course in a noncredit certificate program in High Beginning ESL. Students develop listening skills necessary for comprehension of vocabulary, sentences, and short lectures on academic and day-to-day topics. Students also develop pronunciation and speaking skills necessary for clearly expressing themselves. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.</p>	

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sentence accuracy and fluency in standard written and spoken English. The course focuses on the understanding and practice of sentences in various tenses, varied placement of sentence elements, and error correction. Pass/No Pass Option, Non-degree applicable course.

NCE 950EC English For Child Development: Introduction (Noncredit) 0.0 UNITS

Total: 54 Hours. Prerequisite: Completion of the Mission College ESL Placement process. This intermediate course develops oral and written English language skills necessary to introduce young children, to objectively describe their actions, and to identify and reflect on individual children's needs and preferences. (Cross-Listed with ESL 950EC). Pass/No Pass, Satisfactory Progress. Non-degree applicable course.

NCE 950LS Intermediate Listening and Speaking (Noncredit) 0.0 UNITS

Total: 54 Hours. Prerequisite: Completion of the Mission College ESL Placement process. Intermediate level ESL students practice effective oral communication for a variety of social, academic, and professional situations. Students develop skills to express ideas effectively focusing on vocabulary, syntax and idioms. The course emphasis is on improving listening and speaking skills leading to oral fluency in one-on-one and small group situations. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.

NCE 950RW Intermediate Reading and Writing (Noncredit) 0.0 UNITS

Total: 108 Hours. Prerequisite: Completion of the Mission College ESL Placement process. This course develops writing fluency and reading, grammar and vocabulary skills at the intermediate level. Students develop strategies to comprehend level-appropriate texts using fiction and nonfiction reading materials and increase their ability to write accurate compound and complex sentences and effective paragraphs on familiar and academic topics. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.

NCE 955EC English For Chd: Factors In Child Development (Noncredit) 0.0 UNITS

Total: 54 Hours. Prerequisite: Completion of the Mission College ESL Placement process. This intermediate course develops oral and written English language skills to describe a child's development, appearance, and environment as well as to identify and reflect on factors that affect development. (Cross-Listed with ESL 955EC). Pass/No Pass, Satisfactory Progress. Non-degree applicable course.

NCE 960EC English For Chd: Domains Of Child Development, Part I (Noncredit) 0.0 UNITS

Total: 54 Hours. Prerequisite: Completion of the Mission College ESL Placement process. This high intermediate course develops oral and written English language skills necessary to identify, describe and support a child's socio-emotional and motor development. (Cross-Listed with ESL 960EC). Pass/No Pass, Satisfactory Progress. Non-degree applicable course.

NCE 960LS High Intermediate Listening and Speaking (Noncredit) 0.0 UNITS

Total: 54 Hours. Prerequisite: Completion of the Mission College ESL Placement process. This high intermediate course continues to develop ESL students' oral communication skills in a variety of academic, business, and social contexts. Students increase their knowledge of vocabulary, idiomatic expressions, and communication strategies as well as improve their listening comprehension and note-taking skills. The course emphasis is on the development of oral fluency and the appropriate use of complex language functions in small and large group communication and presentations. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.

NCE 960RW High Intermediate Readomg and Writing (Noncredit) 0.0 UNITS

Total: 108 Hours. Prerequisite: Completion of the Mission College ESL Placement process. This course develops fluency in reading, writing, grammar and vocabulary skills for English language learners at the highintermediate level. Students develop strategies to comprehend and analyze level-appropriate fiction and nonfiction texts and write developed, well-organized, and grammatically correct sentences and paragraphs on familiar and abstract topics. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.

NCE 965EC English for CHD: Domains of Child Development Part II (Noncredit) 0.0 UNITS

Total: 54 Hours. Prerequisite: Completion of the Mission College ESL Placement process. This high intermediate course develops oral and written English language skills to identify, describe, and support children's cognitive and language development. (Cross-Listed with ESL 965EC). Pass/No Pass, Satisfactory Progress. Non-degree applicable course.

