

Courses

ACCOUNTING

ACTG-04A: Financial Accounting

Designations: (C-ID ACCT 110)

Unit(s): 4

Lecture Hours: 4

Lab Hours: 0

Advisories: ACTG 51; ENGL 85A or ENGL 85AC or ENGL 85E.

This course provides the student with the knowledge of corporate financial statement reporting and the ability to analyze the reports of a corporation. Basic topics include analysis of transactions and preparation of financial statements related to developing an understanding of the financial condition of a corporation. This accounting course is recommended for students who have knowledge of or equivalent experience in the basics of bookkeeping. (2/11)

ACTG-04B: Managerial Accounting

Designations: (C-ID ACCT 120)

Unit(s): 4

Lecture Hours: 4

Lab Hours: 0

One-way Corequisite: ACTG 04A or ACTG 51.

Advisories: MATH 81.

This course provides students with instruction in managerial accounting. Topics include job-order and process costing, cost-volume-profit relationships, the contribution approach to costing, budgeting, standard costing, capital budgeting and investment decisions, and relevant costs for decision making. (10/13)

ACTG-31: Computerized Accounting

Unit(s): 2

Lecture Hours: 1

Lab Hours: 3

Prerequisites: ACTG 04A or ACTG 51.

Advisories: AOM 30; ENGL 85A or ENGL 85AC or ENGL 85E.

This course provides instruction in computer-assisted accounting. Topics include general ledger setup, accounts receivable setup, accounts payable setup, transactions and reports, financial statement analysis, depreciation, and payroll. (2/11)

ACTG-51: Applied Accounting

Unit(s): 4

Lecture Hours: 4

Lab Hours: 0

Advisories: MATH 80.

This course is an entry-level Accounting course emphasizing a preparer approach using manual accounting methods and comparing them to current computerized accounting. Basic course work during the first half of the semester relates to the sole proprietorship type organization. During the second half of the course the emphasis changes to cover the basics of partnership and corporate accounting. Students will become acquainted with both the theory and terminology associated with the accounting cycle. Other topics in accounting will also be covered including Payroll, Cash, Inventory, Bad Debts and Depreciation. (12/18)

ACTG-52: Payroll Records and Accounting

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

One-way Corequisite: ACTG 04A or ACTG 51.

Advisories: ENGL 85AC; MATH 80; MATH 95S

This course covers payroll tax laws, computation of payroll taxes, completion of payroll tax forms, and the recording of payroll transactions in the journal. Emphasis is placed on computing gross wages, calculating withholding amounts (such as Social Security, Medicare, income taxes (federal & state), and unemployment taxes); determining net pay; preparing

appropriate tax forms with reporting requirements; and journalizing/ posting payroll transactions. Upon completion, students should be able to analyze data, make appropriate calculations, complete payroll tax forms, and prepare accounting entries. (2/19)

ACTG-53: Fundamentals of Income Tax Accounting

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ACTG 51 or ACTG 04A; ENGL 85A or ENGL 85AC or ENGL 85E.

This course provides the student with the knowledge of tax laws, accounting procedures, and preparation of required returns for federal income taxes. An introduction to partnership and corporate taxation, as well as a brief overview of tax administration, will supplement the course material. (2/11)

AGRICULTURE BUSINESS

AGBS-10: Introduction to Agriculture Business

Designations: (C-ID AG 104)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: MATH 80.

This course is a survey of the broad scope of agriculture business. It serves as an introduction to economic, accounting, management, sales, leadership, and marketing aspects of agriculture and their impact on producers and consumers. The management principles encountered in the day-to-day operation of an agricultural enterprise are stressed as they relate to the decision-making process. (3/19)

AGBS-11: Agricultural Economics

Designations: (CSU breadth area D) (IGETC area 4)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL-85; MATH 81.

This course includes the analysis of the microeconomic principles of supply and demand and the affects on producers and consumers. This class will explore the contemporary and historical place of agriculture and farmers in our economic, social, and political systems and their relationship to the consuming public. (10/13)

AGBS-12: Agricultural Accounting

Designations: (C-ID AG 128)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 85; MATH 81.

This course will focus on the principles of agricultural accounting systems, types of records, their use, and how to compute and use measures of earnings and costs of production to improve agribusiness efficiency. (11/13)

AGBS-13: Agricultural Marketing

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 85; MATH 80.

This course includes a survey of the marketing aspects of the agriculture industry and an overview of the structure and institutional aspects of the marketing system. Emphasis will be on the marketing functions and how consumer trends affect agribusiness. (1/14)

AGBS-14: Farm Management

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 85; MATH 81.

This course will focus on the organization and operation of a farm or ranch businesses, identification of factors affecting profitability, evaluation of the business for increased efficiency and profit, and the application of budgeting to the laboratory school farm. (1/14)

AGBS-17: Agricultural Sales and Communication

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 85; MATH 80.

This course involves the study of principles and practices of the selling process: selling strategies and approaches, why and how people buy, prospecting, territory management, and customer service. Additional topics for exploration include self-management, communication, interpersonal skills necessary to developing managerial abilities, leadership qualities, and facilitation of teamwork within the agribusiness sector. (1/14)

AGBS-18: Agricultural Computer Applications

Designations: (C-ID AG 108)

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ENGL-85; MATH 81.

This course explores computer use in the workplace with emphasis on agribusiness situations. Computer applications including word-processing, spreadsheets, databases, and presentation managers will be covered. Also included will be accessing information through the Internet and World Wide Web, telecommunications, an introduction to web page design, and other software appropriate to agribusiness. (11/13)

AGBS-30A: Elements of Agricultural Leadership

Unit(s): 2

Lecture Hours: 2

Lab Hours: 0

Advisories: ENGL 84A.

The purpose of this course is to increase the effectiveness of agricultural student leaders. Leadership theories and models will be explored along with opportunities to apply specific leadership skills. The curriculum is designed to develop students for leadership positions in local, state, regional, and national organizations and agencies involved in the agriculture industry. (2/15)

AGBS-30B: Agriculture Leadership-Personal Development

Unit(s): 2

Lecture Hours: 2

Lab Hours: 0

Advisories: ENGL 84A.

This course focuses on the knowledge, skills and attitudes that enhance personal effectiveness and professional success. Students will gain self-awareness and study leadership traits. Goal attainment, personal organization and critical thinking strategies are emphasized. (2/15)

AGBS-30C: Agriculture Leadership-Team Leadership

Unit(s): 2

Lecture Hours: 2

Lab Hours: 0

Advisories: ENGL 84A.

Principles and practices in planning, developing, conducting, and evaluating leadership programs for agricultural groups. The course focuses on helping students better understand themselves and others; improving group communication; becoming effective leaders and members of groups; improving leadership and personal development skills; assessing leadership situations, determining and administering appropriate leadership strategies, and evaluating results. (2/15)

AGBS-31A: Agricultural Ambassadors-Introduction

Unit(s): 2

Lecture Hours: 2

Lab Hours: 0

Advisories: ENGL 84A.

The purpose of this course is to introduce students to the Agricultural Ambassador program. Ambassadors promote agricultural awareness and educational opportunities in agriculture at Merced College and beyond. Students will learn the role of Ambassadors, develop their communication and leadership skills, plan leadership events, prepare recruitment materials, and deliver recruitment presentations to prospective students and members of the community. (2/14)

AGBS-31B: Agricultural Ambassadors-Recruitment

Unit(s): 2

Lecture Hours: 2

Lab Hours: 0

Advisories: ENGL 84A.

The purpose of this course is to focus the recruitment role of the Agricultural Ambassadors as they promote agricultural awareness and educational opportunities in agriculture at Merced College and beyond. Students will learn the fundamentals of effective presentations, conduct tours, plan leadership events, prepare recruitment materials, and deliver recruitment presentations for prospective students and members of the community while serving in the role of Agricultural Ambassador. (2/14)

AGBS-31C: Agricultural Ambassadors-Public Relations

Unit(s): 2

Lecture Hours: 2

Advisories: ENGL 84A.

The purpose of this course is to focus on the public relations role of the Agricultural Ambassadors as they promote agricultural awareness and educational opportunities in agriculture at Merced College and beyond. Students will learn the fundamentals of public relations, communication and leadership skills, plan leadership events, prepare recruitment materials, and deliver recruitment presentations for prospective students and members of the community while serving in the role of Agricultural Ambassador. (2/14)

AGBS-70A-Z: Special Topics in Agriculture Business

Unit(s): 0.5 - 4

Lecture Hours: 0-4

Lab Hours: 0-12

Advisories: ENGL-85; MATH 81 or MATH B.

This course is the study of basic principles, processes, and theories of the special topic being presented during the semester. (12/06)

AGRICULTURE

AGRI-10: Agriculture, Environment, and Society

Designations: (CSU breadth area D)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: AGBS 18; ~~ENGL-85A or ENGL 85AC or ENGL-85E; LRNR-30.~~

This course involves an international view of the sociology of agriculture presented through an examination of relationships between societies and their environments, economics, and agriculture. Emphasis will be placed on the analysis of agriculture's use of technology and the corresponding impact on the environment, economy, and society on a global scale. (3/19)

ALLIED HEALTH

ALLH - 24: Work Experience in Allied Health

Unit(s): 1-8

Lecture Hours: 0

Lab: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course enables students to earn college credit for learning and/or improving skills or knowledge on-the-job. Occupational Work Experience is discipline specific and must connect to the student's major or occupational goal(s). Seventy-five (75) hours of documented paid work experience equals 1 unit of credit. Sixty (60) hours of documented volunteer experience

equals 1 unit of credit. A student may enroll in up to 16 total units of work experience at Merced College. Students must have an established work site prior to enrolling in the course. (11/16)

ALLH-63: Nurse Assistant

Unit(s): 6
Lecture Hours: 3.5
Lab Hours: 7.5
Limitations on Enrollment: 1) Orientation workshop;
2) CPR card-Module AC;
3) negative TB screening test within past 6 months or negative chest x-ray within past year;
4) physical within past 6 months;
5) DOJ fingerprint clearance;
6) Penal Code Violations Clearance.
Advisories: ENGL 84A.

The course provides clinical instruction and practice of basic nursing skills required of nursing assistants employed in skilled nursing facilities and extended care facilities. The course emphasizes care of the older adult client, assistance with the activities of daily living, bathing, dressing, exercise movement, eating, eliminating safety measures, cardiopulmonary resuscitation and rehabilitation techniques. Meets State Department of Health Services requirements for eligibility to take the Nursing Assistant Certification examination. (2/18)

ALLH-67: Medical Terminology

Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Advisories: ENGL 85AC.

This course is a study of general medical terminology -- diagnostic, operative, and symptomatic terms related to body systems -- with emphasis on proper spelling and pronunciation. (3/20)

ANIMAL SCIENCE**ANSC-10: Elements of Animal Science**

Designations: (C-ID AG 104)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Advisories: ~~ENGL 85A~~ or ENGL 85AC or ~~ENGL 85E~~.

This course is a survey of the livestock industry, supply of animal products, and their uses in animal production. There is a special emphasis on the origin, characteristics, adaptation, and contributions of farm animals to the agriculture industry. The student will analyze the economic trends and career opportunities in animal agriculture. Field trips will be required. (3/19)

ANSC-12: Livestock Breeding and Selection

Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course combines the study of basic genetic principles with the study of the anatomical and physiological aspects of reproduction as they relate to animal species significant to agriculture. The genetic principles to be emphasized include basic inheritance, selection techniques, mating systems, heterosis, and performance evaluation. The reproductive aspects to include endocrinology, estrous cycles, mating behaviors, gametogenesis, conception, gestation, parturition, and maternal behaviors. Artificial insemination, embryo manipulation, and current innovations in reproductive biotechnology will also be examined. (10/17)

ANSC-13: Animal Disease and Parasite Control

Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course of animal health and sanitation will provide instruction to the student on common livestock diseases and fundamentals of immunity. It will also include coverage of the livestock worker's role in promoting animal

health and the foundation of disease control programs. (10/17)

ANSC-14: Elements of Animal Nutrition

Unit(s): 3
Lecture Hours: 2 ;
Lab Hours: 3
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80.

The science of animal nutrition is the basis for "Livestock Feeding and Nutrition." The fundamentals of digestion and absorption in both ruminants and non-ruminants are discussed in this course. The nutritive value of feeds as they relate to the formulation of livestock rations will be emphasized, including by-product feeding. (10/17)

ANSC-16: Horse Husbandry

Unit(s): 3
Lecture Hours: 2
Lab Hours: 3
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This is a survey of the equine industry encompassing the evolution and role of the equine species throughout history, breed selection and development, nutrition, diseases, preventive health, reproductive management, basic horsemanship, and stabling alternatives. (10/17)

ANSC-17: Beef Production

Unit(s): 3
Lecture Hours: 2
Lab Hours: 3
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This is a study of principles and practices of purebred and commercial beef cattle production throughout the world, United States, and California. There will be emphasis placed on the importance of breeds, breeding principles, selection, nutrition, environmental management, health, marketing, and record keeping to ensure scientifically-based management decisions and consumer product acceptance as applied to beef cattle. (10/17)

ANSC-18: Sheep and Meat Goat Science

Unit(s): 3
Lecture Hours: 2
Lab Hours: 3
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is a survey of the sheep and meat goat industry including management of commercial, purebred and small farm flocks; selecting, feeding, breeding and basic care of the herd animals plus the marketing and economics of lambs, wool, and kids. (10/17)

ANSC-19: Swine Production

Unit(s): 3
Lecture Hours: 2
Lab Hours: 3
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This is a study of the principles and practices of purebred and commercial pork production throughout California, the United States, and the world. Emphasis will be placed on the importance of breeds, breeding principles, selection, nutrition, environmental management, health, marketing, and record keeping to ensure scientifically-based management decisions and consumer product acceptance. (12/06)

ANSC - 24: Work Experience in Animal Science

Unit(s): 1-8
Lecture Hours: 0
Lab: 0
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course enables students to earn college credit for learning and/or improving skills or knowledge on-the-job. Occupational Work Experience is discipline specific and must connect to the student's major or occupational goal(s). Seventy-five (75) hours of documented paid work experience equals 1 unit of credit. Sixty (60) hours of documented volunteer experience equals 1 unit of credit. A student may enroll in up to 16 total units of work experience at Merced College. Students must have an established work site prior to enrolling in the course. (11/16)

ANSC-30: Fitting, Showing, and Merchandising Livestock

Unit(s): 1.5

Lecture Hours: 1

Lab Hours: 1.5

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is designed for students to develop skills in preparing and marketing beef cattle, sheep, swine, dairy cattle, and goats for competition at intercollegiate livestock competitions. Lessons in exhibiting the animals are given. The course may be repeated three times. (4/13)

ANSC-40: Beginning Horsemanship (Western)

Unit(s): 2

Lecture Hours: 1

Lab Hours: 3

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This is a course that deals with the handling and schooling of a horse from the ground, in addition to basic fundamentals of riding. Safety factors for both horse and rider will be emphasized. Other areas of the course will include the proper use of equipment and aids. (2/14) (Note: Check with instructor for supplies needed.)

ANSC-41: Intermediate Horsemanship (Western)

Unit(s): 2

Lecture Hours: 1

Lab Hours: 3

Prerequisites: ANSC 40

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This is a class in intermediate western riding which will enable a person to school a horse, teach beginning riding, or train another rider in schooling. The student will obtain a working knowledge of the judging of horse shows and obligations involved in the judging of different events. A rider in this class is expected to be able to give a creditable performance in a standard AHSA or AQHA horse show. (2/14) (Note: Check with instructor for supplies needed.)

ANSC-70AA-ZZ: Special Topics in Animal Science

Unit(s): 0.5 - 4

Lecture Hours: 0-4

Lab Hours: 0-12

Advisories: ENGL 84A.

This course is the study of basic principles, processes, and theories of the special topic being presented during the semester. (1/07)

ANTHROPOLOGY**ANTH-01: Introduction to Biological Anthropology**

Designations: (CSU breadth area B2/B3) (IGETC area 5B/5C) (C-ID ANTH 110)

Unit(s): 4

Lecture Hours: 3

Lab Hours: 3

Advisories: ENGL 01A

This survey course deals with the study of human biological heritage and physical variability. Genetics, the fossil evidence and theories of human evolution, forensic anthropology, primatology and current bioethical issues will be discussed. The laboratory portion of the course will include exercises in: genetics, human variation, skeletal analysis, forensic anthropology, evolution and the fossil record, and primate anatomy and behavior. The philosophy of science and the scientific method serve as the foundation for this course. (9/16)

ANTH-02: Sociocultural Anthropology

Designations: (C-ID ANTH 120) (CSU breadth area D) (IGETC area 4)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is an introduction to the study of human culture and the concepts, theories, and methods used in the comparative study of sociocultural systems. Subjects include subsistence patterns, social and

political organization, language and communication, family and kinship, religion, the arts, social inequality, ethnicity, gender, and culture change. The course applies anthropological perspectives to contemporary issues. (10/12)

ANTH-10: Southeast Asian Culture: Hmong

Designations: (CSU breadth area D) (IGETC area 4)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course surveys the basic ideas and social constructs of Southeast Asian Cultures, especially the cultures of the new Southeast Asian groups of people in California: Hmong, Mien, Lue, Lao, Cambodian, and Vietnamese. Emphasis will be placed on issues of cultural ethnicity, family life style, educational background, and socio-political organization of each group in the past and in the United States. (11/13)

ADMINISTRATIVE OFFICE MANAGEMENT**AOM-30: Introduction To Computer Applications**

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ENGL 84A; MATH 80.

This course is intended for students seeking an introduction to application software used in the workplace with emphasis on business situations. Computer applications including word processing, spreadsheets, databases, and presentation managers will be covered. (11/17)

AOM-43: Essentials of Business Communication

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: AOM 30, AOM 50B.

This course covers the business writing patterns of routine, persuasive, and negative messages. Students learn the basic training in listening, speaking, and non-verbal communication in order to develop the skills needed in everyday **communication in business business communication**. Given a scenario, students create e-mail, memos, letters, proposals, reports and an ePortfolio. Students **also** learn about doing business with other cultures and giving oral business presentations. (3/19)

AOM-50B: Document Formatting

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Students will learn the (1) development of basic computerized keyboarding techniques and (2) fundamental knowledge of word processing software to properly format memorandums, letters, envelopes, tables, and reports. (11/17)

AOM-50C: Learn to Type

Unit(s): 1

Lecture Hours: 1

Lab Hours: 0

This course **teaches provides** an introduction to the keyboard for non-typists. (3/19)

AOM-52C: Keyboarding Speed and Accuracy

Unit(s): 1

Lecture Hours: 1

Lab Hours: 0

Advisories: Upon entering the course it is recommended that the student be able to: Know the qwerty enhanced keyboard and be able to key at least 22 wpm with 85% accuracy.

This course is designed to increase keyboarding speed and accuracy through the use of individualized evaluation. The course helps bridge the speed gap between each level of keyboarding instruction. It is designed for the student who wishes to gain keyboarding speed and accuracy. (11/17)

AOM-53: Advanced Computer Applications

Unit(s): 3
 Lecture Hours: 2
 Lab Hours: 3
 Prerequisites: AOM 30.

The student will learn the advanced features of ~~the~~ word processor, spreadsheet, database, and presentations applications. Typically the most current version of Microsoft Office is taught. ~~S~~Students are advised to check with the discipline faculty for software version information. A prerequisite challenge is encouraged from students who can provide evidence of competency of current introductory software skills in Word, Excel, Access, and PowerPoint. (3/19)

AOM-56: Office Procedures

Unit(s): 3
 Lecture Hours: 3
 Lab Hours: 0
 Advisories: ENGL 84A

Students will learn the skills, strategies, and techniques needed to perform the common office procedures ~~employed-in within~~ any ~~form of~~ business. (3/19)

AOM-58A: Website Development

Unit(s): 2
 Lecture Hours: 2
 Lab Hours: 0
 Advisories: AOM 30.