NCE 965GE Advanced Grammar And Editing (Noncredit) 0.0 UNITS

Total: 36 Hours. Prerequisite: Completion of the Mission College ESL Placement process. In this intensive advanced level ESL course students review and refine level-appropriate grammatical structures to develop sentence variety, and strengthen accuracy and fluency in academic English. The course focuses on the study and usage of complex sentences in various tenses, varied placement of sentence elements, and error correction. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.

NCE 970LS Advanced Listening and Speaking (Noncredit) 0.0 UNITS

Total: 54 Hours. Prerequisite: Completion of the Mission College ESL Placement process. This advanced course focuses on developing oral proficiency needed to participate in academic discourse and cross-cultural communication by means of interviews, large group discussions, debates, and presentations. Students receive guidance and extensive practice in listening to academic lectures and multimedia recordings. Students increase their knowledge of various communication styles as well as effective note-taking strategies including recognizing organizational patterns and outlining main ideas. Pass/No Pass, Satisfactory Progress. Nondegree applicable course.

NCE 970RW Advanced Reading and Writing (Noncredit) 0.0 UNITS

Prerequisite: Completion of the Mission College ESL Placement process. This course develops reading, writing, vocabulary, grammar and editing skills for advanced English language learners. Students develop strategies to comprehend, analyze, and evaluate level-appropriate texts, and they read and write paragraphs and essays in a variety of rhetorical styles. Students gain skills for writing thesis statements and paragraphs with appropriate topic sentences, supporting ideas, and details. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.

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.

NCO 3901 Forum on World Affairs I (Noncredit) 0.0 UNITS

Total: 9 hours. This course expands the student's knowledge of current economic, social, and cultural issues at an introductory level. Students also improve communication skills as they share knowledge of world, national, and local issues and become better informed community members. Satisfactory Progress, Pass/No Pass. Non-degree applicable course.

NCO 3902 Forum on World Affairs II (Noncredit) 0.0 UNITS

Total: 18 hours. This course provides an in-depth coverage of current affairs that includes analysis of economic, social, historic, and cultural factors that contribute to current world affairs. Through class discussions and individual student projects students improve skills in communication and critical analysis. Satisfactory Progress, Pass/No Pass. Non-degree applicable course.

NCO 3903 Forum on World Affairs III (Noncredit) 0.0 UNITS

Total: 36 hours. This course provides an in-depth coverage of current affairs that includes analysis of economic, social, historic, and cultural factors that contribute to current world affairs. Through class discussions and individual student projects students improve skills in communication and

critical analysis. Satisfactory Progress, Pass/No Pass. Non-degree applicable course.

NCO 3904 Move to be Fit (Noncredit) 0.0 UNITS

Total: 18 hours. Through lecture, demonstration, and practice, older adults learn techniques for stress reduction, strategies for safely implementing a physical activity program, and develop an understanding of key healthy aging concepts to maintain and improve overall health and well-being. Satisfactory Progress, Pass/No Pass. Non-degree applicable course.

NCO 3905 Fitness for Older Adults (Noncredit) 0.0 UNITS

Total: 24 hours. This course is designed to help the older adult improve balance and agility. Students are given activities that contribute to their understanding of the benefits of physical activity and movement through the aging process. Satisfactory Progress, Pass/No Pass. Non-degree applicable course.

NCO 3906 Music Appreciation Through Movement (Noncredit) 0.0 UNITS

Total: 36 hours. This course is designed for the non-credit older adult who has had no formal training in music. Students develop an appreciation and enjoyment of music through active listening, guided practice, and movement. Satisfactory Progress, Pass/No Pass. Non-degree applicable course.

NCO 3907 Craft and Create (Noncredit) 0.0 UNITS

Total: 9 hours. This course is for the older adult who is interested in learning a variety of different craft techniques through the execution of simple art projects. Satisfactory Progress, Pass/No Pass. Non-degree applicable course.

NCO 3908 Explorations in Painting and Drawing (Noncredit) 0.0 UNITS

Total: 24 hours. This course is for the older adult student who is interested in developing skills in drawing and painting. Satisfactory Progress, Pass/No Pass. Non-degree applicable course.