This is an introductory course in the planning, design, and creation of a website. (3/19)

AOM-59A: Medical Coding and Billing

Unit(s): 4
 Lecture Hours: 4
 Lab Hours: 0

This course will enable the student to develop a basic knowledge of the national diagnostic and procedural coding systems and to simplify the process of filing claim forms. The student will be introduced to the major medical insurance programs, reimbursement, privacy rules, HIPAA, basic understanding of legal and regulatory considerations. The student will be able to identify and define medical terminology and abbreviations ~~used~~ in the outpatient setting. (3/19)

AOM-60A: Business English

Unit(s): 3
 Lecture Hours: 3
 Lab Hours: 0
 Advisories: ~~ENGL 84A~~; AOM 50B or type 25 wpm.

This course covers the mechanics of English as specifically applied to the field of business. It covers sentence structure, spelling, punctuation, grammar, business vocabulary, and the application of appropriate writing techniques for business communication. (3/19)

ARCHAEOLOGY**ARCH-01: Introduction to Archaeology**

Designations: (C-ID ANTH 150) (CSU breadth area B1) (IGETC area 5A)
 Unit(s): 3
 Lecture Hours: 3
 Lab Hours: 0
 Advisories: ENGL 01A

This class examines the historical, theoretical and methodological development of Archaeology and the role that scientific inquiry plays in understanding the past. Research design, survey and excavation methodology, stratigraphic analysis, dating techniques, lithic source assessment as well as artifact analysis and interpretation will be addressed. Cultural resource management and archaeological ethics will be discussed. Artifacts from around the world are used in class to illustrate archaeological concepts. (11/14)

ARCH-01L: Field Archaeology

Unit(s): 1
 Lecture Hours: 0
 Lab Hours: 3
 Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course provides the student with an opportunity to gain practical experience in archaeological field reconnaissance, archaeological site excavation, laboratory analysis of archaeological data and in the preparation of archaeological reports. Students will take part in surveys and excavations on local historic and prehistoric sites. (5/14)

ART**ART-01: Art History: Ancient Through Gothic Survey of Western Art from Prehistory Through the Middle Ages**

Designations: (CSU breadth area C1) (IGETC area 3A)
 Unit(s): 3
 Lecture Hours: 3
 Lab Hours: 0
 Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E.
 Advisories: ENGL 01A

This course is a survey that examines the historical contexts of humanity through the development of art, architecture, painting, sculpture, and the minor arts, from pre-history through the ~~Gothic Medieval~~ period. (4/19)

ART-02: Art History: Renaissance Through 20th Century Survey of Western Art from Renaissance to Contemporary

Designations: (CSU breadth area C1) (IGETC area 3A)
 Unit(s): 3
 Lecture Hours: 3
 Lab Hours: 0
 Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E.
 Advisories: ENGL 01A

This course is a survey that examines the historical context of humanity through the development of art, architecture, sculpture, painting and the applied arts from the Renaissance to the ~~20th-Century Contemporary~~ period. (4/19)

ART-06: Survey of Modern Art

Designations: (CSU breadth area C1) (IGETC area 3A) (C-ID ARTH 150)
 Unit(s): 3
 Lecture Hours: 3
 Lab Hours: 0
 Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E.
 Advisories: ENGL 01A

This course is a survey of the prominent artists and art movements from the 19th and 20th centuries to today. Major works in painting, sculpture, architecture and the applied arts are covered. The historical context of science, invention, world events, politics, philosophy, religion, and music are examined as influences reflected in each generation's contribution to the history of the visual arts. (12/15)

ART-12A: Sculpture: 3-D Foundations

Designations: (C-ID ARTS 101)
 Unit(s): 3
 Lecture Hours: 2
 Lab Hours: 3
 Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is an introduction to the fundamentals of the sculpting process and the study of a variety of materials related to sculpture. Projects explore the elements and principles of 3-D design and the conceptual styles of realism to abstraction, both in the round and as bas-relief. Important sculptors and their significant works from various historical periods and various cultures are examined. A small materials fee covers the cost of the works created. (5/12)

ART-12B: Intermediate Sculpture

Unit(s): 3
 Lecture Hours: 2
 Lab Hours: 3

Prerequisites: ART 12A

Students will explore sculpture materials, methods, techniques, and create three-dimensional design projects related to intermediate-level course work. Students will research important sculptors and their significant works from various historical periods and cultures. A materials fee will cover the cost of the art works created. (1/14)

ART-15: Design: 2-D Foundations

Designations: (C-ID ARTS 100) (CSU breadth area C1) (IGETC area 3A)

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ENGL 01A

This studio survey class is a required foundation course for the study of the Visual Arts. Lectures and studio projects explore and analyze concepts related to the elements and principles of current and historical design theories. Philosophical, social and cultural implications are examined. Subject matter is directly linked to topics in 2-D, fine art, graphic design, commercial art, and photography, with broader applications to professional fields of 3-D, applied arts, environmental design, architecture, interior design and fashion. Required for Art Majors. (12/15)

ART-17A: Introduction to Ceramics

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is an introduction to ceramic materials, concepts, and processes including basic design elements and principles, creative development, hand-building, throwing, glaze techniques, firing and ceramic terminology. The course covers aesthetics and creative development of clay objects examining historical, contemporary and personal modes of expression across multiple cultures. (5/14)

ART-17B: Intermediate Ceramics

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Prerequisites: ART 17A

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This is an intermediate course in ceramic pottery and sculpture design and construction, non-technical glaze composition, and kiln firing. Stress is placed upon the attainment of skill on the potter's wheel and organization of construction problems. Students pursue projects of individual interest. (5/14)

ART-20A: Introduction to Printmaking

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ART-24A; ENGL 85A or ENGL 85AC or ENGL 85E.

This course is an introduction to the basic materials, equipment and fundamental printmaking processes including relief (linocut and woodcut), intaglio (drypoint, etching and collagraph) and stencil (screenprint) methods. Students will produce limited editions of black and white prints, be introduced to color techniques and survey the history of printmaking. (2/14)

ART-20B: Intermediate Printmaking

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Prerequisites: ART 20A

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course deals with color printmaking techniques, as well as black and white, with an emphasis on intaglio processes and the lithographic technique in which images are printed from limestone slabs. (2/14)

ART-23A: Introduction to Painting

Designations: (C-ID ARTS 210)

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is an introduction to the principles, elements, and practices of painting in oil and acrylic medium. Students will focus on exploration of painting materials, perceptual skills and color theory, paint mixing and technique, as well as creative responses to materials and subject matter. (2/14)

ART-23B: Intermediate Painting

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Prerequisites: ART 23A

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is an exploration of artistic concepts, styles, and creative expression related to intermediate-level painting, focusing on complex subject matter and concepts using a variety of subjects, techniques, and methodologies. Students in this course will build on fundamental painting skills to develop personalized approaches to content and materials in exercises covering multiple historical and contemporary approaches to painting. (2/14)

ART-24A: Drawing I

Designations: (C-ID ARTS 110)

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This studio survey course introduces the principles, elements, and practices of drawing, employing a wide range of subject matter and drawing media. Students will focus on perceptually based drawing, observational skills, technical abilities, conceptual thinking and critical analysis. Historical and contemporary developments, critical trends, materials, and approaches in drawing will be examined for their philosophical and cultural implications. Required for Art majors. (1/17)

ART-24B: Intermediate Drawing

Designations: (C-ID ARTS 205)

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Prerequisites: ART 24A.

This course is an exploration of artistic concepts, styles, and creative expression related to intermediate-level drawing, focusing on complex subject matter and concepts using a variety of drawing mediums, techniques, and methodologies. Students in this course will build on fundamental drawing skills to develop personalized approaches to content and materials in exercises covering multiple historical and contemporary approaches to drawing. (2/14)

ART-26A: Introduction to Figure Drawing

Designations: (C-ID ARTS 200)

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is an introduction to drawing the human figure from observation using a wide variety of drawing media and techniques. Topics include an introduction to human anatomy and the historical and contemporary roles of figure drawing in the visual arts. Students in this course will learn both descriptive and interpretive approaches to drawing the figure, in both rapid and extended studies. (2/14)

ART-26B: Intermediate Figure Drawing

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Prerequisites: ART 26A

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

Exploration of artistic concepts, styles, and creative expression related

to intermediate-level figure drawing, focusing on complex composition and concepts using a variety of color drawing mediums, techniques, and methodologies. Students in this course will build on fundamental figure drawing skills to develop personalized approaches to content and materials in exercises covering multiple historical and contemporary approaches to figure drawing. (2/14)

ART-29A: Introduction to Watercolor Painting

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is an introduction to the principles, elements, and practices of painting in the watercolor medium. Students will focus on exploration of painting materials, perceptual skills and color theory, paint mixing and technique, as well as creative responses to materials and subject matter. (2/14)

ART-29B: Intermediate Watercolor Painting

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Prerequisites: ART 29A

This course is an exploration of artistic concepts, styles, and creative expression related to intermediate-level watercolor painting, focusing on complex subject matter and concepts using a variety of subjects, techniques, and methodologies. Students in this course will build on fundamental watercolor painting skills to develop personalized approaches to content and materials in exercises covering multiple historical and contemporary approaches to painting. (2/14)

ART-48A-ZZ: Advanced Special Problems in Art

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Limitations on Enrollment: Before enrolling, the student must complete a contract detailing proposed area of study.

Completed contract requires signatures: a) the instructor of the course section the student will be attending; b) the Arts Division Chairperson.

This course is designed to provide students with the opportunity to do advanced, specialized work, under the supervision of an instructor in areas not offered in regular classes. Students must develop an advanced problem in the area of art that they wish to explore. (1/08)

DIGITAL ART

ARTD-07: History of Graphic Design

Designations: (CSU breadth Area C1) (IGETC Area 3A)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This survey course encompasses graphic art forms from the development of written language to contemporary digital media across a range of cultural perspectives. The class explores formative printed media and Gutenberg press book design from illuminated manuscripts through the Renaissance, Victorian era and Art Nouveau graphics and critical theory from the modernist era through postmodernism and the digital revolution. (12/17)

ARTD-08: History of Animation

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: ENGL 01A.

This critical and historical survey course covers animated media from the origins of cave paintings illuminated by flickering firelight to contemporary digital augmented reality pushing the boundaries of consciousness. The class explores American, European and Japanese animation through a cross-cultural perspective which fosters a wide-ranging analysis of moving imagery with particular attention to significant creative breakthroughs in

the medium.(02/19)

ARTD-40A: Introduction to Digital Art

Designations: (CSU breadth area C1) (IGETC area 3A)

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

The studio survey course introduces fundamental raster and vector artwork concepts and **manipulation visualization** processes. Students will learn basic design elements, compositional principles, current digital art theories, philosophical and cultural implications, and software techniques to create, edit, and output digital visuals. The course emphasizes creative thinking skills, design aesthetics, and still and motion media competence. (2/19)

ARTD-40B: Intermediate Digital Art

Designations: (CSU breadth area C1) (IGETC area 3A)

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ART 15, ARTD 40A; ENGL 85A or ENGL 85AC or ENGL 85E.

This studio course continues to **inculcate promote** creative thinking ability, the exploration of design elements & composition, and imaginative technical ability through the **intermediate** use of bitmap and vector software programs. Students' perceptual capability will expand when producing innovative artworks for print, web, and multimedia outputs. Digital art history, contemporary trends, and emerging media underscore the course's broadminded structure. (2/19)

ARTD-41A: Introduction to Graphic Design: 2D Foundations

Designations: (C-ID GDES 120)

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ART 15; ~~ENGL 85A or ENGL 85AC or ENGL 85E~~; ENGL 01A.

This studio survey course introduces fundamental concepts and manipulation processes in graphic design and the visual communication arts. Students will learn foundational design principles, conceptual thinking, and typographic layout while also exploring philosophical and cultural implications. Students utilize software and traditional drawing-board design practices that visually enlighten and effectively communicate to a mass audience. (2/19)

ARTD-41B: Intermediate Graphic Design: 2D Foundations

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Prerequisites: ARTD 41A

Advisories: ~~ENGL 85A or ENGL 85AC or ENGL 85E~~; ENGL 01A.

This studio survey course continues to explore concepts and manipulation processes in graphic design and the visual communication arts. Students will learn intermediate design principles, conceptual thinking, and typographic layout while also exploring philosophical and cultural implications. Students utilize software and traditional drawing-board design practices that visually enlighten and effectively communicate to a mass audience. (2/19)

ARTD-42A: Introduction to Motion Graphics

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ART 24A; ENGL 85A or ENGL 85AC or ENGL 85E.

This course involves innovative thinking in introductory graphics on a timeline. Students will create characters, design movement paths, learn pose manipulation and cycles, frame movement based on sound, animate text and produce dynamic compositions and scene storytelling with drawing and software such as After Effects and Maya. (9/15)

ARTD-42B: Intermediate Motion Graphics

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Prerequisites: ARTD 42A

Advisories: ENGL 85AC or ENGL 85AC or ENGL 85E.

This studio course involves more in-depth innovative concepts in intermediate-level visual effects on a timeline. Students will create characters with pose manipulation, design fluid movement paths within environments, control simulations with scripting, frame movement based on sound, and produce more complex compositions and scene storytelling with particles and deformers while utilizing software such as After Effects, ZBrush, Nuke, ToonBoom and Maya. (11/15)

ARTD-45A: Animation I: Introduction to Web Design and 2D**Animation**

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ART 24A; ENGL 85A or ENGL 85AC or ENGL 85E.

This studio course imparts a thorough foundation in creative two-dimensional ~~Adobe Animate~~ ~~CG Toon Boom~~ digital media production for the web, while also exploring philosophical and cultural implications. Indispensable basic typographic, color, illustration, animation, interactivity, layout, and sound design concepts feature strongly in the class. The course's Animate CC, Toon Boom and HTML 5 web technology techniques prepare students for producing imaginative web sites, animations and multimedia projects. (2/19)

ARTD-45B: Multimedia Animation II: Intermediate Web Design and**Animation**

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Prerequisites: ARTD 45A.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This studio course further imparts a thorough intermediate-level approach to creative ~~Adobe Flash Toon Boom~~ digital media production for the web. Indispensable intermediate typographic, color, illustration, animation, interactivity, layout, and sound design concepts feature strongly in the class. The course's interactive ~~Flash Toon Boom~~ and new ~~HTML-5~~ web technology techniques prepare students for producing imaginative web sites and multimedia projects. (2/19)

ARTD-47: Typography I: Introduction to Type Design

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Prerequisites: ~~Previous or concurrent enrollment in ART 15.~~

Advisory: ART 15

This course provides an introduction to the fundamental aspects of creative letterform design for effective visual communication. Students develop initial prototypes on the drawing board and further computer refinements using software such as Illustrator and FontForge to produce professional typefaces in the OpenType format. The class underscores a broad cross-section of typefaces and Gutenberg historical precedents of typographic style to generate original visual solutions. (2/19)

ART (NONCREDIT)**ARTS-507B: Music Therapy for Adults-Intermediate**

Unit(s): 54 Total, Open Entry

Limitations on Enrollment: Students must demonstrate ability to sight-read music for their instrument.

This 54 hour course provides experience in performing concert and symphonic band literature. Public performance and exchange concerts are scheduled in addition to class instruction and rehearsals. (1/14)

ARTS-512: Choral Dynamics

Unit(s): 54-72 hours Total, Open Entry

Limitations on Enrollment: Ability to accurately match pitch and

correctly follow verbal instructions.

This 54-72 hour course is a study of standard choral literature. It emphasizes part-singing, intonation, breath control, vocal development, style, eras, musical devices, etc. The ensemble makes several public concert appearances each year. (5/19)

ARTS-520: Theatre Production in the Community for Older Adults

Unit(s): 54 Total, Open Entry

Limitations on Enrollment: Enrollment by audition or interview, instructor signature required.

This class offers the older adult community member the opportunity to perform theatrical roles and or learn the basics of technical positions in theatrical rehearsal and public performance. (12/15)

AMERICAN SIGN LANGUAGE**ASLG-01: Beginning American Sign Language**

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 01A.

This course is an introduction to understanding and signing American Sign Language and appreciating the basic elements of the Deaf culture. Emphasis is on obtaining a practical command of the language, including major grammatical components, basic ASL sentence structures, nonmanual gestures, expression of spatial relationships in a visual-gestural language, and beginning conversational skills. (5/19)

ASLG-02: Intermediate High Beginning American Sign Language

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: ASLG 01.

Advisories: ENGL 01A

This course provides ~~intermediate high beginning~~ practice understanding and signing American Sign Language and appreciating the basic elements of the Deaf culture. Emphasis is on obtaining a practical command of the language including major grammatical components, basic ASL sentence structures, non-manual gestures, expression of spatial relationships in a visual-gestural language, and ~~intermediate high beginning~~ conversational skills. (5/19)

ASLG-03: Advanced Intermediate American Sign Language

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: ASLG 02.

Advisories: ENGL 01A

This course provides ~~advanced intermediate~~ practice in understanding and signing American Sign Language and insights in the basic elements of the Deaf culture. Emphasis is on obtaining a practical command of the language, including major grammatical components, basic ASL sentence structures, non-manual gestures, expression of spatial relationships in a visual-gestural language, and ~~intermediate~~ conversational skills. (5/19)

ASTRONOMY**ASTR-01: Principles of Astronomy**

Designations: (CSU breadth area B1) (IGETC area 5A)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This is a basic course studying the principles of astronomy beginning with the solar system and continuing through the Milky Way Galaxy and the galaxies beyond. Throughout the course topics relating to the philosophy of science, history of astronomy, tools of the astronomer, and supporting topics of physics are introduced. The course is designed for students satisfying breadth requirements in science and having a general interest in astronomy. (12/06)

ASTR-01L: Introductory Astronomy Laboratory

Designations: (CSU breadth area B1/B3) (IGETC area 5C)

Unit(s): 1

Lecture Hours: 0

Lab Hours: 3

One-way Corequisite: ASTR 01.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 81.

This is a basic course in astronomy providing laboratory experience and opportunity for observation of the night sky. Specific topics include observations of the solar system and deep sky objects, time studies, planetary motions, telescopes and their applications, spectroscopy, and basic calculations of the astronomer. (11/13)

This is a course teaching theory, practice and game performance of the competitive sport. May be repeated three times. (3/19)

ATHL-01K: Intercollegiate Softball

Unit(s): 3

Lecture Hours: 0

Lab Hours: 180 TBA

Limitations on Enrollment: This is a varsity team sport requiring coach's or academic athletic advisor's approval.

Advisories: KINE 13

This course teaches theory, practice and game performance of the competitive softball. This course may be repeated three times. (2/13)

ATHLETICS**ATHL-01A: Intercollegiate Baseball**

Unit(s): 3

Lecture Hours: 0

Lab Hours: 10

Limitations on Enrollment: This is a varsity team sport requiring coach's or academic athletic advisor's approval.

This is a course teaching theory, practice and game performance of competitive baseball. This course may be repeated three times. (3/19)

ATHL-01B: Intercollegiate Basketball

Unit(s): 1.5-3

Lecture Hours: 0

Lab Hours: 5-10

Limitations on Enrollment: This is a varsity team sport requiring coach's or academic athletic advisor's approval.

Advisories: KINE 13

This course teaches theory, practice and game performance of competitive basketball. This course may be repeated three times. (12/18)

ATHL-01D: Intercollegiate Football

Unit(s): 3

Lecture Hours: 0

Lab Hours: 10

Limitations on Enrollment: This is a varsity team sport requiring coach's or academic athletic advisor's approval.