NCO 3909 The Joy of Art (Noncredit) 0.0 UNITS

Total: 36 hours. This course is for the older adult who is interested in working in applying various techniques to the creation of independent art projects. Satisfactory Progress, Pass/No Pass. Non-degree applicable course.

NUTRITIONAL SCIENCE (NTR)

NTR 006 Personal Health and Wellness (3.0 Units) 3.0 UNITS

Total Lecture: 54 hours. Acceptable for credit: University of California, California State University This course focuses on the exploration of major health issues and behaviors in the various dimensions of health. Emphasis is placed on individual responsibility for personal health and the promotion of informed, positive health behaviors. Topics include nutrition, exercise, weight control, mental health, stress management, violence, substance abuse, reproductive health, disease prevention, aging, healthcare, and environmental hazards and safety. Pass/No Pass Option. C-ID # PHS 100. CSUGE: E.

NTR 015 Human Nutrition (3.0 Units) 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 015H Human Nutrition Honors (3.0 Units) 3.0 UNITS

Total Lecture: 54 hours. Advisory: ENG 001A or ENG 001AX. Acceptable for credit: University of California, California State University. This honors course introduces scientific principles as they apply to human nutrition. It explores the functions of essential nutrients, the chemical composition of foods, as well as psychological and social issues related to food intake. Students will explore current topics in nutrition and evaluate nutrient intake as it relates to maintaining health and preventing disease throughout the lifecycle. Students may not receive credit for both NTR 015 and NTR 015H. Enrollment in the Honors Program is required.

NTR 040 Nutrition and Disease (3.0 Units) 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 ENG 001A and REA 054

NTR 040H Nutrition and Disease - Honors (3.0 Units) 3.0 UNITS

Total Lecture: 54 hours. Acceptable for credit: California State University, University of California. This honors nutrition course is intended for students interested in entering the health fields with an emphasis on physiology, metabolism of nutrients, metabolic diseases, and dietary modification to optimize recovery and health. Students will understand and evaluate dietary intake, nutritional assessment, and nutrition care commonly used at clinics and hospitals. Students may not receive credit for both NTR 040 and NTR 040H. Enrollment in the Honors Program is required. Pass/No Pass Option.

PHILOSOPHY (PHI)

PHI 001 Introduction to Philosophy (3.0 Units) 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 Units) 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. One of the goals of learning these techniques is to extend one's thinking and learning beyond simple memorization and repetition; that is, one begins to understand what it means to think critically about a subject matter. Another aim is to improve one's ability to read critically and to recognize and avoid logical errors. This class demonstrates that there are right and wrong ways to reason, and that good reasoning is a skill that can be developed and improved. Pass/No Pass Option.

PHI 003 Introduction to Ethics (3.0 Units) 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 Units) 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 (5.0 Units) 5.0 UNITS

Prerequisite MAT 000D Prerequisite MAT 002 or higher This is a first lecture/lab course in physics for non-majors. Topics covered include Newton's laws of force, the concepts of potential and kinetic energy, momentum, thermodynamics, hydrodynamics, and wave motion.

PHY 002B General Physics - Electricity, Magnetism And Optics (5.0 Units) 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 (5.0 Units) 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 Units/1.0 Unit) 4.0 UNITS

Prerequisite PHY 004A Prerequisite MAT 003B This lecture/laboratory course, 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 Units/1.0 Unit) 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.

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PHY 004D Engineering Physics-Atomic (2.0 Units) 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 Units/1.0 Unit) 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.

POLITICAL SCIENCE (POL)

POL 001 American Government (3.0 Units) 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 Units) 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 Units) 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 004 International Relations (3.0 Units) 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 006 Politics of Race, Class and Gender (3.0 Units) 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 Units) 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 Units) 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.

PSYCHOLOGY (PSY)

PSY 001 General Psychology (3.0 Units) 3.0 UNITS

Advisory: Eligibility for ENG 908 and REA 054. This course introduces major concepts, problems and methods that psychologists use to investigate and understand the human mind. Pass/No Pass Option.