This course offers the student the opportunity to develop and improve the fundamental skills involved in football, such as passing, receiving, kicking, blocking (with the aid of blocking dummies), team play and strategy. Rules and class competition will also be included. This class may be repeated three times. (2/14)

ATHL-01G: Intercollegiate Swimming

Unit(s): 3

Lecture Hours: 0

Lab Hours: 10

Limitations on Enrollment: This is a varsity team sport requiring coach's or academic athletic advisor's approval.

This course teaches theory, practice and game performance of the competitive sport. This course may be repeated three times. (3/19)

ATHL-01I: Intercollegiate Track and Field

Unit(s): 3

Lecture Hours: 0

Lab Hours: 10

Limitations on Enrollment: This is a varsity team sport requiring coach's or academic athletic advisor's approval.

This is a course teaching theory, practice, and game performance of the designated competitive sport. This course may be repeated three times. (2/14)

ATHL-01J: Intercollegiate Water Polo

Unit(s): 3

Lecture Hours: 0

Lab Hours: 10

Limitations on Enrollment: This is a varsity team sport requiring coach's or academic athletic advisor's approval.

ATHL-01L: Intercollegiate Volleyball

Unit(s): 3

Lecture Hours: 0

Lab Hours: 10

Limitations on Enrollment: This is a varsity team sport requiring coach's or academic athletic advisor's approval.

This course teaches theory, practice and game performance of the competitive sport. This course may be repeated three times. (3/19)

ATHL-02A: Off-Season Conditioning for Baseball

Designations: (CSU breadth area E)

Unit(s): 1-3

Lecture Hours: 0

Lab Hours: 3-9

Limitations on Enrollment: This is a varsity team off-season conditioning course that requires coach's or academic athletic adviser's signature.

This course is designed to optimize sports performance and reduce risk of injury for the off-season intercollegiate athlete in the sport of baseball. Course content will include: sport specific skill development, sport specific strength training, cardiovascular conditioning, agility work, plyometrics, speed training, and flexibility exercises. This course is designed to prepare students for intercollegiate baseball competition and may be repeated to meet requirements for CCCAA eligibility. (11/13)

ATHL-02B: Off-Season Conditioning for Basketball

Designations: (CSU breadth area E)

Unit(s): 1-3

Lecture Hours: 0

Lab Hours: 3-9

Limitations on Enrollment: This is a varsity team off-season conditioning course that requires coach's or academic athletic adviser's signature.

This course is designed to optimize sports performance and reduce risk of injury for the off-season intercollegiate athlete in the sport of basketball. Course content will include: sport specific skill development, sport specific strength training, cardiovascular conditioning, agility work, plyometrics, speed training, and flexibility exercises. This course is designed to prepare students for intercollegiate basketball competition and may be repeated to meet requirements for CCCAA eligibility. (2/14)

ATHL-02D: Off-Season Conditioning for Football

Designations: (CSU breadth area E)

Unit(s): 1-3

Lecture Hours: 0

Lab Hours: 3-9

Limitations on Enrollment: This is a varsity team off-season conditioning course that requires coach's or academic athletic adviser's signature.

This course is designed to optimize sports performance and reduce risk of injury for the off-season intercollegiate athlete in the sport of football. Course content will include: sport specific skill development, sport specific strength training, cardiovascular conditioning, agility work, plyometrics, speed training, and flexibility exercises. This course is designed to prepare students for intercollegiate football competition and may be repeated to meet requirements for CCCAA eligibility. (2/14)

ATHL-02G: Off-Season Conditioning for Water Polo

Designations: (CSU breadth area E)

Unit(s): 1-3

Lecture Hours: 0

Lab Hours: 3-9

Limitations on Enrollment: This is a varsity team off-season conditioning course that requires coach's or academic athletic adviser's signature.

This course is designed to optimize sports performance and reduce risk of injury for the off-season intercollegiate athlete in the sport of water polo. Course content will include: sport specific skill development, sport specific strength training, cardiovascular conditioning, agility work, plyometrics, speed training, and flexibility exercises. This course is designed to prepare students for intercollegiate water polo competition and may be repeated to meet requirements for CCCAA eligibility. (2/14)

ATHL-02I: Off-Season Conditioning for Track and Field

Designations: (CSU breadth area E)

Unit(s): 1-3

Lecture Hours: 0

Lab Hours: 3-9

Limitations on Enrollment: This is a varsity team off-season conditioning course that requires coach's or academic athletic adviser's signature.

This course is designed to optimize sports performance and reduce risk of injury for the off-season intercollegiate athlete in the sport of track and field. Course content will include: sport specific skill development, sport specific strength training, cardiovascular conditioning, agility work, plyometrics, speed training, and flexibility exercises. This course is designed to prepare students for intercollegiate track and field competition and may be repeated to meet requirements for CCCAA eligibility. (2/14)

ATHL-02K: Off-Season Conditioning for Softball

Designations: (CSU breadth area E)

Unit(s): 1-3

Lecture Hours: 0

Lab Hours: 3-9

Limitations on Enrollment: This is a varsity team off-season conditioning course that requires coach's or academic athletic adviser's signature.

This course is designed to optimize sports performance and reduce risk of injury for the off-season intercollegiate athlete in the sport of softball. Course content will include: sport specific skill development, sport specific strength training, cardiovascular conditioning, agility work, plyometrics, speed training, and flexibility exercises. This course is designed to prepare students for intercollegiate softball competition and may be repeated to meet requirements for CCCAA eligibility. (2/14)

ATHL-03: Athletic Conditioning

Unit(s): .5-2

Lecture Hours: 0

Lab Hours: 1.5-6

Limitations on Enrollment: This is varsity athletic team conditioning course that requires coach's or academic athletic adviser's signature.

Advisories: Good general health; absence of medical conditions that would prevent planned physical activity.

This class is designed to prepare athletes for athletic competition. Different training techniques will be used including: functional training, core training, plyometrics, and strength training. Emphasis will be placed on injury prevention and to improve athletic performance. Multiple workouts are required per week. This course may be repeated three times. (2/13)

ATHL-13: Advanced Basketball

Unit(s): .5-1

Lecture Hours: 0

Lab Hours: 1.5-3

Limitations on Enrollment: This is a varsity team off-season conditioning course that requires coach's or academic athletic adviser's signature.

This course offers the more advanced student the opportunity to develop and improve fundamental skills involved in basketball, such as, ball handling,

shooting, defensive and offensive tactics, and physical endurance. It also covers team strategy and play. Rules, strategy, and sportsmanship are also stressed. This course may be repeated three times. (2/14)

ATHL-36A: Theory and Analysis of Football

Unit(s): 1

Lecture Hours: 1

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course presents the fundamental knowledge of football through lecture and discussions. This course is recommended for varsity football players. (2/14)

ATHL-36B: Theory and Analysis of Basketball

Unit(s): 1

Lecture Hours: 1

Lab Hours: 0

Advisories: ENGL 84A or ENGL 85AC or ENGL 85E ; KINE 13.

This course presents the fundamental knowledge of basketball through techniques of lecture, discussions, and video analysis. This course is recommended for physical education, recreation, and recreation-aide majors and varsity basketball players. (2/14)

ATHL-36C: Theory and Analysis of Baseball

Unit(s): 1

Lecture Hours: 1

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course presents the fundamental knowledge of baseball through techniques of lecture, discussions, and video analysis. This course is recommended for kinesiology, physical education, recreation, and recreation-aide majors and varsity baseball players. (9/15)

ATHL-36D: Theory and Analysis of Track and Field

Unit(s): 1

Lecture Hours: 1

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course presents the fundamental knowledge of track and field through techniques of lecture, discussions, and video/DVD analysis. (11/15)

AUTOMOTIVE TECHNOLOGY

AUTO-04: Automotive Mechanics

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80 or MATH 85.

This class is designed for students without prior experience in automotive mechanics. It is a study of fundamental theory and operation of the components that make up the major automotive systems with the purpose of giving the student general knowledge of the automobile. Major emphasis is given to operational principles of the automobile and related terminology. (11/18)

AUTO-24: Work Experience in Automotive Technology

Unit(s): 1-8

Lecture Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course enables students to earn college credit for learning and/or improving skills or knowledge on-the-job. Occupational Work Experience is discipline specific and must connect to the student's major or occupational goal(s). Seventy-five (75) hours of documented paid work experience equals 1 unit of credit. Sixty (60) hours of documented volunteer experience equals 1 unit of credit. A student may enroll in up to 16 total units of work experience at Merced College. Students must have an established work site prior to enrolling in the course. (11/16)

AUTO-32: Wheel Alignment and Suspension

Unit(s): 4
 Lecture Hours: 3
 Lab Hours: 3
 Advisories: AUTO 04, AUTO 63; ENGL 85A or ENGL 85AC or ENGL 85E ; MATH 80, MATH 85 .

This course is designed to provide the technical knowledge and experience required for aligning and servicing suspension systems on modern automobiles. Laboratory exercises will provide the student an opportunity to develop entry-level skills in the use of machines and equipment commonly used in wheel alignment, tire service, and front-end repairs. (1/13)

AUTO-33: Automotive Brake Systems

Unit(s): 4
 Lecture Hours: 3
 Lab Hours: 3
 Advisories: AUTO 04, AUTO 63; ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80 or MATH 85.

This course is designed for students without prior experience in automotive brake repair. The course will cover theory, service and repair of conventional, Antilock Brake Systems (ABS) and related brake systems. Laboratory exercises will provide the student the opportunity to develop skills and knowledge in the use of tools and equipment necessary in the repair and service of automotive brake systems. (2/13)

AUTO-36: Automotive Manual Transmissions and Drive Trains

Unit(s): 4
 Lecture Hours: 3
 Lab Hours: 3
 Advisories: AUTO 04; ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80, MATH 85.

This course is designed for the student without any prior experience in standard transmissions or drive axles. The class will provide technical information required for understanding and repairing of manual transmissions and drive trains. Laboratory exercise will provide the student with proper repair procedures and use of related tools and equipment. Standard transmissions, transaxles, differentials, drivelines, and related components will be covered. (1/13)

AUTO-41: Automotive Engines

Unit(s): 4
 Lecture Hours: 2
 Lab Hours: 6
 One-way Corequisite: AUTO 04.
 Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80 or MATH 85.

This is a class in the principles and theory of engine repair and rebuilding including the disassembly and assembly of engines. There will be emphasis on inspection, measuring, and comparing worn and rebuilt parts. Testing equipment will be used during in-car engine condition diagnosis. Also included will be minor machining operations that are used in engine rebuilding and repairing. (2/13)

AUTO-42: Automotive Electrical Systems

Unit(s): 4
 Lecture Hours: 3
 Lab Hours: 3
 Prerequisites: AUTO 63
 Advisories: AUTO 04; ENGL 85A or ENGL 85AC or ENGL 85E, MATH 80 or MATH 85.

This course covers automotive electrical systems and includes a review of electron theory, magnetism, and semiconductors. The student will acquire technical and working knowledge of starting, charging and ignition systems and components. The student will acquire working and technical knowledge of electrical accessories and accessory circuits. The use of special service tools and electronic diagnostic equipment will be included. (2/13)

AUTO-43: Automotive Computerized Engine Controls

Unit(s): 4
 Lecture Hours: 3
 Lab Hours: 3

One-way Corequisite: AUTO 04 AUTO 63.
 Advisories: AUTO 42.

This course covers the testing and service of automotive fuel systems, including fuel injection systems, electronic engine controls, and emission controls. (12/18)

AUTO-44: Automotive Air Conditioning, Heating System, Cooling System

Unit(s): 4
 Lecture Hours: 3
 Lab Hours: 3
 Advisories: AUTO 04; ENGL 85A or ENGL 85AC or ENGL 85E ; MATH 80, MATH 85.

This is a basic course in the principles of operation of automotive air conditioning, heating system, and cooling system. The course covers theory, system controls, troubleshooting, service, and repairs. Lab emphasis consists of system diagnosis servicing, repairs, and preventive maintenance on live vehicles. (1/13)

AUTO-46: Automatic Transmissions

Unit(s): 4
 Lecture Hours: 2
 Lab Hours: 6
 Advisories: AUTO 04, AUTO 63; ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80, MATH 85.

This course will cover domestic and import automatic transmissions and transaxles. Rebuilding will include diagnosis, inspection, repair, and testing. Theory will cover power flow, apply devices, hydraulics, torque converters, and computer controls. (1/13)

AUTO-47: Engine Performance

Unit(s): 2
 Lecture Hours: 1
 Lab Hours: 3
 Prerequisites: AUTO 42, AUTO 43.
 Advisories: ENGL 85A ENGL 85AC ENGL 85E; MATH 80 or MATH 85.

This course is a study in the diagnosis of automotive electrical and computer controlled fuel and ignition systems. The course will cover charging and starting circuits, computer controlled fuel injection and ignition systems and emissions control devices. All integrated systems will be included as they relate to live maintenance and diagnostic procedures. Advanced systems diagnosis and maintenance of these circuits will receive special attention. (2/13)

AUTO-48F: Special Problems in Auto Body Repair and Painting

Unit(s): 1.5-2.0
 Lecture Hours: 0
 Lab Hours: 4.5-6
 Prerequisites: AUTO 50
 Advisories: WELD/MECH-06; ENGL 85A or ENGL 85AC or ENGL 85E ; MATH 80 or MATH 85.

The course will provide the student additional time to develop and complete techniques, concepts and skills learned in AUTO 50 (Auto Body Repair and Painting). The student will be provided with sufficient time to complete projects started in the other classes. (2/13)

AUTO-50: Auto Body Repair and Painting

Unit(s): 4
 Lecture Hours: 2
 Lab Hours: 6
 Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80 or MATH 85; WELD 06 /MECH 06.

This course is an introduction to auto body repair and painting. Methods of metal repair will include shrinking, stretching, contouring, and plastic filling. Proper use of specialized hand tools and power tools will be emphasized. Various automotive primers and paints and their application will be covered. Application of paint, spraying techniques, and spray equipment maintenance will receive special attention. (2/13)

AUTO-54: Advanced Auto Body Repair and Refinishing

Unit(s): 4

Lecture Hours: 2

Lab Hours: 6

Prerequisites: AUTO 50

Advisories: ENGL 85A ENGL 85AC ENGL 85E; MATH 80 or MATH 85.

~~This course involves repairing and refinishing of vehicles with body and finish damage. Vehicle panel repair or replacement through proper tools and equipment will be covered. Students will receive instruction in the proper choice of paints, repairing techniques, cost estimating, and customer relations. Training in advanced painting techniques will be included to meet industry standards. (2/13)~~

AUTO-55: Automotive Emissions Level 1 and 2 Training

Unit(s): 5

Lecture Hours: 45

Lab Hours: 1.5

Prerequisites: AUTO 47

Advisories: AUTO 47; ENGL 85A ENGL 85AC ENGL 85E; MATH 80 or MATH 85.

This course is designed to provide students with knowledge and skills necessary to perform Smog Check Inspections. Level 1 training is intended to provide students with fundamental knowledge of engine and emission control theory, design and operation. Level 2 training is intended to provide students the knowledge, skills, and abilities needed to perform Smog Check inspections. Students who successfully complete this training will have met the California Bureau of Automotive Repair requirements for Level 1 and 2 training to qualify to take the Smog Check Inspector state licensing examination. (2/13)

AUTO-56: Advanced Diagnosis and Repair in Automotive Technology

Unit(s): 2

Lecture Hours: 0

Lab Hours: 6

Prerequisites: AUTO 36, AUTO 41, AUTO 43 and AUTO 46.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is designed to permit the student to gain additional diagnostic and hands on experience in automotive power trains, drive trains, and chassis systems. This course will help prepare the student for employment in the automotive repair industry with entry level skills. (5/16)

AUTO-63: Basic Automotive Electronics for Technicians

Unit(s): 4

Lecture Hours: 3

Lab Hours: 3

Advisories: ENGL 85E.

This course is designed to provide the automotive students with a strong background in basic electrical concepts. This will help the student to troubleshoot electrical system problems with the aid of technical information and test equipment. The class will also provide the necessary electrical theory for the more advanced automotive classes. (11/18)

AUTO-66: Automotive Parts and Service Advising

Unit(s): 3

Lecture Hours: 25

Lab Hours: 1.5

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80 or MATH 85.

This course will cover the duties and responsibilities of automotive parts and service advisors working at independent and dealership-based stores. Course content will include service and parts merchandising and communication skills, integrated computer management software, cost estimation, enhancing customer satisfaction, scheduling, inventory control, hazardous materials, warranties, lemon laws and documentation requirements. (11/15)

BIOLOGY**BIOL-01: General Biology for Non-Majors**

Designations: (CSU breadth area B2/B3) (IGETC area 5B/5C)

Unit(s): 4

Lecture Hours: 3

Lab Hours: 3

Prerequisites: ~~ENGL 85A or ENGL 85AC or ENGL 85E~~ ENGL 01A.

Limitations on Enrollment: This course is not open to students having a C or better in BIOL-04A.

This is an introductory-level course designed for non-majors. Areas stressed include the origin of life, structure and function of cells, basic processes of life, reproduction, ecology, microbiology, evolution, classification, genetics, and metabolic processes. (5/19)

BIOL-02: Human Biology

Designations: (CSU breadth area B2/B3) (IGETC area 5B/5C)

Unit(s): 4

Lecture Hours: 3

Lab Hours: 3

Prerequisites: ~~ENGL 85A or ENGL 85AC or ENGL 85E~~ ENGL 01A.

Limitations on Enrollment: This course is not open to students having a C or better in BIOL-04A.

This course is an introduction to the principles of biology with an emphasis on humans. Topics covered include scientific method, cell structure and function, biochemistry, metabolism, cell division, heredity, biotechnology, evolution, anatomy and physiology of the human body, development and aging, disease, and ecology. This course is recommended for allied health students. (5/19)

BIOL-04A: Fundamentals of Biology: The Cell and Evolution

Designations: (C-ID BIOL 190) (CSU breadth area B2/B3) (IGETC area 5B/5C)

Unit(s): 4

Lecture Hours: 3

Lab Hours: 3

Prerequisites: CHEM 04A; MATH C or MATH 61 or MATH 62.

Advisories: BIOL 01 or BIOL 02; ENGL 85A or ENGL 85AC or ENGL 85E.

This course is a study of the principles of biology. Areas of study will include aspects of the philosophy of science, the chemistry of life, the cell and cellular organization, biological membranes, energy transfer including photosynthesis and cellular metabolism, mitosis/meiosis, and molecular biology. Genetics will include Mendelian genetics, human genetics and Biotechnology. This course is intended for science majors for pre-medical, pre-veterinarian, pre-dental, pre-optometry, and pre-pharmacy majors. (2/18)

BIOL-04B: Diversity of Life: Morphology and Physiology

Designations: (C-ID BIOL 140) (CSU breadth area B2/B3) (IGETC area 5B/5C)

Unit(s): 5

Lecture Hours: 3

Lab Hours: 6

Prerequisites: BIOL 04A

This course is the second semester of a two-semester sequence of general biology for biology majors. This course will cover the origins of life, evolutionary history, biological diversity, plant form and function, animal form and function, and ecology. This course is intended for science majors and for pre-medical, pre-veterinarian, pre-dental, pre-optometry, and prepharmacy majors. (11/15)

BIOL-06: Environmental Science

Designations: (CSU breadth area B2) (IGETC area 5B)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This introductory course examines Earth as an ecosystem composed of biological, chemical, and physical processes with emphasis on man's impact on the planet. Topics include the structure and function of

ecosystems, bio-diversity, the impact of industrialization and urbanization, energy, populations, resources, pollution, pesticides, and risk/benefit assessment. (10/04)

BIOL-09: Introduction to Genetics

Designations: (CSU breadth area B2)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Prerequisites: None.
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is an introductory study of genetic principles, inheritance, variation, and evolution in plants and animals. This course includes the study of Mendelian genetics, molecular genetics, and population genetics. Recent research innovations explored include genetic engineering. (9/17)

BIOL-16: General Human Anatomy

Designations: (C-ID BIOL 110) (CSU breadth area B2/B3) (IGETC area 5B/5C)
Unit(s): 4
Lecture Hours: 2
Lab Hours: 6
Prerequisites: BIOL 01 or BIOL 02 or BIOL 04A; ENGL 85A or ENGL 85AC or ENGL 85E.