PSY 001H General Psychology - Honors (3.0 Units) 3.0 UNITS

Advisory: Eligibility for ENG 908 and REA 054. This honors course introduces major concepts, problems and methods that psychologists use to investigate and understand the human mind. Students cannot get credit for both PSY 001 and PSY 001H. This section requires enrollment in the Honors Transfer Project. More information and the online application can be found at <http://honors.missioncollege.edu>.

PSY 007 Biological Psychology (3.0 Units) 3.0 UNITS

Prerequisite: PSY 001 This course is an introduction to the physiological substrates of behavior.

PSY 010 Social Psychology (3.0 Units) 3.0 UNITS

This course studies psychological and sociological influences on an individual while functioning in social contexts. Pass/No Pass Option.

PSY 012 Human Growth and Development (3.0 Units) 3.0 UNITS

Advisory: PSY 001, Eligibility for ENG 908 and REA 054. The comprehensive coverage of the growth and development of humans from conception to death is examined. Pass/No Pass Option.

PSY 015 Introduction to Research Methods (3.0 Units) 3.0 UNITS

Prerequisite MAT 010 Prerequisite PSY 001 This course surveys various psychological research methods and designs.

PSY 015H Introduction to Research Methods - Honors (3.0 Units) 3.0 UNITS

Advisory: Eligibility for ENG 001A and REA 054, MAT 010. Prerequisite: PSY 001 This course reviews psychological quantitative research methods and the software statistical application SPSS. This section requires enrollment in the Honors Transfer Project. More information and the online application can be found at <http://honors.missioncollege.edu>.

PSY 025 Introduction to Abnormal Psychology (3.0 Units) 3.0 UNITS

Prerequisite PSY 001 or Prerequisite PSY 001H The classification and treatment of human maladaptive and maladjusted behavior are studied.

PSY 030 Psychology of Addiction and Substance Abuse (3.0 Units) 3.0 UNITS

Advisory: Eligibility for ENG 001A and REA 053. The study of the physiological and psychological processes of addiction and substance abuse. Pass/No Pass Option.

PSY 045 Introduction to Human Sexuality (3.0 Units) 3.0 UNITS

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.

READING (REA)

REA 054 Critical College Reading and Thinking (3.0 Units) 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.

SOCIAL JUSTICE (SJS)

SJS 001 Social Justice (3.0 Units) 3.0 UNITS

Total Lecture: 54 hours. Acceptable for credit: California State University, University of California. Interdisciplinary study of social justice. The course will cover philosophical and historical foundations of the social justice concept and movement and examine the socio-economic, cultural and political conditions of key social groups. The lens will be centered on but not limited to the experiences of the United States. Pass/No Pass Option. C-ID # SJS 110

SJS 002 Intro to Gender Studies (3.0 Units) 3.0 UNITS

Total Lecture: 54 hours. Acceptable for credit: California State University, University of California. In this course, students will learn how sex and gender

are shaped by biological and environmental factors, and what research shows about sex differences. Further, students will examine gender from feminist perspectives. This course will examine how gender is constructed in various institutions such as the family, mass media, education, and the economy. In this course students will be given a basic understanding of the gender and feminism and will be introduced to relevant theories of gender, the intersectionality of gender, race and class, as well as how gender shapes an individual's experience of the world in realms such as communication, sexuality, relationships, work, health and violence. Pass/No Pass Option. C-ID # SJS 120.

SJS 003 Introduction to Lgbtq Studies (3.0 Units) 3.0 UNITS

Acceptable for credit: California State University, University of California. This introductory course introduces students to a broad range of historical and contemporary gay, lesbian, bisexual, transgender, and queer issues addressed through sociological, political, racial, and sexual context. Pass/No Pass Option. C-ID # SJS 130.

SOCIOLOGY (SOC)

SOC 001 Introduction to Sociology (3.0 Units) 3.0 UNITS

The study of interplay of the individual and society. Pass/No Pass Option.

SOC 001H Introduction to Sociology - Honors (3.0 Units) 3.0 UNITS

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 <http://honors.missioncollege.edu>.

SOC 002 Social Problems (3.0 Units) 3.0 UNITS

A sociological analysis of contemporary social problems. Pass/No Pass Option.