This course is an intensive study of the structure of the human body. Consideration is given to the skeletal, muscular, circulatory, respiratory, digestive, excretory, reproductive, and nervous systems. Special emphasis is placed on the needs of students majoring in biology, nursing, physical education, and medical sciences. (9/13)

BIOL-18: Principles of Physiology

Designations: (C-ID BIOL 120) (CSU breadth area B2/B3) (IGETC area 5B/5C)
Unit(s): 4
Lecture Hours: 3
Lab Hours: 3
Prerequisites: BIOL 01 or BIOL 02 or BIOL 04A or BIOL 16; CHEM 02A; ENGL 85A or ENGL 85AC or ENGL 85E ; MATH C or MATH 61 or MATH 62.

This course is a general lecture and laboratory course in human physiology, including a study of blood and circulation, respiration, muscle activity, endocrine glands, digestion, excretion, and the functions and activities of the brain, nerves, and sense organs. (2/18)

BIOL-20: Microbiology

Designations: (CSU breadth area B2/B3) (IGETC area 5B/5C)
Unit(s): 4
Lecture Hours: 2
Lab Hours: 6
Prerequisites: BIOL 01 or BIOL 02 or BIOL 04A; CHEM 02A; ENGL 85A or ENGL 85AC or ENGL 85E.

This is an introductory course familiarizing students with basic laboratory techniques and fundamental topics of microbiology. Laboratory work includes aseptic techniques, staining procedures, biochemical characterization, serology, and DNA technology used in the identification of microorganisms. Lecture topics consist of a historical overview, genetics, metabolism, cell physiology, growth requirements, immunology, and host/parasite interactions between humans and bacteria, viruses, protozoa, and helminths. The course is designed for students in any of the allied health professions. (11/15)

BIOL-32: Introduction to Biotechnology

Designations: (IGETC area 5B) (CSU breadth area B2/B3)
Unit(s): 4
Lecture Hours: 4
Lab Hours: 0
Advisories: ENGL 01A; MATH C or MATH 61 or MATH 62 or MATH 88 .

This is an introductory course in the theory and principles of biotechnology and how the field applies to meeting the needs of today's world. Topics covered within the lectures include the application of Biotechnology

in medicine, microbial engineering, biomanufacturing, bioremediation, agriculture and biofuels. In addition, the specialized fields of stem cells, personalized therapies in medicine, forensics and agricultural biotechnology are covered. The discussion section of the course will incorporate active student involvement in genetic database searches, patent applications, market analysis and will focus on how biological research can be translated into solutions for current world problems. (2/18)

BIOL-32L: Introduction to Biotechnology Lab

Designations: (IGETC area 5C)
Unit(s): 2
Lecture Hours: 0
Lab Hours: 6
One-way Corequisite: BIOL 32. 2+2 students require a grade C.
Advisories: ENGL 01A; MATH C or MATH 61 or MATH 62 or MATH 88 .

This lab is the required partner to BIOL 32 for students pursuing the Biotechnology A.S. or certificate degrees. (2/18)

BIOL-33: Biotechnology II: Advanced Laboratory Techniques and Theory

Unit(s): 4
Lecture Hours: 2
Lab Hours: 6
Prerequisites: BIOL 09, BIOL 32, and BIOL 32L.
Advisories: BIOL 20; ENGL 85A or ENGL 85AC or ENGL 85E.

An advanced course on techniques in biotechnology. This course is designed to build upon the skills developed in Biology 31. The course will cover PCR, restriction enzyme digest, subcloning, gene expression, genomic library construction, primary cell culture, mammalian cell expression systems, Southern and Western blotting, and protein quantization. Field trips may be required (2/18)

BIOL-50: Survey of Anatomy and Physiology

Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Prerequisites: ~~ENGL 85A or ENGL 85AC or ENGL 85E~~ ENGL 01A.

This is a course in basic anatomy and physiology of the human body. It is designed as an elementary course for students with limited background in science or biology. (2/19)

BUSINESS

BUS-10: Introduction to Business

Designations: (C-ID BUS 110)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Advisories: AOM 30; ENGL 85A or ENGL 85AC or ENGL 85E.

This survey course is an overview of all aspects involved in business. It covers economic foundations, types of business organizations, marketing, money and banking, and finance. This information will be integrated and related to social, political, legal, and international matters affecting the United States. (2/11)

BUS-18A: Business Law

Designations: (C-ID BUS 125)
Unit(s): 4
Lecture Hours: 4
Lab Hours: 0
~~Prerequisites: BUS 10; ENGL 85A or ENGL 85AC or ENGL 85E.~~
Advisories: ENGL 01A BUS 10.

This course is a study of legal principles that govern the conduct of business. Included are surveys of the essential elements of legal history and jurisprudence; judicial, administrative, and alternative dispute resolution; ethics; business crime; torts; contracts and the UCC; bankruptcy; agency relationships; property; administrative law; labor and employment law; international law. Introduction to legal research and brief-writing are also included. (5/19)

BUS-35: Money Management

Unit(s): 3
Lecture Hours: 3
Lab Hours: 0

Advisories: ENGL 85A ENGL 85AC ENGL 85E; MATH 80.

This course offers instruction in basic financial, career and life planning. Areas of study include income distribution; occupational earnings; wise buying; credit and borrowing; insurance; housing; savings and investments; taxes; and retirement and planning. (12/15)

BUS-49A-ZZ: Special Topics in Business

Unit(s): .5-3
Lecture Hours: .5 -3
Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This is a course designed to address special topics in business to meet the current needs of students. It will provide the students with access to instruction that will assist them in acquiring the most up-to-date information possible in order to cope with the rapidly changing business and economic environment. (2/07)

BUSINESS (NONCREDIT)**BUSN-749: Microcomputers and Business**

Unit(s): 720 Total, Open Entry
Advisories: None.

~~This program is a project-based course designed to develop student entry-level skill proficiency in using state-of-the-art technology to solve problems. Various simulations reflective of real life experiences will be a major part of the instructional units.~~

This entry-level course is designed for the adult student who desires vocational training in the field of Technical Office Occupations. The course is project-based to develop student entry-level skill proficiency in using state of the art technology to solve problems. Various simulations reflective of real life experiences will be a major part of the instructional units. The course is 720 hours in duration and is open entry format. (3/19)

BUSN-752: Introduction to Microcomputers

Unit(s): 24 Total, Open Entry

This course will introduce students to microcomputers and the Windows software environment. Students will learn to identify the components of desktop screens, learn to execute basic computer commands. The class may also cover internet browsing, e-mail, website navigation, and downloading files. This course is 24 hours in duration. (12/18)

BUSN-756: Introduction to Microcomputers

Unit(s): 450, Open Entry

This entry-level course is designed for the adult students who desires vocational training in the field of Technical Office Occupations. This course will introduce students to microcomputers and the Windows software environment. Students will learn to identify the components of desktop screens and learn to execute basic computer commands. The class will also cover internet browsing, email, website navigation, and downloading files. The course is project-based to develop student entry-level skill proficiency in using Microsoft Office Word, PowerPoint and Excel. Various simulations reflective of real life experiences will be a major part of the instructional units. The course is 450 hours in duration and is open entry format. (5/16)

CHEMISTRY**CHEM-02A: Introductory Chemistry**

Designations: (CSU breadth area B1/B3) (IGETC area 5A/5C) (C-ID CHEM 101)

Unit(s): 4
Lecture Hours: 3
Lab Hours: 3

Prerequisites: MATH C or MATH 61 or MATH 62.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This is an introduction to the general principles of inorganic chemistry, atomic and molecular structure, states of matter, solutions, and radioactivity.

The class is designed for students majoring in liberal studies; nursing or agriculture. (2/18)

CHEM-02B: Introductory Chemistry: Introduction to Organic and Biochemistry

Designations: (CSU breadth area B1/B3) (IGETC area 5A/5C)

Unit(s): 4
Lecture Hours: 3
Lab Hours: 3

Prerequisites: CHEM 02A; MATH C or MATH 61 or MATH 62.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E ; LRNR 30.

This is a continuation of CHEM 02A with emphasis on organic and biochemistry. The structure, nomenclature, and properties of organic compounds such as: alkanes, alkenes, arenes, alcohols, thiols, amines, aldehydes, ketones, carboxylic acids and their derivatives are covered. Structure, properties and reactions of biochemical compounds such as carbohydrates, proteins, and lipids are covered and followed through major and minor metabolic pathways. This course is intended for students in liberal studies, agriculture, and health-related fields. It is not for chemistry or science majors. (3/18)

CHEM-04A: General Chemistry I

Designations: (CSU breadth area B1/B3) (IGETC area 5A/5C) (C-ID CHEM 110/120)

Unit(s): 5
Lecture Hours: 3
Lab Hours: 6

Prerequisites: CHEM 02A; MATH C or MATH 61 or MATH 62.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is designed to teach general principles of chemistry emphasizing nomenclature, chemical equations, stoichiometry, concentration, gas laws, atomic structure, bonding, intermolecular forces, and crystalline solids. It is designed for the student majoring in chemistry, physics, biology, engineering, pre-med, or related fields. A student who has not successfully completed the prerequisite of CHEM 02A but has completed a high school chemistry course with a grade of "B" or higher may consider submitting a prerequisite challenge. (2/18)

CHEM-04B: General Chemistry II

Designations: (CSU breadth areas B1/B3) (IGETC area 5A/5C) (C-ID CHEM 120)

Unit(s): 5
Lecture Hours: 3
Lab Hours: 6

Prerequisites: CHEM 04A

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This is a continuation of the general principles of chemistry, with emphasis on kinetics, chemical equilibria, thermodynamics, electrochemistry, nuclear chemistry and transition metal complexes. An introduction to the principles of organic chemistry is included. The lab provides the student with experience in qualitative and quantitative analysis. (2/14)

CHEM-12A: Organic Chemistry I

Designations: (C-ID CHEM 150/160)

Unit(s): 5
Lecture Hours: 3
Lab Hours: 6

Prerequisites: CHEM 04B.

Advisories: ENGL 01A.

This course is a study of the theory and practice of organic chemistry examining the bonding, structure, stereochemistry, nomenclature, properties, and reactions of hydrocarbons and organic halides. Addition, substitution, elimination, and rearrangement reactions are examined. Corresponding mechanisms and energy diagrams are included in the study. Nuclear magnetic resonance, infrared, ultra-violet and mass spectroscopy are introduced as structural elucidation techniques. The laboratory includes the study of organic laboratory techniques including the synthesis of organic compounds, separation, characterization, identification, purification, and the use of related instrumentation. This course is directed toward students in science and pre-professional preparation. (5/17)

CHEM-12B: Organic Chemistry II

Designations: (C-ID CHEM 160)

Unit(s): 5

Lecture Hours: 3

Lab Hours: 6

Prerequisites: CHEM 12A

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is a continuation of CHEM 12A expanding the study of organic chemistry to include aromatic hydrocarbons, alcohols, ethers, thiols, sulfides, aldehydes, ketones, carboxylic acid and derivatives, amines and an introduction to the biochemistry of carbohydrates, proteins, and lipids. Included is a further examination of the use of IR, NMR, GC, and Mass Spectroscopy in the identification of organic substances. In the laboratory portion of the course emphasis is placed on the reactions, synthesis, purification, characterization, spectroscopy, and qualitative tests of organic substances. This course is directed toward students in science and preprofessional preparation. (5/09)

CHILD DEVELOPMENT**CLDV-01: Child Growth and Development**

Designations: (C-ID CDEV 100) (CSU breadth area D/E) (IGETC area 4)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E.

This introductory course examines the major physical, psychosocial, and cognitive/language developmental milestones for children, both typical and atypical, from conception through adolescence. There will be an emphasis on interactions between maturational processes and environmental factors. While studying developmental theory and investigative research methodologies, students will observe children, evaluate individual differences and analyze characteristics of development at various stages. (11/11)

CLDV-02: Child, Family and Community

Designations: (C-ID CDEV 110) (CSU breadth area D/E) (IGETC area 4)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E .

This course studies the importance of the socialization of children and how society supports and empowers families. Emphasis will include the role of family, peers, school/child care, media, community and culture and the influence these socializing agents have on children from diverse backgrounds. (3/15)

CLDV-03: Principles and Practices of Teaching Young Children

Designations: (C-ID ECE 120)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

One-way Corequisite: CLDV 01

An examination of the underlying theoretical principles of developmentally appropriate practices applied to programs, environments, emphasizing the key role of relationships, constructive adult-child interactions, and teaching strategies in supporting physical, social, creative and intellectual development for all young children. This course includes a review of the historical roots of early childhood programs and the evolution of the professional practices promoting advocacy, ethics, and professional identity. (3/12)

CLDV-04: Observation and Assessment

Designations: (C-ID ECE 200)

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Prerequisites: CLDV 01

One-way Corequisite: CLDV 03

Limitations on Enrollment: students must provide immunization documentation as required by California State law to work or volunteer in a child care facility.

Advisories: ENGL 01A

This course focuses on the appropriate use of a variety of assessment and observation strategies to document child development and behavior. Child observations will be conducted and analyzed. (9/16)

CLDV-05: Health, Safety and Nutrition

Designations: (C-ID ECE 220)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E.

Advisories: ENGL 01A

This course is an introduction to laws, regulations, standards, policies and procedures as related to early childhood curriculum. The key components that ensure physical and mental health and safety for both children and staff will be identified; Specifically examining the importance of collaboration with families and health professionals. A focus of integrating the concepts of health, safety and nutrition applicable to daily planning and program development is explored. (12/16)

CLDV-06: Teaching in a Diverse Society

Designations: (C-ID ECE 230)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E.

This course examines societal and personal attitudes, beliefs, values, assumptions and biases about culture, language, identity, family structures, ability, and socioeconomic status. Students will demonstrate strategies for helping children negotiate and resolve conflicts with a focus on using an anti-bias approach in the classroom. (2/17)

CLDV-07: Introduction to Curriculum for the Young Child

Designations: (C-ID ECE 130)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

One-way Corequisite: CLDV 03

Advisories: ENGL 01A

This course presents an overview of knowledge and skills related to providing appropriate curriculum and environments for young children. Students will examine a teacher's role in supporting development and engagement for all young children. This course provides strategies for developmentally-appropriate practice based on observation and assessments across the curriculum: 1) academic content areas; 2) play, art, and creativity; and 3) development of social-emotional, communication, and cognitive skills. (9/15)

CLDV-07L: Practicum

Designations: (C-ID ECE 210)

Unit(s): 3

Lecture Hours: 1

Lab Hours: 6

Prerequisites: CLDV 01, CLDV 02, CLDV 03, CLDV 04, CLDV 07 .

Limitations on Enrollment: students must provide immunization documentation as required by California State law to work or volunteer in a child care facility.

In this course the student will practice and demonstrate developmentally appropriate early childhood program planning and teaching competencies under the supervision of ECE/CD faculty and other qualified early education professionals. Students will utilize practical classroom experiences to make connections between theory and practice, develop professional behaviors, and build a comprehensive understanding of children and families. Child centered, play-oriented approaches to teaching, learning, and assessment; and knowledge of curriculum content areas will be emphasized as student teachers design, implement and evaluate experiences that promote positive development and learning for all young children. (9/16)

CLDV-09: Human Development

Also: (PSYC 09)

Designations: (C-ID PSY 180) (CSU breadth area E)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E ENGL 01.

This course is an introduction to the scientific study of human development from conception through death. It examines interplay of biological, psychological, social, and cultural forces on the developing human being. (4/19)

CLDV-10: Strategies for Working with Challenging Behaviors

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

Appropriate for classroom teachers in various settings, students will identify developmentally appropriate behaviors, challenging behaviors and the various influences that effect children's behavior. Students will analyze children's behaviors and select strategies to make positive changes. Emphasizes the connection between children's social and emotional development and their success in the classroom, and how the teachers' perceptions, experiences, and behavior influence child behaviors. (10/17)

CLDV-11: Introduction to Curriculum & Strategies in Early**Intervention**

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Prerequisites: CLDV 01

Limitations on Enrollment: Students must provide immunization documentation as required by California State law to work or volunteer in a child care facility.

This course covers curriculum and early intervention strategies for working with children with special needs in partnership with their families. Focuses on the use of observation and assessment in meeting the individualized needs of children in inclusive and natural environments. Includes the role of the teacher as a professional working with families, collaboration with interdisciplinary teams, and cultural competence.(10/17)

CLDV-24: Work Experience in Child Development

Unit(s): 1-8

Lecture Hours: 0

Lab: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course enables students to earn college credit for learning and/or improving skills or knowledge on-the-job. Occupational Work Experience is discipline specific and must connect to the student's major or occupational goal(s). Seventy-five (75) hours of documented paid work experience equals 1 unit of credit. Sixty (60) hours of documented volunteer experience equals 1 unit of credit. A student may enroll in up to 16 total units of work experience at Merced College. Students must have an established work site prior to enrolling in the course. (11/16)

CLDV-30: Infant and Toddler Development

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: CLDV 01.

A study of infants and toddlers from pre-conception to age three including physical, cognitive, language, social, and emotional growth and development. Applies theoretical frameworks to interpret behavior and interactions between heredity and environment. Emphasizes the role of family and relationships in development.

CLDV-30C: Infant/Toddler Curriculum

Unit(s): 2

Lecture Hours: 2

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is designed to help students guide children's learning by providing developmentally appropriate environment for infants and toddlers that invites play and active exploration. (11/12)

CLDV-30D: School-Age Curriculum

Unit(s): 2

Lecture Hours: 2

Lab Hours: 0

Advisories: CLDV-01; ENGL-85A or ENGL-85AC or ENGL-85E.

This course is designed to help Early Childhood Education students and practicing child care professionals create developmentally appropriate curriculum ideas for children in school-age programs, ages 5-12 years old. Students will do hands-on work with materials. (9/12)

CLDV-30L: Infant/Toddler Care and Education Practicum

Unit(s): 3

Lecture Hours: 1

Lab Hours: 6

Prerequisites: CLDV 30.

Limitations on Enrollment: Students must provide immunization documentation as required by California State Law to work or volunteer in a child care facility.

This laboratory experience offers students the opportunity to work in a supervised early childhood program with children from birth up to three years. Students will apply current theory and research to the care and education of infants and toddlers in group settings. Coursework examines essential policies, principles and practices that lead to quality care and developmentally appropriate curriculum for children birth to 36 months. (9/16)

CLDV-33: Working Effectively With Families

Unit(s): 1

Lecture Hours: 1

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This is a course designed for students who are interested in working with families in child care, early childhood and other school settings. Students will examine the diversity of families, effective home-school-community relationships and effective teacher-family communication. (9/15)

CLDV-34A: Administration I: Programs in Early Childhood Education**Early Childhood Programs and Operations**

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 01A

This course is an introduction to the administration of early childhood programs. It covers program types, budget management, regulations, laws, development and implementation of policies and procedures. It examines administrative tools, philosophies, and techniques needed to organize, open, and operate an early care and education program. (2/19)

CLDV-34B: Administration and Supervision of ECE Programs-Part B**Administration II: Early Childhood Leadership and Advocacy**

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: CLDV 34A

Advisories: ENGL 01A

~~This advanced administration course is designed to give students an indepth look at more complex administrative practices in Early Childhood settings. Emphasis of this course will be placed on fiscal management, policy-making, operational maintenance, health and safety, food/nutrition services and maintaining quality. (11/15)~~

This course is an advanced early childhood programs administrative course. It covers effective strategies for leadership, advocacy, and personnel management, in early care and education settings. Includes legal and ethical responsibilities, supervision techniques, professional development, and reflective practice for diverse, inclusive, and equitable early care and education programs. (2/19)

CLDV-37: Adult Supervision and Mentoring in Early Care and**Education**

Unit(s): 2

Lecture Hours: 2

Lab Hours: 0

Advisories: ~~ENGL 85A or ENGL 85AC or ENGL 85E~~ CLDV 01 OR ENGL 01A.

This course is a study of the methods and principles of supervising student teachers, volunteers, staff, and other adults in early care and education settings. Emphasis is on the roles and development of early childhood professionals as mentors and leaders. (4/19)

CLDV-38: Children With Special Needs

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: CLDV 01.

Introduces the variations in development of children with special needs ages birth through eight and the resulting impact on families. Includes an overview of typical and atypical development, historical and societal influences, laws relating to children with special needs, and the identification and referral process. (10/17)

CLDV-41: Infant and Toddler Feeding

Also: (NUTR 41)

Unit(s): 1

Lecture Hours: 1

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course focuses on feeding typical and atypical developing infants beginning at birth with breast milk, formulas, first foods and progresses to textures and foods appropriate for the toddler. Course focuses on how to feed a baby, prevent baby bottle tooth decay and choking prevention. Students will learn about appropriate snacks, food safety aspects and food preparation for children with varying needs. Finally students will have the opportunity to design an age appropriate menu meeting the Child Care Food Program Guidelines. This course is recommended for child development and foods and nutrition students (11/15)

CLDV-54: Sexual Development of Young Children

Unit(s): 1

Lecture Hours: 1

Lab Hours: 0

Prerequisites: CLDV 01

Addressing healthy sexual development of young children may be awkward and uncomfortable for most adults. This course identifies stages of sexual development from infancy to adolescence. Students will learn techniques in how to address children's sexual development by utilizing accurate, age appropriate information to children to develop healthy, safe and secure attitudes of their bodies. (9/15)

CLDV-56: School-Age Development

Unit(s): 2

Lecture Hours: 2

Lab Hours: 0

Prerequisites: CLDV 03

This introductory course on school-age development covers an overview of school-age care; the school-age professional; school-age theory and development ages 5-13; current issues facing school-age children; guidance of school-age children; regulations and program quality; and developing partnerships with communities and families. Students will participate in observations of school-age children and programs. (12/04)

CLDV-56L: School-Age Development Lab

Unit(s): 2

Lecture Hours: 0

Lab Hours: 6

One-way Corequisite: CLDV 56.

Limitations on Enrollment: Students must have a negative result on a TB test within the past four years.

School-age programs will be studied for purposes of planning experiences

which encourage physical, mental, social and emotional growth. The laboratory will consist of supervised work in a selected school-age care program and is designed to offer students continued and increased opportunities in working with children ages 5-12 years old. This course is required for the School-Age Certificate. (9/12)

CLDV-57: Child Abuse and Neglect

Unit(s): 1

Lecture Hours: 1

Lab Hours: 0

Advisories: CLDV 01; ENGL 85A or ENGL 85AC or ENGL 85E.

This course is designed to assist students and practicing professionals working with children and families understand the identification, treatment, and prevention of child abuse and neglect. (11/13)

CLDV-65A: Language and Literacy for Young Children

Unit(s): 1

Lecture Hours: 1

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is designed to introduce and apply the California Preschool Learning Foundations and Framework in the area of Language and Literacy. This course will guide teachers to visualize and consider how research and practices are appropriately implemented in Transitional Kindergarten (TK) and other early childhood preschool classrooms. Students will learn developmentally appropriate strategies providing children active learning experiences in language and literacy; including oral, writing and reading strategies. (5/16)

CLDV-65B: Math for Young Children

Unit(s): 1

Lecture Hours: 1

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is designed to introduce and apply the California Preschool Learning Foundation and Frameworks for Mathematics. This course will guide teachers to consider how research and best practices can be appropriately implemented in classrooms for Transitional Kindergarten (TK) and other preschool classes. Students will learn developmentally appropriate strategies providing children with the basic skills of mathematics: e.g. number sense, algebra and functions (classification and patterning), measurement, geometry, and mathematical reasoning. (5/16)

CLDV-65C: Everyday Science for Young Children

Unit(s): 1

Lecture Hours: 1

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This is a course designed to introduce and apply California Preschool Learning Foundation and Frameworks of Science. This course will guide teachers to visualize and consider how the research and practices can be appropriately implemented in classrooms for transitional kindergarten and other preschool classes. Participants will learn strategies about providing children with the basic skills of scientific inquiry, such as observing and describing, comparing and contrasting, classifying, experimenting and recording and using the scientific vocabulary associated with these skills. (5/16)

CLDV-65D: CA PS Foundations & Framework: History and Social Science

Unit(s): 1

Lecture Hours: 1

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

Introduction to the history and social science domain of the California Preschool Learning Foundations and Frameworks including strands of self and society, civics, history, geography, ecology, and economics. Provides practical strategies for implementing the curriculum frameworks developed for this domain. Applicable to required or professional development units for Child Development Permit holders, pre-school, transitional kindergarten, and early-primary teachers. (12/17)

CLDV-65E: CA Preschool Foundations & Frameworks: Social and Emotional

Unit(s): 1
Lecture Hours: 1
Lab Hours: 0
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

Introduction to the social and emotional development domain of the California Preschool Learning Foundations and Frameworks including the strands of self, social interaction, and relationships. Provides practical strategies for implementing the curriculum frameworks developed for this domain. Applicable to required or professional development units for Child Development Permit holders, pre-school, transitional required or professional development units for Child Development Permit holders, pre-school, transitional kindergarten, and early-primary teachers. (12/17)

CLDV-65F: CA Preschool Foundations & Frameworks: English Language Development

Unit(s): 1
Lecture Hours: 1
Lab Hours: 0
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

Introduction to the English language learners domain of the California Preschool Learning Foundations and Frameworks including strands of listening, speaking, reading and writing. Provides practical strategies for implementing the curriculum frameworks developed for this domain. Applicable to required or professional development units for Child Development Permit holders, pre-school, transitional or professional development units for Child Development Permit holders, pre-school, transitional kindergarten, and early-primary teachers. (12/17)

CLDV-65G: CA Preschool Foundations & Frameworks: Performing Arts

Unit(s): 1
Lecture Hours: 1
Lab Hours: 0
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

Introduction to the performing arts domain of the California Preschool Learning Foundations and Frameworks including strands of music, drama, and dance. Provides practical strategies for implementing the curriculum frameworks developed for this domain. Applicable to required or professional development units for Child Development Permit holders, pre-school, transitional kindergarten, and early-primary teachers. (12/17)

CLDV-65H: CA Preschool Foundations & Frameworks: Visual Arts

Unit(s): 1
Lecture Hours: 1
Lab Hours: 0
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

Introduction to the visual arts domain of the California Preschool Learning Foundations and Frameworks including artistic expression and response, and skills using various art mediums. Provides practical strategies for implementing the curriculum frameworks developed for this domain. Applicable to required or professional development units for Child Development Permit holders, preschool, transitional kindergarten, and early-primary teachers. (12/17)

CLDV-65I: CA Preschool Foundations & Frameworks: Physical Development

Unit(s): 1
Lecture Hours: 1
Lab Hours: 0
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

Introduction to the physical development domain of the California Preschool Learning Foundations and Frameworks including strands of fundamental movement skills, perceptual-motor skills and movement concepts, and active physical play. Provides practical strategies for implementing the curriculum frameworks developed for this domain. Applicable to required or Child Development Permit holders, pre-school, transitional kindergarten, and early-primary teachers. (12/17)

CLDV-65J: CA Preschool Foundations & Frameworks: Health

Unit(s): 1
Lecture Hours: 1
Lab Hours: 0
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

Introduction to the Health domain of the California Preschool Learning Foundations and Frameworks including strands of health habits, safety, and nutrition. Provides practical strategies for implementing the curriculum frameworks. Applicable to required or professional development units for Child Development Permit holders, as well as pre-school, transitional kindergarten, and early-primary teachers. (12/17)

CLDV-70A-ZZ: Special Topics in Child Development

Unit(s): 1-3
Lecture Hours: 1-3
Lab Hours: 0-9

This is a course designed to address special topics in Child Development to meet current needs of students. Specific classes will be offered to help them cope with the rapidly-changing environment and its effect on everyday living. (12/04)

COLLEGE**COLL-10: First Year Seminar**

Designations: (CSU breadth area E)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Advisories: ENGL 84A or ENGL 84E.

This multidisciplinary course provides first time college students with the habits of mind necessary to develop lifelong problem-solving abilities in their academic, social, and personal lives. This course introduces critical thinking, information literacy, higher education resources, and motivating factors for college success. (5/17)

COLL-53: Orientation and Strategies for College Success

Unit(s): 1
Lecture Hours: 1
Lab Hours: 0

The course is designed to orient students to Merced College and introduce practical strategies for college success. Topics addressed will include: Orientation; Assessment and Awareness of Values, Choices and Behaviors that Impact College Success; Understanding the College Catalog, College Policies, and Campus Resources; Navigating Technology; Goal Setting; Study Strategies; and Clarifying Major/Career Pathways in relation to the students' intended "School of" study.(12/18)

COLL-54: Math Strategies

Unit(s): 1
Lecture Hours: 1
Lab Hours: 0

This comprehensive course is designed for students who need additional instruction in compensatory strategies that typically lead to success within the traditional classroom. Specialized instruction will occur in formulating efficient personal, test-taking and study strategies specifically related to learning math.(5/19)

COMMUNICATION STUDIES**COMM-01: Fundamentals of Speech**

Designations: (C-ID COMM 110) (CSU breadth area A1) (IGETC area 1C-CSU only)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is designed to instruct students in the fundamentals of composing, preparing and presenting speeches in front of audiences. The focus will be on researched speeches to inform and persuade. By the end

of the course, students should be speaking confidently and skillfully and should be able to transfer their understanding and skills from the classroom to "real world" situations. (9/13)

COMM-01H: Honors Fundamentals of Speech

Designations: (C-ID COMM 110) (CSU breadth area A1) (IGETC area 1C - CSU only)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E.

Limitations on Enrollment: Enrollment in the Honors Program. See the college catalog for a description of admission requirements.

This course is designed to instruct students in the fundamentals of composing, preparing and presenting speeches in front of audiences. The focus will be on researched speeches to inform and persuade. By the end of the course, students should be speaking confidently and skillfully and should be able to transfer their understanding and skills from the classroom to "real world" situations. (9/13)

COMM-02: Oral Interpretation

Also: (ENGL-02)

Designations: (C-ID COMM 170)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is designed to introduce students to performance studies through analysis, appreciation, and application of interpretive performance of the various forms of literature: poetry, prose and drama. (10/12)

COMM-04: Small Group Discussion and Problem Solving

Designations: (C-ID COMM 140) (CSU breadth area A1) (IGETC area 1C - CSU only)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E.

This is a course designed to help students develop critical thinking and oral presentation skills for communicating and working together on small group tasks. Emphasis is placed on problem-solving, reasoning, conflict resolution, and leadership. (02/18)

COMM-05: Interpersonal Communication

Designations: (C-ID COMM 130) (CSU breadth area A1)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E.

The focus of this course is to examine successful verbal and nonverbal communication in interpersonal relationships. Communication theory and skills will be investigated in order to help students interact more effectively in personal and professional relationships. (4/12)

COMM-30: Introduction to Intercultural Communication

Designations: (C-ID COMM 150) (CSU breadth area D) (IGETC area 4)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is designed to examine the basic concepts, principles, and their application to communication between persons from different minority, ethnic, and co-cultural backgrounds within the United States and in the international arena through the scope of interpersonal communication skills. This class will assist in the understanding and evaluation of barriers to communicating with people from other cultures, which include ethnocentrism, prejudice, and lack of awareness. (10/07)

COOPERATIVE EDUCATION**COOP-41A: Cooperative Education in (Subject)**

Unit(s): 1-4

Lecture Hours: 1-4 hours weekly

Lab Hours: 0

Advisories: ENGL-85.

Cooperative work experience education is a process of education that combines work experience with regular college instruction as an integral part of the community college curriculum. Cooperative Education allows students the opportunity to benefit from practical application in a job setting within their major area, or will allow students to sample an experience in a career field the student may be considering. A student may enroll in Cooperative Education for a maximum of four semesters, and no more than 16 units may be earned at Merced College. Seventy-five hours of work experience (or 60 hours volunteer work) equal one unit of college credit. Cooperative education units are offered in many areas. The number of units (1, 2, 3, or 4) the student will be enrolled in will be determined by the number of hours the student will work during the semester. In order to participate in the Cooperative Education Program, a student must (a) have on-the-job experience that contributes to occupational or educational goals; (b) be enrolled in Cooperative Education; (c) have the approval of the Cooperative Education Coordinator; and (d) have the cooperation of the employer in including new or expanded responsibilities or learning opportunities on the job for which the student is enrolled in Cooperative Education. (11/13)

COOP-41B: Cooperative Education in (Subject)

Unit(s): 1-4

Lecture Hours: 1-4 hours weekly

Lab Hours: 0

Prerequisites: COOP 41A

Advisories: ENGL-85.

See COOP 41A above. (11/13)

COOP-41C: Cooperative Education in (Subject)

Unit(s): 1-4

Lecture Hours: 1-4 hours weekly

Lab Hours: 0

Prerequisites: COOP 41B

Advisories: ENGL-85.

See COOP 41A above. (11/13)

COOP-41D: Cooperative Education in (Subject)

Unit(s): 1-4

Lecture Hours: 1-4 hours weekly

Lab Hours: 0

Prerequisites: COOP 41C

Advisories: ENGL-85.

See COOP 41A above. (11/13)

COMPUTER SCIENCE**CPSC-01: Introduction to Computer Information Systems**

Designations: (C-ID ITIS 120)

Unit(s): 4

Lecture Hours: 3

Lab Hours: 3

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH C.

An introduction to the basics of computing systems, impact of computers on our society, and the future of computing. Focus on using applications, algorithm design, programming basics, database management systems, networking, ethics and security, information systems, internet and web technologies, and computer systems hardware and software components. Application of these concepts and methods through hands-on projects developing computer-based solutions to problems. (12/18)

CPSC-05A: Application Development and Programming

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: Advisory ENGL 85A or ENGL 85AC or ENGL 85E .

An introduction to the fundamental concepts and models of application development including the basic concepts of program design, data structures, programming, problem solving, programming logic, and fundamental design techniques for event-driven programs. Hands-on experience with a modern application programming language and development platform. (1/14)

CPSC-06: Programming Concepts and Methodology I

Designations: (C-ID COMP 122)

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Prerequisites: MATH C or MATH 61.

Advisories: CPSC 01; ENGL 85A or ENGL 85AC or ENGL 85E.

This course introduces the discipline of computer science using a high level language; provides an overview of computer organization and an introduction to software engineering. Topics include methodologies for program design, development, style, testing, and documentation; algorithms, control structures, methods, and elementary data structures. These skills will be used to solve a variety of application problems. (2/18)

CPSC-07: Discrete Structures

Also: (MATH 07)

Designations: (IGETC area 2) (CSU breadth area B4) (C-ID COMP 152)

Unit(s): 3

Lecture Hours: 25

Lab Hours: 1.5

Prerequisites: CPSC 06 or ENGR 14 or CPSC 14; MATH 04A.

This course is an introduction to the discrete structures used in Computer Science with an emphasis on their applications. Topics covered include: functions, relations and sets; basic logic; proof techniques; basics of counting; graphs and trees; and discrete probability. (12/15)

CPSC-14: C++ Programming

Also: (ENGR 14)

Designations: (C-ID COMP 122)

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Prerequisites: MATH C or MATH 61.

Advisories: CPSC 01; ENGL 01A.

This is the entry-level comprehensive concepts course for computer science majors and recommended for science and math majors. Algorithm design, logic diagrams, problem solving, coding and debugging are emphasized using a structured language such as C++. (2/18)

CPSC-17: Drone Technology I

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This class is a basic introduction to drone technology. Lab involves construction and repair of a drone including the software used to manage data and fly. This course will also prepare students to successfully pass the FAA aeronautical knowledge test and receive Remote Pilot Certification. (12/17)

CPSC-18: Drone Technology II

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Prerequisites: CPSC 06 or CPSC 14 or ENGR 14.

Advisories: CPSC 17.

This class covers drone technology data acquisition and analysis. Several different sensors and data analysis applications will be utilized. (12/17)

CPSC-39: Programming Concepts and Methodology II

Designations: (C-ID COMP 132)

Unit(s): 4

Lecture Hours: 3

Lab Hours: 3

Prerequisites: CPSC 06 or ENGR 14 or CPSC 14.

Advisories: ENGL 01A

This course is a continuation course in Computer Science which introduces further aspects of software design and implementation. Abstract data types, fundamental data structures and associated algorithms: lists, stacks, queues and trees. Students will be expected to design, implement, test and analyze a number of programs. (12/12)

CPSC-42: Computer Architecture and Organization

Designations: (C-ID COMP 142)

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Prerequisites: CPSC 06 or ENGR 14 or CPSC 14.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

The organization and behavior of real computer systems at the assembly-language level. The mapping of statements and constructs in a high-level language onto sequences of machine instructions is studied, as well as the internal representation of simple data types and structures. Numerical computation is examined, noting the various data representation errors and potential procedural errors. (12/12)

~~CPSC-40A: Networking for Home and Small Businesses~~

~~CPSC-45A: Introduction to Networking~~

~~Also: (ELCT 40A)~~

~~Unit(s): 3~~

~~Lecture Hours: 2~~

~~Lab Hours: 3~~

~~Advisories: ELCT 51A; ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80 or MATH 85.~~

~~This course prepares students for jobs as network technicians. Students develop soft skills required for computer and help desk technicians. Basic configurations of routing, remote access, addressing, and security are applied to routers and switches. Network monitoring and basic troubleshooting skills are examined.~~

~~This curriculum helps students develop the skills needed to obtain entry-level networking jobs. It provides a hands-on approach to networking education that allows students to gain practical experience working on PC's, their components, and applications. Students complete instructional labs to understand the general theory needed to build networks and connect them to the internet. Basic security and wireless concepts are covered. This course is for students with basic PC usage skills. (2/19)~~

~~CPSC-40B: Working at a Small-To-Medium-Business-or-ISP~~

~~CPSC-45B: CCNA Routing and Switching~~

~~Also: (ELCT 40B)~~

~~Unit(s): 3~~

~~Lecture Hours: 2~~

~~Lab Hours: 3~~

~~Prerequisites: ~~CPSC-40A or ELCT 40A. CPSC-45A or ELCT-45A.~~~~

~~This course prepares students for jobs as network technicians. Students develop soft skills required for computer and help desk technicians. Basic configurations of routing, remote access, addressing, and security are applied to routers and switches. Network monitoring and basic troubleshooting skills are examined. (2/19)~~

CPSC-49A-ZZ: Special Topics in Computer Studies

Unit(s): 0.5 - 3

Lecture Hours: 0.5-3

Lab Hours: 0 - 6

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

These series of courses are designed to provide opportunities for students to further develop their computing skills. Students may petition, through the Office of Admissions and Records, to retake the course as the topics change. (2/14)

CRIMINAL JUSTICE

CRIM-01: Criminology

Designations: (C-ID SOCI 160) (CSU breadth area D)
 Unit(s): 3
 Lecture Hours: 3
 Lab Hours: 0
 Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is an analysis of the nature and patterning of criminality and theories of criminal behavior. Crime control policies are critically examined regarding linkages among 1) social conflicts and inequalities, 2) criminal laws and enforcement practices, and 3) social deviance. (11/14)

CRIM-02: Introduction to Criminal Justice

Designations: (C-ID AJ 110)
 Unit(s): 3
 Lecture Hours: 3
 Lab Hours: 0
 Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E.