SOC 002H Social Problems - Honors (3.0 Units) 3.0 UNITS

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 <http://honors.missioncollege.edu>.

SOC 016 Introduction to Statistics in Social And Behavioral Sciences (3.0 Units) 3.0 UNITS

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 sciences. This course is not equivalent to MAT 010. Pass/No Pass Option.

SOC 021 Introduction to Race and Ethnicity (3.0 Units) 3.0 UNITS

This course introduces the student to the sociological analysis of race, ethnicity, and racism.

SOC 040 Introduction to Marriage and Family (3.0 Units) 3.0 UNITS

Advisory: SOC 001, Eligibility for ENG 908 and REA 054. An analysis of love and marriage in the 2000'S. Pass/No Pass Option.

SOC 045 Introduction to Human Sexuality (3.0 Units) 3.0 UNITS

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.

SOC 047 Sociology of Criminology (3.0 Units) 3.0 UNITS

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.

SOC 050 Introduction to Criminal Justice (3.0 Units) 3.0 UNITS

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.

SOC 054 Concepts of Criminal Law (3.0 Units) 3.0 UNITS

Prerequisite: SOC 050. This course offers an analysis of criminal liability in the United States.

SOC 058 Introduction to Corrections (3.0 Units) 3.0 UNITS

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.

SOC 060 Community and Justice System (3.0 Units) 3.0 UNITS

Advisory: Eligibility for ENGL 001A and READ 053. This course examines the complex relationship between communities and the justice system. Pass/No Pass Option.

SPANISH (SPA)

SPA 001 First Semester Spanish (Elementary Spanish) (5.0 Lecture) 5.0 UNITS

Basic skills and structures in a cultural context.

SPA 001L Spanish Laboratory (0.5 Lab) 0.5 UNITS

SPA 001L is a requirement for students enrolled in SPA 001, and is designed to further enhance class material.

SPA 002 Second Semester Spanish (Elementary Level) (5.0 Lecture) 5.0 UNITS

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.

SPA 002L Second Semester Spanish Laboratory (0.5 Lab) 0.5 UNITS

SPA 002L is a requirement for students enrolled in SPA 002, and is designed to further enhance class material.

SPA 003 Third Semester Spanish (5.0 Lecture) 5.0 UNITS

Prerequisite SPA 002 or equivalent This course is a continuation of SPA 002 emphasizing intensive oral and written drills.

SPA 004 Fourth Semester Spanish (5.0 Lecture) 5.0 UNITS

Prerequisite SPA 003 or its equivalent SPA 004 is a continuation of SPA 003 emphasizing composition and oral skills in the cultural context.

SPA 050A Basic Conversational Spanish and Culture (3.0 Units) 3.0 UNITS

This course focuses on conversation and vocabulary building in a cultural context.

SPA 050B Basic Conversational Spanish and Culture (3.0 Units) 3.0 UNITS

Emphasis on conversation & vocabulary building in a cultural context.

(TRN)

TRN 010 Introduction to Transit Industry Careers (1.0 Unit) 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 Unit/1.0 Unit) 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

COURSES

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 Unit) 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 Unit) 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 Unit) 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 Unit) 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 Unit) 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 Unit) 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 (1.0 Unit) 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 Units) 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 (1.0 Unit) 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 Unit) 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 Unit) 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 (2.0 Units) 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 (2.0 Units) 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 (2.0 Units) 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 (2.5 Units) 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 Units/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 Units) 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.

TRN 143 DC Theory and Power Components (2.0 Units) 2.0 UNITS

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 Units) 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 Units) 2.5 UNITS

Total Lecture: 36 hours, Total Lab: 27 hours. This course covers high voltage, NFPA 70E, red tag power outage procedures, print reading and documentation, and hand and power tools. 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. Pass/No Pass Option.

TRN 152 Overhead Line Worker Apprenticeship Fundamentals II (2.5 Units) 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 (2.5 Units) 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 (5.0 Units) 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 (2.0 Units) 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 Units) 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 programs at Santa Clara Valley Transportation Authority.