The course will emphasize the three major components of the system: court, corrections, law enforcement, and will then examine the role of each. This course pertains to the history and philosophy of criminal justice in America. (11/16)

CRIM-03: Criminal Procedures

Designations: (C-ID AJ 122)
 Unit(s): 3
 Lecture Hours: 3
 Lab Hours: 0
 Prerequisites: CRIM 02; ENGL 85A or ENGL 85AC or ENGL 85E.

This course covers the examination of due process from pre-arrest through trial and appeal. The history of due process and precedent will be examined through statutory law and interpretations of law reflected in court decisions with particular focus upon the impact of interpretations of Fourth, Fifth, Sixth, Eighth, and Fourteenth Amendments. (10/15)

CRIM-04: Criminal Law

Designations: (C-ID AJ 120)
 Unit(s): 3
 Lecture Hours: 3
 Lab Hours: 0
 Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E.
 One-way Corequisite: CRIM 02.

This course offers an analysis of the doctrines of criminal liability in the United States and the classification of crimes against persons, property, morals, and public welfare. Special emphasis is placed on the classification of crime, the general elements of crime, the definitions of common and statutory law, and the nature of acceptable evidence. This course utilizes case law and case studies to introduce students to criminal law. The completion of this course offers a foundation upon which upper-division criminal justice courses will build. The course will also include some limited discussion of prosecution and defense decision making, criminal culpability, and defenses to crime. (10/15)

CRIM-05: Community and Human Relations

Designations: (C-ID AJ 160)
 Unit(s): 3
 Lecture Hours: 3
 Lab Hours: 0
 Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E.
 One-way Corequisite: CRIM 02.

This course covers the relationship of criminal justice agents and the community; causal and symptomatic aspects of community understanding; lack of cooperation and mistrust; study of behavioral causes; and ways to develop and maintain amicable relationships within a diverse multicultural population. (10/15)

CRIM-06: Introduction to Evidence

Designations: (C-ID AJ 124)
 Unit(s): 3
 Lecture Hours: 3

Lab Hours: 0
 Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E.
 One-way Corequisite: CRIM 02.

This course is a study of the origin, development, philosophy, and constitutional basis of evidence; constitutional and procedural considerations affecting arrest; search and seizure; kinds and degrees of evidence and rules governing admissibility and exclusion of criminal evidence; judicial decisions interpreting individual rights, and case studies viewed from a conceptual level. (10/15)

CRIM-08: Introduction to Investigation

Designations: (C-ID AJ 140)
 Unit(s): 3
 Lecture Hours: 3
 Lab Hours: 0
 Prerequisites: CRIM 02.

This course covers the fundamentals of investigation; techniques procedures, and ethical issues of investigation of crime, including organization of the investigative process, crime scene searches, recording, collection, and preservation of physical evidence, interviewing and interrogating, surveillance, source of information, utility of evidence, scientific analysis of evidence and the role of the investigator in the trial process. (12/17)

CRIM-10: Writing for Criminal Justice

Unit(s): 3
 Lecture Hours: 3
 Lab Hours: 0
 Prerequisites: CRIM 02, CRIM 04.

This course covers the techniques of communicating facts, information, and ideas effectively in a simple, clear, and logical manner in the various types of criminal justice system reports: letters, memoranda, directives, and administrative reports. Emphasis is placed on criminal justice terminology, the use of English, and the organization of information. The student will also receive practical experience in note taking and report writing; and the preparation for the presentation of testimony in court. (11/14)

CRIM-11: Introduction to Corrections

Designations: (C-ID AJ 200)
 Unit(s): 3
 Lecture Hours: 3
 Lab Hours: 0
 Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course provides a critical analysis of punishment, the various types of punishment, alternatives to punishment, and the impact of punishment on the Criminal Justice System. A Critical examination of the types of Correctional Institutions and the clients housed in each institution are addressed. (12/14)

CRIM-24: Work Experience in Criminology

Unit(s): 1-8
 Advisories: ENGL 85A or ENGL 85E.

This course enables students to earn college credit for learning and/or improving skills or knowledge on-the-job. Occupational Work Experience is discipline-specific and must connect to the student's major or occupational goal(s). Seventy-five (75) hours of documented paid work experience equals 1 unit of credit. Sixty (60) hours of documented volunteer experience equals 1 unit of credit. A student may enroll in up to 16 total units of work experience at Merced College. Students must have an established work site prior to enrolling in the course. (2/19)

CRIM-30: Juvenile Procedures

Designations: (C-ID AJ 220)
 Unit(s): 3
 Lecture Hours: 3
 Lab Hours: 0
 Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E.
 One-way Corequisite: CRIM 01 or CRIM 02 or CRIM 11.

This course is an examination of the origin, development, and organization of the Juvenile Justice System as it evolved in the American Justice

System. The course explores the theories that focus on Juvenile Law, courts and processes, and the constitutional protections extended to juveniles administered in the American Justice System. (10/15)

CRIM-33: Violence in the Family

Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Advisories: CRIM 02; ENGL 85A or ENGL 85AC or ENGL 85E.

This course examines criminal law and the psycho-socio dynamics of child abuse, elder abuse, spousal abuse, and sexual assault. (12/09)

CRIM-35: Narcotics

Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Advisories: CRIM 02; ENGL 85A or ENGL 85AC or ENGL 85E.

This course is a review of the laws restricting and governing the use of narcotics and dangerous drugs, the psychological and physiological effects of the use and addiction to narcotics and dangerous drugs, and the procedures used to combat the problems facing law enforcement and society in relation to narcotics and dangerous drugs. (11/14)

CRIM-37: Communication and Ethics in Law Enforcement

Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Advisories: CRIM 02; ENGL 85A or ENGL 85AC or ENGL 85E.

This course covers the ethical issues created by the congruent and incongruent match of criminal justice philosophy and law enforcement practice. Effective communication styles for courtroom, testimony, interrogation, and verbal judo will be examined, evaluated, and practiced. (11/14)

CRIM-42C: Reserve Officer Module Level 3

Unit(s): 7
Lecture Hours: 108 Total
Lab Hours: 54 Total

Limitations on Enrollment: Students must be cleared by the California Department of Justice (DOJ) to participate. DOJ clearance is evaluated through the LiveScan fingerprint process. This clearance will reveal a qualifying/disqualifying criminal history background. In addition, there must be an absence of medical conditions that would prevent strenuous physical training during arrest and control methods training, use of force, and crimes in progress. A physician's clearance indicating good physical health must be presented to the instructor at the first class meeting. Students must possess a California Driver's License.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course meets the requirements of the State of California, Commission on Peace Officers Standards and Training (POST). It covers topics such as: ethics, professionalism, the criminal justice system, criminal law, property crimes, crime against persons, laws of arrest, laws of search and seizure, Investigative report writing, vehicle operations, use of force, crimes in progress, traffic enforcement, preliminary investigation, custodial issues, arrest and control methods including baton, first aid, CPR, chemical agents, information systems, and cultural diversity. In accordance with POST regulations, students missing more than 5% of class time will not be certified in this course. (1/13)

CRIM-42D: Reserve Officer Module Level 2

Unit(s): 10
Lecture Hours: 162 Total
Lab Hours: 54 Total
Prerequisites: CRIM 42C

Limitations on Enrollment: 1Students must be cleared by the California Department of Justice (DOJ) to participate. DOJ clearance is evaluated through the LiveScan fingerprint process. This clearance will reveal a qualifying/disqualifying criminal history background. 2The absence of medical conditions that would prevent strenuous physical training during arrest and control methods training, use of force, and crimes in progress. Physicians' clearance indicating good

physical health must be presented to instructor at first class meeting. 3 Student must possess a valid California Drivers' License.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course satisfies the Level 2 Modular Format Basic Course training requirements of the Commission on Peace Officer Standards and Training (POST). It covers community relations, victimology, crisis intervention, property crimes, crimes against persons, general criminal statutes, laws of arrest, laws of search and seizure, presentation of evidence, investigative report writing, use of force, patrol techniques, vehicle pullovers, crimes in progress, traffic enforcement, unusual occurrences, preliminary investigation, arrest and control methods-including baton, firearms, chemical agents, persons with disabilities, crimes against the justice system, weapons violations, hazardous materials, cultural diversity and discrimination issues. Students missing more than 5% of class time will not be allowed to complete the class (POST regulations). (1/13)

CRIM-49A-ZZ: Special Topics in Criminal Justice

Unit(s): 0.5 - 5
Lecture Hours: 0.5-8
Lab Hours: 0-4

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This is a course designed to address special topics in criminal justice to meet the current needs of students. The course will allow pre-service and in-service personnel to maintain the most current training standards in the field. (12/09)

CROP PRODUCTION

CROP-10: Elements of Cereal Grain Production

Unit(s): 3
Lecture Hours: 2
Lab Hours: 3

Advisories: ~~ENGL 85A or~~ ENGL 85AC ~~or ENGL 85E~~; MATH 80 ~~or MATH 85~~.

This is a study of production principles, which include botany, taxonomy, soil tillage, fertilization, variety and seed selection, pest management, harvest, processing, storage, and marketing for important fiber, food, and cereal crops in California. Covered crops will include cotton, sugar beets, wheat, rice, barley, sorghum, corn, oats, safflower, legumes for seed, and potatoes. A field trip to a major production area is required. (3/19)

CROP-12: Commercial Vegetable and Garden Production

Unit(s): 3
Lecture Hours: 2
Lab Hours: 3

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80 or MATH 85.

This course is a study of vegetable production covering the botany, cultural production, harvesting, processing, growth characteristics, fertility, pests, and marketing of the major warm season and cool season vegetable crops in California. A field trip into a major vegetable production region is required. (2/13)

CROP-13: Forage Crops

Unit(s): 3
Lecture Hours: 2
Lab Hours: 3

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80 or MATH 85.

This course will cover production, harvesting, and utilization of principal California forage crops. The importance of forage crops as a supplement to livestock enterprises will also be covered. The use of forage crops as soil amendments, and irrigated and range pastures will be discussed. (2/14)

DAIRY HUSBANDRY

DAIR-10: Elements of Dairy

Unit(s): 3
Lecture Hours: 2
Lab Hours: 3

Advisories: ~~ENGL 85A~~ or ENGL 85AC or ~~ENGL 85E~~.

This is a study of history, development, and projections of the dairy industry. General information on the economics of dairying, facts, trends, selection, culling, fitting, showing, judging, pedigrees, feeding, and basic management skills will be learned and also information on employment opportunities and requirements. (3/19)

DRAMA

DRAM-01: Introduction to Theater

Designations: (C-ID THTR 111) (CSU breadth area C1/C2) (IGETC area 3B)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ~~ENGL 85A~~ or ENGL 85AC or ~~ENGL 85E~~.

This course is an introduction to the art of theater that delves into the nature of theatrical presentation, elements of dramatic structure, and the contributions of the playwright, actors, director, designers, technicians, and the audience. (2/19)

DRAM-02: Rehearsal and Performance

Designations: (C-ID THTR 191)

Unit(s): 2

Lecture Hours: 1

Lab Hours: 3

One-way Corequisite: DRAM 02L.

Limitations on Enrollment: Enrollment by audition or interview, instructor signature required.

Advisories: ENGL 85A ENGL 85AC ENGL 85E.

This course focuses on preparing students for the practical application of rehearsal techniques, play promotion, and production towards public performance using a different work or genre for each subsequent offering. Stage management, direction, rehearsal procedures, and marketing skills are stressed. Because a different work or genre is explored in each subsequent offering, the course may be repeated three times. (5/14)

DRAM-02L: Rehearsal and Performance Lab

Designations: (C-ID THTR 192)

Unit(s): 1

Lecture Hours: 0

Lab Hours: 54 total hours by arrangement

Limitations on Enrollment: Enrollment by audition or interview, instructor signature required.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is the lab only portion of Rehearsal and Performance in which students put into practice learned technical skills in technical rehearsal and public performance of a college production. This course is intended for stage running crew and additional actor in minor roles only. This course may be repeated three times. This course is available for 54 hours of "To Be Arranged" a semester. (1/13)

DRAM-04: Actor's Workshop

Unit(s): 2

Lecture Hours: 2

Lab Hours: 0

One-way Corequisite: DRAM 04L.

Limitations on Enrollment: Enrollment by audition or interview, instructor signature required.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course focuses on practical application in technical rehearsals and public performance of rehearsal skills, promotion, production skills and performance techniques begun in Actor's Workshop. Due to different styles and genres being examined each semester, this class may be repeatable once. (1/13)

DRAM-04L: Actor's Workshop Lab

Unit(s): 1

Lecture Hours: 0

Lab Hours: 3

Limitations on Enrollment: Enrollment by audition or interview, instructor signature required.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course focuses on practical application in technical rehearsals and public performance of rehearsal skills, promotion, production skills and performance techniques begun in Actor's Workshop. Due to different styles and genres being examined each semester, this class may be repeatable once. (5/16)

DRAM-08: Theatre History: Ancient to Romanticism

Designations: (C-ID THTR 113) (CSU breadth area C1)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E.

A study of theatre history, from its origins through to the mid 19th Century, including the influence of staging, acting styles, socio-political movements and culture upon the playwright and his/her work. Eastern and Western Theatre traditions are examined. (5/16)

DRAM-12: Acting I

Designations: (C-ID THTR 151)

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ENGL 01A

This course is designed to serve the needs of the beginning student in acting. Emphasis will be on stage techniques and character development for stage performance. The development of scene repertoire is also studied by choosing scenes to be memorized from various periods of dramatic literature. Critical evaluation, demonstration, and written reviews are required. (2/13)

DRAM-13: Acting II

Designations: (C-ID THTR 152)

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Prerequisites: DRAM 12

Advisories: ENGL 01A

This course follows Acting I and continues the exploration of theories and techniques used in preparation for the interpretation of drama through acting. The emphasis will be placed on deepening the understanding of the acting process through character analysis, monologues, and scenes. (2/13)

DRAM-14: Acting III: Advanced Scene Study

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Prerequisites: DRAM 13

This course is a continuation of Acting II and offers the advanced student of acting additional material, and additional artistic challenges and opportunities to improve their acting flexibility. (5/13)

DRAM-15: Stagecraft

Designations: (C-ID THTR 171)

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ENGL 01A

This course is a study of the physical aspects of stagecraft, including makeup, set construction, scenic artistry, lighting, costuming, and sound production. Laboratory experience is gained in the application of principles of technical theatre in actual productions. (5/13)

DRAM-16: Introduction to Costume Design and Construction

Designations: (C-ID THTR 174)

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course covers the history of costume design for theatre and film and basic costume design theory, including basic construction techniques. Fabrics, notions and their various uses will be covered. Students will participate in lab hours to assist with costume construction for current theatrical productions. (12/13)

DRAM-23: Script Analysis: Plays in Performance

Designations: (C-ID THTR 114)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course will introduce students to the principles, theoretical structures, and performance of play scripts. Students will explore diverse genres of the theatrical arts. Scripts will be analyzed, and performed as in-class activities. Students will attend and critique live theatre performances. (12/13)

DRAM-50: Standardized Patient & Acting for Industry

Unit(s): 2

Lecture Hours: 1

Lab Hours: 3

Courses related in Content: Acting for Industry.

Limitations on Enrollment: Registration requires audition /interview and signature of instructor.

This course offers the advanced Acting student experience as a medical standardized patient working within the college's Allied Health programs and prepares the actor for real world auditions and industrial Acting work. Actors gain experience as Standardized Patients working within established scenarios, while using improvisation and practiced techniques to aid in diagnosis and patient care for Allied Health students. Students also prepare audition reels for their commercial portfolios.(01/18)

DRAM-70A-ZZ: Fine and Performing Arts-Special Topics

Unit(s): 0.5 - 2

Lecture Hours: .50 - 2

Lab Hours: .50 - 2

Limitations on Enrollment: Participation is determined by audition, interview or permission of instructor.

This is a course covering a variety of topics of current interest to students of performing art. Different topics will be emphasized each time the course is offered.

Sections of this course may vary in unit value depending on subject matter, meeting time, and format. Each letter may be taken only once. (11/17)

DRAFTING TECHNOLOGY

DRFT-04A: Fundamentals of Computer-Aided Drafting

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: INDT 38I; MATH 80 or MATH 85; ENGL 84A.

This course uses AutoCAD. The student will progress through the fundamental and some intermediate commands. Topics included are: drawing set-up, drawing, editing, text, and dimensioning. Also, the student will construct multi-view drawings as used in industry. Most drawings will be printed from paper space. (12/14)

DRFT-04B: Introduction to 3D

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: INDT 38I

This course is an introduction to direct 3D modeling. Students will gain an understanding of how 3D modeling works, and how it can be used with other applications. (12/14)

DRFT-04C: Introduction to Parametric Modeling

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: INDT 38I

This course uses Inventor. Students will use basic, and intermediate commands to create and modify solid models. The models will be used to create Small Assemblies (less than 10 parts), 2D drawings, and Renderings. (12/14)

DRFT-04D: Advanced Parametric Modeling

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Prerequisites: DRFT 04C

This course uses Inventor and SolidWorks. Students will use advanced commands in both programs. Some of the topics covered are 3D sketches, Tabular Parts, Large Assemblies, and Top-Down Assemblies. (2/14)

DRFT-05: Technical Graphics

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Prerequisites: DRFT 04A or DRFT 04C .

Advisories: ENGL 84A; MATH 80 or MATH 85.

This course utilizes computer graphics to prepare engineering drawings including geometric constructions, multi-view drawing, sectioning, auxiliary views, pictorial drawing, and tolerancing. It contains a strong tie to ANSI Y14.5 (2/13)

DRFT-06: Production Methods

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Prerequisites: DRFT 05 or DRFT 44 or DRFT 59.

This course covers different production methods and materials. Students will learn how the production method influences the design of a product. Materials covered are metals, plastics, matrix, and composites. Some of the methods covered are milling/turning, layoffs, casting, forging, punching, molding, and additive manufacturing. The use of welding and adhesives will also be covered. Students will create drawings of parts and production equipment. (12/11)

DRFT - 10: Rendering and Animation

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: DRFT 04C or DRFT 42B.

This course uses 3DS Max Design. Students will learn how to create objects in 3DS, Box Modeling, Material mapping, Rendering, and Animation. Students will also learn how to import objects for use in animations and how to complete basic video editing. (12/14)

DRFT-25: Descriptive Geometry

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Prerequisites: DRFT 04A, DRFT 05.

Advisories: MATH 81.

This course involves the use of computer-aided drafting and hand sketching to solve problems and communicate ideas. The course is also an introduction to descriptive geometry using computers and more traditional methods of problem solving through the auxiliary view and two-view methods. The development of graphical methods in their application to graphs, charts, and spatial and vector geometry will be studied. (2/14)

DRFT - 35: Capstone Design Project Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Prerequisites: DRFT 04C or DRFT 43.

One-way Corequisite: DRFT 10.

This course will guide students in the design process. Students will learn

the steps in creating a new design (identify problem, planning, research, design, documentation, presentation). They will experience the different steps as they design a product/building to solve a problem or meet a need. Students will use different software as needed throughout the project, and they will learn how to use project management software. (2/11)

DRFT-41: Civil Drafting

Unit(s): 3
Lecture Hours: 2
Lab Hours: 3
Prerequisites: DRFT 04A

This course uses AutoCAD. Students will learn about and create common civil drawings. Some of the drawings that will be included are Traverses, topo maps, plan and profile drawings, cut/fill, and borehole drawings. Students will also learn about file formats that are used with survey equipment and how to integrate them with AutoCAD. (12/15)

DRFT-42A: Architectural Drafting-Auto Cad

Unit(s): 3
Lecture Hours: 2
Lab Hours: 3
Prerequisites: DRFT 04A

This course covers the drafting techniques used in the preparation of working drawings for building construction, with special emphasis on house planning, house construction, and building codes and regulations. The course includes the drawing of a short set of house plans, floor plan, plot plan, elevation, and perspective. (2/14)

DRFT-42B: Architectural Drafting -- 3D

Unit(s): 3
Lecture Hours: 2
Lab Hours: 3
Prerequisites: DRFT 42A

This course uses REVIT, and covers the techniques used in the making of working drawings for building construction. The program used creates a 3-D drawing of a house. A detailed cutting list and bill of materials is also generated relative to the drawings. There will be special emphasis on a complete set of house plans adequate for bidding purposes. Also included will be sections, details, interior elevations, foundation plan, heating and air conditioning, specification, and a model. (2/14)

DRFT-43: Sustainable Architecture

Unit(s): 3
Lecture Hours: 2
Lab Hours: 3
One-way Corequisite: DRFT 42B.

This course uses Revit. Students will learn how the sustainable movement has influenced architecture. This course will cover CalGreen, LEED, and sustainable building methods. Students will learn how to use Revit to create the documentation needed. (2/14)

DRFT-44: Print Reading and Sketching

Unit(s): 3
Lecture Hours: 2
Lab Hours: 3
Advisories: ENGL 84A; MATH 80 or MATH 85.

This course is for technical students and other personnel who must be skilled in reading industrial prints. The student will become familiar with industrial prints, industry standards, and current practices. There will be a basic coverage of sketching as it applies to the communication skills of reading prints. (2/14)

DRFT-59: Basic Drafting

Unit(s): 3
Lecture Hours: 2
Lab Hours: 3
Advisories: ENGL 84A; MATH 80 or MATH 85.

This course covers principles of mechanical drawing and drafting. It is designed to help students communicate through sketching and drawing. The communication is covered as a presentation of ideas through drawings. (2/14)

ECONOMICS**ECON-01: Introduction to Microeconomics**

Designations: (CSU breadth area D) (IGETC area 4) (C-ID ECON 201)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E ; MATH 81.
Advisories: ENGL 01A

ECON-01 is an introductory course in microeconomic theories including maximization, benefit verses cost, rational choice, the analysis of demand and supply, the role of price in free markets, consumer behavior, market structure, production cost, competitive business models, and resource pricing. The course examines the nature of production, distribution, market outcomes, and the role of government in the market. (5/13)

ECON-02: Introduction to Macroeconomics

Designations: (CSU breadth area D) (IGETC area 4) (C-ID ECON 202)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Prerequisites: AGBS 11 or ECON 01; ENGL 85A or ENGL 85AC or ENGL 85E ; MATH 81.
Advisories: ENGL 01A

ECON-02 is an introductory course in macroeconomic theories including the determination of income, output, employment, and prices in the economy; the monetary system; governmental fiscal, monetary, and income policies; economic growth; international trade; and economic development. (11/13)

EDUCATION (NONCREDIT)**EDU-110: Reading and Computers**

Unit(s): 288 Total, Open Entry

This course is best suited for adult learners below the third grade reading ability that need individual attention, encouragement, and reinforcement while learning basic phonics, reading, spelling, and vocabulary skills. The student can learn at his/her own rate of speed with computer assisted instruction. (9/13)

EDU-111: Reading and Computers II

Unit(s): 288-324 Total, Open Entry
Advisories: EDU 110

This course is best suited for adult learners at third grade reading and vocabulary level up to approximately sixth grade level that require individual attention and reinforcement while reviewing basic phonics, improve reading, spelling, and vocabulary skills. (5/13)

EDU-112A: Skills Acquisition for Student Success-General

Unit(s): ~~90~~Total 180-540 hours, Open Entry

This course can be taken by enrolled credit students for a **minimum of 180 and a maximum of ~~90~~ 540** hours per term. The course provides a supervised learning experience for students who can benefit from individualized instruction in study skills and study habits in a laboratory setting. The study skills and study habits learned depend on the needs of the individual students and include educational computer applications, knowledge of college resources, and application of composition skills across the curriculum. (4/19)

EDU-112B: Skills Acquisition for Student Success-Math

Unit(s): ~~90~~Total 90-180 hours, Open Entry

Enrolled credit students may take this course for a maximum of ~~90~~ 180 hours per term. This course provides a supervised learning experience for students who can benefit from individualized instruction in study skills and study habits in a laboratory setting. The study skills and study habits learned depend on the needs of the individual students and include educational computer applications, knowledge of college resources, and application of computation skills across the curriculum. **The course is 90-**

180 hours; open entry format. (4/19)

EDU-112C: Skills Acquisition for Student Success-Allied Health

Unit(s): 8-36 Total, Open Entry

This course is designed to provide students the opportunity to improve and enhance their allied health skills through any number of training exercises that assist in the clinical development of and reinforcement of the practical allied health skills. The course is in a lab setting enriched with a resource library, manikins (for skills practice), and computer stations. Course duration is 8-36 hours. (12/18)

EDU-112D: Skills Acquisition for Student Success-English

Unit(s): ~~36-90 Total~~, 36-180 hours, Open Entry

Enrolled credit students may take this course for a **minimum of 36 and a maximum of ~~90~~ 180 hours** per term. This course is designed to provide Merced College students the opportunity to improve their critical reading, writing, research, and/or technological skills in a supervised instructional setting. The critical skills learned depend upon the needs of individual students and correspond to the work assigned in co-enrolled courses. (4/19)

EDU-508: Mature Driver Improvement

Unit(s): 8 Total, Open Entry

This course is designed primarily for drivers age 55 and older. Students receive classroom instruction on driving safety, road courtesy, improving driving performance, and safe driving techniques for emergencies. This course is 8 hours in duration. (10/13)

ELECTRICITY/ELECTRONICS TECHNOLOGY

ELCT-30: Exploring the World of Electricity and Electronics

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

This is an overview of electricity and electronics presented in the context of the principles of science. Students will gain an understanding of electronic components and circuits and will learn how to use the scientific method to investigate the physical nature of electricity, magnetism and their applications. Topics such as electronics in biotechnology, communications, consumer electronics, and industrial technology will be addressed, along with the impact and context of the "electronic age" on modern society. (12/18)

ELCT-31: Foundations of Electronics-DC and AC Circuits

Unit(s): 5

Lecture Hours: 3

Lab Hours: 6

Advisories: ENGL 85E.

This course is an introduction to the fundamentals of electricity and electronics including basic direct and alternating current circuits, passive components, measuring instruments, circuit testing and troubleshooting. Students will learn about resistance, capacitance, inductance, and transformer action in direct and alternating current circuits. Laboratory activities are designed to offer practical experience in circuit assembly, use of test and measuring equipment, circuit analysis and troubleshooting. (12/18)

ELCT-32: Fundamentals of Analog Electronics

Unit(s): 5

Lecture Hours: 2

Lab Hours: 9

Prerequisites: ELCT 31

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80 or MATH 85.

This course introduces the fundamental concepts of analog electronics, semiconductor devices and integrated circuits. Topics include semiconductor devices such as diodes, BJTs, FETs, and MOSFETs transistors, as well as operational amplifiers and their practical applications (e.g. rectifiers, amplifiers, power supplies). The skills emphasized are interpretation of electronic schematic diagrams, software simulation, basic circuit analysis, assembly and testing. Laboratory activities are designed

to offer practical experience in using test and measurement equipment to perform circuit analysis and troubleshooting. (2/13)

ELCT-34: Digital Logic, Circuits, and Systems (Foundations of Electronics)

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ELCT 30, ELCT 31, ELCT 41, ELCT 52.

The aim of this course is to provide the student with an introduction to basic digital electronic devices (logic gates, flip-flops, seven-segment displays, counters, shift registers) and their applications in modern computing, mechatronics and automated systems. A/D and D/A converters and the basic operation of programmable logic controllers and microcomputers will be introduced. (12/18)

ELCT-35: Microcontrollers and Programming With Robotics Applications

Unit(s): 4

Lecture Hours: 2

Lab Hours: 6

Prerequisites: ELCT 34

Advisories: ELCT 30, ELCT 31 ; ENGL 85A or ENGL 85AC or ENGL 85E.

This is an introductory course to the design and control of autonomous robots. Students will start by exploring microcontroller programming with PBASIC and Basic Stamp interface board. Students will gain firsthand experience with more advanced topics such as input and output processing, motion control, servo motor control, as well as ultrasound, tactile, light and robotic vision navigation. These topics will be explored through lectures, textbook assignments and ample hands-on laboratory experiments and project troubleshooting. (2/13)

ELCT-36: Networking Topologies and Cabling

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ELCT 51B; ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80 or MATH 85.

This is a course designed to provide the student with information and knowledge to prepare for the industry-standard Building Industry Consulting Service International (BICSI) Register installer. Level I exam, and employment as a telecommunications cabling installer. Students will gain an understanding of the cabling industry, U.S. and international standards, basic networking, signal transmission, copper cabling, fiber optics, installation, safety, structured cabling system basics, cable management, cable testing, and emerging technologies. Students will also be prepared to read network design documentation, architectural blueprints, set up part parts lists, purchase components, pull and mount cable, choose wiring closets, install jacks, and perform cable testing. (5/13)

ELCT-40C: Routing and Switching in the Enterprise

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Prerequisites: CPSC 40B or ELCT 40B.

Complex configurations of switching devices in the enterprise network are introduced to students. Variable Length Subnet Masking (VLSM) is emphasized and Internet Protocol version 6 (IPv6) is introduced in device configurations. It also introduces advanced routing protocols such as Enhanced Interior Gateway Routing Protocol (EIGRP) and Open Shortest Path First (OSPF) Protocol. Hands-on exercises include configuration, installation, and troubleshooting of multi-router systems. (12/15)

ELCT-40D: Designing and Supporting Computer Networks

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Prerequisites: ELCT 40C

This course introduces students to network design processes using two examples; a large stadium enterprise network and a medium-sized film

company network. Students follow a standard design process to expand and upgrade each network, which includes requirements gathering, proof-of concept, and project management. Lifecycle services, including upgrades, competitive analyses, and system integration are presented in the context of pre-sale support. (12/15)

ELCT-41: Industrial Motor and Equipment Control (Applications of Electronics)

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ELCT 31; ENGL 85E.

This course is designed to present the principles and applications of electrical motor and equipment control techniques used in industry. Ladder logic diagrams, contactors, motor starters, and electronic controls and sensors are among the subjects to be studied. Lectures, demonstrations, and laboratory experiments will be the methods used to present and enrich the material to be learned. (11/18)

ELCT-42A: Principles and Applications of Programmable Logic Controllers

Unit(s): 2

Lecture Hours: 1

Lab Hours: 3

Advisories: ELCT 34, ELCT 41, ELCT 52.

This course provides instruction in industrial type of computers called "Programmable Logic Controllers" (PLCs). The main topics introduce students to the PLC's basic hardware configuration and programming techniques. During the course students will learn how to configure and use programming instruction to create various applications. The students will program and operate on industrial PLCs as a part of laboratory assignments. (11/18)

ELCT-42B: Advanced Topics in PLC Configuration and Programming

Unit(s): 2

Lecture Hours: 1

Lab Hours: 3

Advisories: ELCT 34, ELCT 42A.

The course introduces students to a mid-size Programmable Logic Controller (Allen-Bradley SLC-500) hardware configuration, set-up and programming. During the course students will learn how to use advanced ladder addressing programming instructions as Math, Bit Shift, Compare, Jump, MCR and more, to develop various "real-world" industrial type of PLC applications. (11/18)

ELCT-43A: Industrial Instrumentation and Process Control

Unit(s): 3

Lecture Hours: 2.5

Lab Hours: 1.5

Advisories: ELCT 31, ELCT 34, ELCT 42A, ELCT 42B; ENGL 85E.

This course is designed to study instrumentation, sensors and controls that are used in industrial process control and automation. The course includes the study of the principles of operation and the practical applications of instrumentation in industry. Topics such as: decibels, micro-controllers, levers, friction, clutches and brakes, tooth rotor tachometers, vision sensors, dynamic braking of Direct Current (DC) motors, linear motors, and flux vector Alternating Current (AC) drives may be addressed. (11/18)

ELCT-44: Electronics Project Design, Fabrication and Repair

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Prerequisites: ELCT 30 or ELCT 31.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

The aim of this course is to provide the student with an introduction to basic digital electronic devices (logic gates, flip-flops, seven-segment displays, counters, shift registers) and their applications in modern computing, mechatronics and automated systems. A/D and D/A converters and the basic operation of programmable logic controllers and microcomputers will be introduced. (1/13)

ELCT-40A: Networking for Home and Small Businesses

ELCT-45A: Networking for Home and Small Businesses

Also: (CPSC 40A)

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ELCT 51A; ENGL 85A or ENGL 85AC or ENGL 85E ; MATH 80 or MATH 85.

This curriculum helps students develop the skills needed to obtain entry-level networking jobs. It provides a hands-on approach to networking education that allows students to gain practical experience working on PC's, their components, and applications. Students complete instructional labs to understand the general theory needed to build networks and connect them to the internet. Basic security and wireless concepts are covered. This course is for students with basic PC usage skills. (2/19)

ELCT-40B: Working At A Small-To-Medium Business or ISP

ELCT-45B: Working At A Small-To-Medium Business or ISP

Also: (CPSC 40B)

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Prerequisites: CPSC 40A or ELCT 40A.

This course prepares students for jobs as network technicians. Students develop soft skills required for computer and help desk technicians. Basic configurations of routing, remote access, addressing, and security are applied to routers and switches. Network monitoring and basic troubleshooting skills are examined. (2/19)

ELCT-47: Electrical Motors, Generators, Transformers, and AC

Distribution

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ELCT 31; ELCT-41, ELCT-52; ENGL 85E; .

This course covers principles of AC and DC motors, generators, transformers, three-phase generation, and AC distribution systems. The course content will include lecture, demonstration, and laboratory projects using motors and transformers. (12/18)

ELCT-51A: Personal Computer Configuration, Assembly and Repair

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E ; MATH 80 or MATH 85.

This is a course addressed to students without any previous knowledge of personal computers (PC). The course introduces students to the fundamentals of desktop computer installation through simple, step by-step instruction based on the most recent CompTIA A+ exam objectives. The course will cover the basic principles of PC operation, maintenance and troubleshooting techniques through lecture and various hands-on activities. (5/13)

ELCT-51B: A+ Certification Training

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ELCT 51A; ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80 or MATH 85.

This is a course designed to provide the student with a working knowledge of the hardware and software used with personal computers (PCs). The course will cover the basic principles of operation, established standards for maintaining compatibility between components and boards, the use of diagnostic software and hardware, various types of operating systems, and standard troubleshooting techniques. (5/13)

ELCT-52: Introduction to Electricity and Electronics

Unit(s): 3

Lecture Hours: 2.5

Lab Hours: 1.5

Advisories: ENGL 84A; ELCT 30.

This is an introductory course to basic electronics/electricity theory and applications including resistance, inductance, capacitance in the series, parallel, and series-parallel circuits with DC and AC power sources. Circuit analysis is accomplished through basic circuit formulas according to Ohm's and Kirchhoff's laws. Fundamentals of Magnetism, DC and AC Motors, Diodes, Transistors and Integrated Circuits and the utilization of basic test equipment in electrical circuit construction and troubleshooting are also covered. (11/18)

ELCT-53A: Solar Installer Course 1

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ENGL 85E; ELCT 30, ELCT 52; INDT 35.

This is an introductory course that will examine and implement the design and installation of a working solar photovoltaic power system. Students will learn how to safely use appropriate tools, make electrical load and solar system size calculations, and examine installation techniques for both gridtie and off grid photovoltaic systems. This course is intended for students who are contemplating a career in the solar photovoltaic industry. (11/18)

ELCT-55: Electrical Conduit Bending Theory and Techniques

Unit(s): 1

Lecture Hours: 5

Lab Hours: 1.5

Advisories: INDT 35, INDT 49.

This course provides a comprehensive overview of conduit bending, fabrication procedures and methods. It will develop basic competencies in electrical apprentices and beginning learners. It will discuss hand bending for 90 degree bends, offsets and kicks, saddles and corner offsets, segmented bends, threaders, benders and other conduit types. These conduit types will include electrical metallic tubing (EMT), galvanized rigid conduit (GRC), rigid aluminum, intermediate metallic conduit (IMC), various poly-vinyl chloride (PVC), and flexible plastic and metallic conduit. Wiring in accordance with the National Electrical Code (NEC) will be stressed. Students may petition, through the Office of Admissions and Records, to retake the course as the National Electrical Codes change. (11/18)

ELCT-56: Introduction to Mechatronics

Unit(s): 4

Lecture Hours: 2

Lab Hours: 6

Prerequisites: ELCT 42A. Advisory ELCT 31, ELCT 42B.

This course introduces students to mechatronics, the rapidly developing field that integrates mechanical, electronic and software engineering in the service of advanced manufacturing. Students will develop an interdisciplinary and integrated approach to design, manufacturing and troubleshooting mechatronics systems. Students will learn how various components such as electronic sensors, electro-pneumatic valves, actuators, motors, and robotic arms work, and how they can be integrated with other mechanical components into complex automated systems. OSHA safety training and certification will be included. Hands-on experience in building and programming a variety of mechatronics projects that simulate real-life industrial automated systems will be provided in laboratory activities. (10/14)

ELCT-58: Electrical Printreading for Installation and Troubleshooting

Unit(s): 3

Lecture Hours: 2

Lab Hours: 0

Prerequisites: ELCT 52

Advisories: ELCT 41, ELCT 42A, and INDT 35.

This course is a study in electrical print reading for installing and troubleshooting electrical systems presents foundational print reading skills needed to install and troubleshoot commercial and industrial electrical systems and equipment. (11/16)

ELCT-59: Electrical Safety and Industrial Skills

Unit(s): 2

Lecture Hours: 2

Lab Hours: 0

Advisories: ENGL 84A.

This course is an introduction into basic electrical safety and industrial skills associated with the Electrical and Industrial Technology programs offered at Merced College. The course will give students an opportunity to learn industry standard safe working practices in the electrical and maintenance trades as well as the safe operation of industrial equipment. The student will be trained in the safe use of Merced College's electrical trainer and equipment that will be used in more advanced Electrical and Industrial Technology classes. (04/18)

ELCT-71A-Z: Electronics/Industrial Electronics Technology Special Topics

Unit(s): 0.5 - 4

Lecture Hours: 0

Lab Hours: 1.5 - 12

Prerequisites: None.

This course is the study of principles, processes, and theories of the special topic being presented. (3/96)

EMERGENCY MEDICAL CARE

EMER-10: Paramedic I

Unit(s): 12.5

Lecture Hours: 12.25

Lab Hours: 0.75

One-way Corequisite: None. Two-way corequisite: EMER 11.

Limitations on Enrollment: EMT course, within the last collegiate calendar year, passed with a grade of B or better, and successfully pass entrance examination. OR, If NREMT certification held for greater than one (1) year- proof of field experience and successful completion of entrance examination. NREMT 1 Certification (current), and maintained throughout coursework. Minimum 18 years of age. Live scan background clearance. Health screen clearance. BLS Healthcare Provider card (current) and maintained throughout the course. Based upon State and Federal Regulations, CA Title 22.

Advisories: ENGL 01A; MATH 81.

This course introduces the student to the roles and responsibilities of the Paramedic within the EMS system, apply basic concepts of development, pathophysiology, pharmacology, patient assessment, medication administration, airway and ventilation concepts, the pulmonary, cardiac, neurological, and endocrine systems to be able to formulate a "field impression" of patient status. (12/18)

EMER-11: Paramedic I Lab

Unit(s): 1.5

Lecture Hours: 0

Lab Hours: 4.5

One-way Corequisite: None. Two-way corequisite: EMER 10.