TRN 202 Service Mechanic: Tools & Fasteners (2.5 Units) 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 programs at Santa Clara Valley Transportation Authority.

TRN 203A Service Mechanic: Electrical/Electronics 1 (2.5 Units) 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 programs at Santa Clara Valley Transportation Authority.

TRN 203B Service Mechanic: Electrical/Electronics 2 (2.5 Units) 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 Units) 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 Units) 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 Units) 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 Units) 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 Units) 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 Units) 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 Units) 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 301 The Art of Training for Transit I (2.0 Units) 2.0 UNITS

Total Lecture: 18 hours, Total Lab: 54 hours. This course is part of the Art of Training for Transit series designed for transit trainers to achieve personal mastery in the three keys of teaching artistry: Preparation, Teaching, and Reflection. Students will learn the characteristics of a professional trainer and the fundamentals of instructional design. Students will build their skills through practical labs and written journals throughout the course. This course, as part of the Art of Training for Transit series, is appropriate for both new trainers and experienced trainers, especially those who teach in transit apprenticeships or other formal training programs. Pass/No Pass Option.

TRN 302 The Art of Training for Transit II (2.0 Units) 2.0 UNITS

Total Lecture: 18 hours, Total Lab: 54 hours. Prerequisite: TRN 301. This is an intermediate level course of a three-course series designed for transit trainers to advance their mastery in the three keys of teaching artistry: Preparation, Teaching, and Reflection. Students will advance their skills in self-assessment/ reflection and build a personal system of continuous learning. Students will learn multiple teaching modalities and use of instructional software through practical labs and written journals throughout the course. Students will also explore student assessment and classroom management techniques geared to intermediate/advanced topics classes. This course, as part of the Art of Training for Transit series, is appropriate for trainers with at least one year of teaching experience, especially those who teach in transit apprenticeships or other formal training programs. Pass/No Pass Option.

TRN 303 The Art of Training for Transit III (2.0 Units) 2.0 UNITS

Total Lecture: 18 hours, Total Lab: 54 hours. Prerequisite: TRN 301 and TRN 302. This is an advanced level course of a three-course series designed for transit trainers to advance their mastery in the three keys of teaching artistry: Preparation, Teaching, and Reflection. Students will evaluate and help refine teaching styles, approaches, and assessment tools of other instructors in their training department/section, using the course content from TRN 301 and TRN 302. Students will learn effective mentoring and coaching skills for a training department/section. This course is appropriate for trainers with at least two years of teaching experience, especially for those who play a lead role or teach in transit apprenticeships or other formal training programs. Pass/No Pass Option.

TRN 401 Coach Operator: New Operator Training I (2.0 Units) 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

COURSES

to the Coach Operator apprenticeship programs at Santa Clara Valley Transportation Authority.

TRN 402 Coach Operator: New Operator Training II (2.5 Units/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 Unit) 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 Coach Operator apprenticeship programs at Santa Clara Valley Transportation Authority.

TRN 404 Coach Operator: New Operator Training IV (1.0 Unit) 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 Unit) 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 Units/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 (1.0 Unit) 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.

TRN 501 Light Rail Operator Safety Certification (2.0 Unit) 2.0 UNITS

Total Lecture: 36 hours. This course is part of VTA's Light Rail Safety Certification program, which is required for employees that will perform work in a rail environment. The Light Rail Safety Certification program introduces employees to rail nomenclature and builds a safety foundation that meets the requirements identified by VTA and the California Public Utilities Commission (General Orders 175-A, 172 and 143-B). This course is approved for credit by exam. Pass/No Pass Option.

TRN 502 Light Rail Operator Safety Yard Certification (2.0 Unit) 2.0 UNITS

Total Lecture: 36 hours. This course is part of VTA's Light Rail Yard Operation Certification program, which is required for employees that will operate light rail vehicles within the Guadalupe Yard limits. The Light Rail Yard Operation Certification program introduces employees to VTA's Kinkisharyo light rail vehicle. Employees will learn about the operations of the vehicle, various components and operating rules. This training meets the requirements identified by VTA and the California Public Utilities Commission (General Order 143-B). This course is approved for credit by exam. Pass/No Pass Option.

TRN 503A Light Rail Infrastructure: Mainline Operation Certification (2.5 Units) 2.5 UNITS

Total Lecture: 36 hours, Total Lab: 27 hours. Prerequisite: TRN 501 and TRN 502. This course is part of the VTA Light Rail Mainline Operation Certification program, which is required for employees that will operate light rail vehicles beyond the Guadalupe Yard. The Light Rail Mainline Operation Certification program focuses on the infrastructure found on VTA's mainline and familiarizes employees with requirements to safely navigate through them. This training meets the requirements identified by VTA and the California Public Utilities Commission (General Order 143-B). Pass/No Pass Option.

TRN 503B Light Rail Infrastructure: Blue Line Familiarization (2.5 Units) 2.5 UNITS

Total Lecture: 36 hours, Total Lab: 27 hours. Prerequisite: TRN 501 and TRN 502 and TRN 503A. The Light Rail Infrastructure Blue Line Familiarization course is required for VTA employees that will operate light rail vehicles beyond in revenue service between the Santa Teresa Terminal and Baypointe Terminal. The Blue Line Familiarization focuses on the specific infrastructure found on the blue-line; employees will learn the requirements to safely navigate a Light Rail Vehicle(LRV) through this route. This training meets the requirements identified by VTA. Pass/No Pass Option.

TRN 503C Light Rail Infrastructure: Orange Line Familiarization (2.5 Units) 2.5 UNITS

Total Lecture: 36 hours, Total Lab: 27 hours. Prerequisite: TRN 501 and TRN 502 and TRN 503A and TRN 503B. The Light Rail Infrastructure: Orange Line Familiarization course is required for employees that will operate light rail vehicles beyond in revenue service between the Alum Rock Terminal and Mountain View Terminal. The Orange Line Familiarization focuses on the specific infrastructure found on the orange line, employees will learn the requirements to safely navigate a LRV through this route. This training meets the requirements identified by VTA. Pass/No Pass Option.

TRN 503D Light Rail Infrastructure: Green Line Familiarization (2.5 Units) 2.5 UNITS

Total Lecture: 36 hours, Total Lab: 27 hours. Prerequisite: TRN 501 and TRN 502 and TRN 503A and TRN 503B and TRN 503C. The Light Rail Infrastructure Green Line Familiarization course is required for VTA employees that will operate light rail vehicles in revenue service between the Winchester Terminal and Old Ironsides Terminal. The Green Line Familiarization focuses on the specific infrastructure found on the green line; employees will learn the requirements to safely navigate a LRV through this route. This training meets the requirements identified by VTA. Pass/No Pass Option.

TRN 504 Light Rail Train Operations (2.0 Units) 2.5 UNITS

Total Lecture: 9 hours, Total Lab: 81 hours. Prerequisite: TRN 501 and TRN 502 and TRN 503A and TRN 503B and TRN 503C and TRN 503D. Acceptable for credit: California State University. Light Rail Train Operations is a capstone course that builds on the TRN 501-503 series. It focuses on the student's ability to apply the rules, regulations, standard operating procedures, and their LRV/light rail system knowledge through intensive operations training with instructors in the field. This training meets the requirements identified by VTA. Pass/No Pass Option.

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 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 049A Vietnamese for the Vietnamese-Speaking (3.0 Units) 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 Units) 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.

WORK EXPERIENCE (WRK)**WRK 300FP Occupational Work Experience for Fire Prevention Internship (3.0 - 4.5 Units) 3.0 UNITS**

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.

WRK 300TN Occupational Work Experience for the Transportation Industry (1.0 - 8.0 Units) 1.0 UNIT

60-480 hours of unpaid work experience, or 72-576 hours of paid work experience, per semester. According to Title 5 education code, section 55252, Occupational Work Experience Education is supervised employment extending classroom - based occupational learning at an on-the-job learning station related to the student's educational or occupational goal. This course is designed for students working in the mass transit industry. 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, or 75 hours of paid work. Students can earn a maximum number of 8 units per term. 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 related to the mass transit industry. Pass/No Pass Option.