Limitations on Enrollment: EMT course, within the last collegiate calendar year, passed with a grade of B or better, and successfully pass entrance examination. If NREMT certification held for greater than one (1) year- proof of field experience and successful completion of entrance examination. NREMT 1 Certification (current), and maintained throughout coursework. Minimum 18 years of age. Live scan background clearance. Health screen clearance. BLS Healthcare Provider card (current) and maintained throughout the course. Based upon State and Federal Regulations, CA Title 22.

Advisories: ENGL 01A; MATH 81.

This course is the corequisite for Paramedic I and occurs in the skills lab or simulation lab. The student will practice and master skills that will allow the student to meet clinical performance objectives. Competency testing is the focus of this course and will include physical assessment, medication administration, IV skills, and airway maintenance including intubation. (12/18)

EMER-20: Advanced Paramedic

Unit(s): 11.5

Lecture Hours: 11.5

Lab Hours: 0

Prerequisites: EMER 10, EMER 11.

One-way Corequisite: None. Two-way corequisite: EMER 21

Limitations on Enrollment: Health Screening Clearance Live Scan clearance. Maintenance of current NREMT. Maintenance of current BLS Healthcare Provider card. Based upon State and Federal Regulations, CA Title 22.

Advisories: ENGL 01A, MATH 81.

This theory course is the application of theory and skills in a wide variety of sick and injured clients in the pre-hospital setting. This course covers care of medical patients, trauma patients, special populations including obstetrical, pediatric, geriatric and mental health patients. This course is part of a program of study to prepare paramedics as described in California Code of Regulations, Title 22, Division 9, Chapter 4 and lists the required hours and subjects to be covered as set forth by the Department of Transportation curriculum. (12/18)

EMER-21: Advanced Paramedic Lab

Unit(s): 1.5

Lecture Hours: 0

Lab Hours: 4.5

Prerequisites: EMER 10, EMER 11.

One-way Corequisite: None. Two-way corequisite: EMER 20.

Limitations on Enrollment: Health Screening Clearance Live Scan clearance. Maintenance of current NREMT certification. Maintenance of current BLS Healthcare Provider card. Based upon State and Federal Regulations, CA Title 22.

Advisories: ENGL 01A, MATH 81.

This course is the corequisite for Advanced Paramedic (Paramedic II) and occurs in the skills lab or simulation lab. The student will practice and master skills that will allow the student to meet the clinical performance objectives of the program. Practice and competency testing is the focus of this course and will include physical assessment, care of the medical patient, special populations' needs, trauma management, communication with EMS base station and medical director, implementing safety precautions for hazardous materials exposure and manage the scene of an emergency. (2/13)

EMER-24: Work Experience in Emergency Medical Care

Unit(s): 1-8

Lecture Hours: 0

Lab: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course enables students to earn college credit for learning and/or improving skills or knowledge on-the-job. Occupational Work Experience is discipline specific and must connect to the student's major or occupational goal(s). Seventy-five (75) hours of documented paid work experience equals 1 unit of credit. Sixty (60) hours of documented volunteer experience equals 1 unit of credit. A student may enroll in up to 16 total units of work experience at Merced College. Students must have an established work site prior to enrolling in the course. (11/16)

EMER-30: Paramedic, Acute Clinical Lab

Unit(s): 3

Lecture Hours: 0

Lab Hours: 9 TBA

Prerequisites: EMER 10, EMER 11, EMER 20, EMER 21.

Limitations on Enrollment: Health Screening Clearance. Current NREMT certification maintained throughout course. Current BLS Health Care Provider card maintained throughout course. Live Scan Clearance. Based upon State and Federal Regulations, CA Title 22.

Advisories: ENGL 01A; MATH 81.

This course occurs in the acute care hospital setting in a precepted format. It is the hands-on application of theory and skills in a hospital setting to a wide variety of sick and injured clients. This course is part of a program of study to prepare paramedics as described in California Code of Regulations, Title 22, Division 9, Chapter 4 and lists the required hours and subjects to be covered as set forth by the Department of Transportation curriculum. (2/13)

EMER-31: Paramedic Field Experience

Unit(s): 9

Lecture Hours: 0

Lab Hours: 27 TBA

Prerequisites: EMER 10, EMER 11, EMER 20, EMER 21.

One-way Corequisite: EMER 30.

Limitations on Enrollment: Health Screening Clearance. Current NREMT certification maintained throughout course. Current BLS Health Care Provider card maintained throughout course. Live Scan Clearance. Based upon State and Federal Regulations, CA Title 22.

Advisories: ENGL 01A; MATH 81.

This course is the final course in the paramedic series and occurs completely in the field under the direct supervision of a certified prearranged paramedic preceptor. It assists the student in developing and refining skills. A wide variety of client activities are taught, including: medical histories, physical examination, client management, triage, trauma care and supportive care of the sick or injured in a field setting. This course is part of a program of study to prepare paramedics as described in California Code of Regulations, Title 22, Division 9, Chapter 4 and lists the required hours and subjects to be covered as set forth by the Department of Transportation curriculum. (12/18)

EMER-50A: Emergency Medical Technician 1, Module A

Unit(s): 2.5

Lecture Hours: 2.25

Lab Hours: 0.75

Limitations on Enrollment: Negative chest x-ray for TB within 1 year; A CPR course based on American Red Cross Professional Rescuer or American Heart Association Healthcare Provider.

Advisories: Advisory ALLH-67; ENGL-85A or ENGL-85AC or ENGL-85E.

This is the first of two modules designed to teach basic emergency medical procedures and responsibilities, including stabilization of the sick and injured for transportation to medical facilities, care during transport, communication with base-hospital personnel, and transfer of the injured to the base-hospital emergency room. This course meets the requirements of Title 22, Division of California Administrative Code. Students successfully completing EMER-50A and EMER-50B are eligible to take the EMT 1 certifying exam from the National Registry of Emergency Medical Technicians. (12/18)

EMER-50B: Emergency Medical Technician 1, Module B

Unit(s): 4.5

Lecture Hours: 3.75

Lab Hours: 2.25

Prerequisites: EMER 50A.

Limitations on Enrollment: Negative TB skin test or negative chest x-ray for TB within 1 year; A CPR course based on American Red Cross Professional Rescuer or American Heart Association Healthcare Provider.

Advisories: ALLH 67; ENGL 85A or ENGL 85AC or ENGL 85E.

This is the second of two modules designed to teach basic emergency medical procedures and responsibilities, including stabilization of the sick and injured for transportation to medical facilities, care during transport, communication with base-hospital personnel, and transfer of the injured to the base-hospital emergency room. This course meets the requirements of Title 22, Division of California Administrative Code. Students successfully completing EMER 50A and EMER 50B are eligible to take the EMT 1 certifying exam from the National Registry of Emergency Medical Technicians. (12/18)

EMER-52: Emergency Medical Technician 1 Refresher

Unit(s): 1.5

Lecture Hours: 24 Total

Lab Hours: 0

Limitations on Enrollment: Current EMT Certification and Current CPR course based on American Red Cross Professional Rescuer or American Heart Association Healthcare Provider or Successful completion of an approved EMT 1 course and current CPR course based on American Red Cross Professional Rescuer or American Heart Association Healthcare Provider.

The course is for currently certified Emergency Medical Technician 1's and for those that have successfully completed an approved EMT 1 course.

The course is designed to provide the medical continuing education refresher component modules required for maintaining certification and for those that require remediation for taking the National Registry examination. Students may petition, through the Office of Admissions and Records, to retake the course for the purpose of re-certification as necessary. (12/18)

ENGLISH (NONCREDIT)

ENG-121: College Prep English 1: Reading

Unit(s): 45-63 Total, Open Entry

Advisories: Read commonly used words and sound out words of more than two syllables.

This course will introduce students to text-based reading at four levels below transfer. Upon entry, students should be able to identify sight words and sound out unfamiliar words. Students will learn skills in order to increase vocabulary through context clues, to understand basic levels appropriate texts, and to think critically about those texts at four levels below transfer. (12/18)

ENG-122: College Prep English 2: Writing

Unit(s): 45-63 Total, Open Entry

Advisories: Read commonly used words and sound out words of more than two syllables.

Course duration: 45-63 hours; open entry format. This course will introduce students to writing at four levels below transfer. Upon entry, students should be able to identify sight words and sound out unfamiliar words. Students will learn skills in order to increase vocabulary, write complete sentences with grammatical accuracy, and to write critically about texts at four levels below transfer. (12/18)

ENG-123: Adult Literacy Level 2

Unit(s): 54-81 Total hours, Open Entry

In Adult Literacy Level 2, students will read level-appropriate text (400-499 Lexile) with accuracy, at an appropriate fluency rate; write opinion pieces or simple informative text; become familiar with the use of print and digital search tools; and be introduced to guided research. (5/19)

ENG-124: Adult Literacy Level 3

Unit(s): 54-81 Total hours, Open Entry

In Adult Literacy Level 3, students will read level-appropriate text (500-690 Lexile) with accuracy, at an appropriate fluency rate; write guided assignments based on a variety of prompts that attempt to organize, compose, revise, and edit; use print and digital search tools to locate information relevant to a topic; and participate in guided research at the appropriate level. (5/19)

ENG-125: Adult Literacy Level 4

Unit(s): 54-81 Total hours, Open Entry

In Adult Literacy Level 4, students will read level-appropriate text (700-1090 Lexile) with accuracy, at an appropriate fluency rate; write opinion pieces, supporting a logically ordered point of view with facts and reasons based upon source material; use print and digital search tools to locate information relevant to a topic to broaden an understanding of the topic; and participate in guided research at the appropriate level. (5/19)

ENG-521: Reading for Older Adults

Unit(s): 36-54 Total hours, Open Entry

This course is designed to assist older adults in identifying and examining personal interests and aptitudes through reading to enhance mental acuity and creativity, as well as the appreciation of the arts and literature. (5/19)

ENG-522: Reading and Composing Memoirs

Unit(s): 36-54 Total hours, Open Entry

This course is designed to assist older adults in identifying and examining personal interests and life experiences through the reading and composing of memoirs to enhance mental acuity and creativity, as well as the appreciation of the arts and literature. (5/19)

ENG-801: Beginning ESL Skills

Unit(s): 204-255 Total, Open Entry

This course is for preliterate and nonliterate ESL students who have no, or

very few, English language skills. Emphasis of the course is on aural/oral skills and visual reinforcement. (12/18)

ENG-802: Advanced-Beginning ESL Skills

Unit(s): 204-255 Total, Open Entry

Advisories: ENG 801

This course is for preliterate and nonliterate ESL students who have minimal English language skills. Emphasis in this course is on aural and oral skills with visual reinforcement. The student will be introduced to reading, writing and math skills. (12/18)

ENG-813: Low-Intermediate ESL Skills

Unit(s): 204 - 255 Total

Advisories: ENG 802

This course is designed for low-intermediate level students who need more practice with English skills. This course includes practice in listening, speaking, reading, and writing. (12/18)

ENG-815: Intermediate ESL Skills

Unit(s): 204 - 255 Total

Advisories: ENG 813

This course is for intermediate level students who have learned basic survival skills, but who need instruction that will lead to a relatively sophisticated level of discourse of issues and ideas that reach beyond basic survival. This course will prepare students to take credit courses at Merced College. This course includes practice in listening, speaking, reading, and writing. (12/18)

ENG-820: ESL Workforce Training for Adults

Unit(s): 72 hours, open entry format.

Advisories: ENG 802

This 72-hour course provides intensive language acquisition skills that prepare non-native English speakers to enter the workforce. The focus is on building communication skills and listening strategies that are necessary to succeed at entry-level position in a variety of job settings. Students will practice conversation skills while learning about the culture of work, follow oral instructions, and learn to meet employment expectations. (12/18)

ENG-820L: ESL Workforce Training Lab

Unit(s): 36 hours, open entry format.

Advisories: ENG 802; ENG-820.

This 36-hour course provides intensive language acquisition skills that prepare non-native English speakers to enter the workforce. This training course offers with direct experience in various work environments, including but not limited to the following: food service, shipping and receiving, child care, grounds and waste management. This on-the-job experience is combined with language instruction. This course is designed to meet state and county requirements for the CalWORKS program. (12/18)

ENG-821: Foundations in Academic Literacy II for Non-Native Speakers

Unit(s): 90 - 255 Total

Advisories: ENG 815

This course is intended for students whose primary language is not English. At a low-advanced ESL level, this course focuses on effective critical reading and thinking skills, research strategies and academic composition with proper documentation. Students write a range of increasingly complex short essays informed by assigned reading, discussion, and/or research using a variety of source material including non-fiction.(3/19)

ENG-821: Foundations in Academic Literacy I for Non-Native Speakers

Unit(s): 90 - 255 Total

Advisories: ENG 821

This course is intended for ESL students. This course focuses on effective critical reading and thinking skills, research strategies, scholarly composition with proper documentation, and advanced editing skills. Students compose a range of academic writing informed by assigned readings, discussion, and/or research using primarily non-fiction source

material. (3/19)

ENGLISH

ENGL-01A: College Composition and Reading

Designations: (C-ID ENGL 100) (CSU breadth area A2) (IGETC area 1A)

Unit(s): 4

Lecture Hours: 4

Lab Hours: 0

Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E.

Advisories: LRNR 30

This course focuses on critical reading and thinking, research strategies, and scholarly composition with proper documentation at the college transfer level. Students write expository, analytical, and argumentative essays informed by assigned readings, discussion, and/or research. (2/12)

ENGL-01B: Introduction to Literature

Designations: (C-ID ENGL 120) (CSU breadth area C2) (IGETC area 3B)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: ENGL 01A

This course introduces representative works from four major genres: short story, novel, drama, and poetry. Students develop analytical and evaluative reading and writing skills while acquiring an appreciation for the cultural context and the aesthetic qualities of literature. Students read texts from various countries and periods in order to encourage an appreciation of literature's range, artistry, and insight into the human experience. (2/12)

ENGL-01C: Critical Thinking Across the Curriculum

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: ENGL 01A

Develops critical thinking, reading, and writing skills as they apply to textual analysis of primary and secondary sources, essays, articles, and a book-length work from a range of academic and cultural contexts. Theme based. Emphasis on the techniques and principles of effective written argument in research-based writing across the disciplines. (12/18)

ENGL-02: Oral Interpretation

Also: (COMM 02)

Designations: (C-ID COMM 170)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is designed to introduce students to performance studies through analysis, appreciation and application of interpretive performance of the various forms of literature: poetry, prose and drama. (10/12)

ENGL-04A: Introduction to World Literature: Ancients to 1650

Designations: (CSU breadth area C2) (IGETC area 3B) (C-ID ENGL 140)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: ENGL 01A

Advisories: ENGL 01B

This course examines the origins and developments of world literatures and cultures from the ancients to 1650 through various literary genres and cultural traditions. Primary focus will fall on major works of certain periods and of geographic origins. Students will engage in comparative analysis and evaluation of the literary works as well as close study of the works in addition to the study of each text's merit. (12/18)

ENGL-04B: Introduction to World Literature: 1650 to Present

Designations: (C-ID ENGL 145) (CSU breadth area C2) (IGETC area 3B)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: ENGL 01A

Advisories: ENGL 01B

This course examines the origins and developments of world literatures and cultures from 1650 to the present through various literary genres and cultural traditions. Primary focus will fall on major works of certain periods and of geographic origins. Students will engage in comparative analysis and evaluation of the literary works as well as close study of the works in addition to the study of each text's merits. (5/05)

ENGL-05: Introduction to Fiction

Designations: (CSU breadth area C2) (IGETC area 3B)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: ENGL 01A

Advisories: ENGL 01B

This course traces the origins and subsequent developments of short fiction and longer fiction (novels), and signals the specific characteristics of respective genres. Students will read a number of books of short fiction and three to five novels in order to study the various developments of style, form, structure, and other artistic choices associated with the history of fiction. (12/04)

ENGL-06A: Major English Writers to the Late 18Th Century

Designations: (C-ID ENGL 160) (CSU breadth area C2) (IGETC area 3B)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: ENGL 01A

Advisories: ENGL 01B

This course introduces students to the history and variety of English literature from its beginnings to the late eighteenth century. Representative works of major authors are read as examples of the various genres, literary trends, and historical eras in which they were written. (2/12)

ENGL-06B: Major English Writers Since the Late 18Th Century

Designations: (C-ID ENGL 165) (CSU breadth area C2) (IGETC area 3B)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: ENGL 01A

Advisories: ENGL 01B

This course introduces students to the history and variety of English literature from the late eighteenth through the twentieth, to the twenty-first centuries. Representative works of major authors are read as examples of the various genres, literary trends, and historical eras in which they were written. (2/12)

ENGL-07: Studies in Literature: Poetry

Designations: (CSU breadth area C2) (IGETC area 3B)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: ENGL 01A

Advisories: ENGL 01B

This course traces origins and developments of the poem as a major literary genre. Course includes an intensive study of the poetic process. Poems from ancient times to the present are analyzed in terms of form, idea, and language. (5/12)

ENGL-08: Introduction to Shakespeare

Designations: (CSU breadth area C2) (IGETC area 3B)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: ENGL 01A

Advisories: ENGL 01B

Introduction to Shakespeare is a course of literary analysis based on reading and studying the major works of William Shakespeare. The course focuses on a number of Shakespeare's plays, especially the most widely-known ones, from the categories Comedy, History, and Tragedy, as well as a survey of his non-dramatic poetry. As this course is an introductory course, students will receive the opportunity to learn about Elizabethan England -- the England of the time of Shakespeare. (12/04)

ENGL-10: American Literature From Beginnings to Civil War

Designations: (C-ID ENGL 130) (CSU breadth area C2) (IGETC area 3B)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: ENGL 01A

Advisories: ENGL 01B

This course is designed to introduce students to the history and variety of literature from American Literature's beginnings to the Civil War. Representative works are read as examples of various genres, literary trends, and historical eras. (2/12)

ENGL-11: American Literature From Post-Civil War to Present

Designations: (C-ID ENGL135) (CSU breadth area C2) (IGETC area 3B)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: ENGL 01A

Advisories: ENGL 01B

This course is designed to introduce students to the history and variety of American literature from the end of the 1865 to the present. Representative works of major and influential authors are read as examples of various genres, literary movements, and historical eras. (2/12)

ENGL-12: Creative Writing

Designations: (C-ID ENGL 200)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: ENGL 01A

Advisories: ENGL 01B

A course designed to provide experience in the writing of poetry, drama, fiction, and creative non-fiction and to aid the student in becoming aware of the craft of writing as described and/or demonstrated by professional writers. The class is conducted primarily as a workshop in which students read their works for constructive criticism. (3/12)

ENGL-13: Critical Reasoning and Writing

Also: (PHIL 13)

Designations: (CSU breadth area A3) (C-ID ENGL 105) (IGETC area 1B)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: ENGL 01A

This course offers instruction in argumentative and critical writing, critical thinking, research strategies, information literacy, and proper documentation. Readings feature mostly non-fictional essays and books that reflect diverse cultural and gender perspectives on a variety of contemporary political and social issues, especially those involving race, ethnicity, and gender. ENGL-13/PHIL 13 meets the IGETC critical thinking/composition requirement. (3/12)

ENGL-13H: Honors Critical Reasoning and Writing

Also: (PHIL 13H)

Designations: (C-ID ENGL 105) (CSU breadth area A3) (IGETC area

1B)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: ENGL 01A

Limitations on Enrollment: Enrollment in the Honors Program.

This course offers instruction in argumentative and critical writing, critical thinking, research strategies, information literacy, and proper documentation. Readings feature mostly non-fictional essays and books that reflect diverse cultural and gender perspectives on a variety of contemporary political and social issues, especially those involving race, ethnicity, and gender. ENGL 13/PHIL 13 meets the IGETC critical thinking/composition requirement. (3/12)

ENGL-14: Introduction to Film

Designations: (CSU breadth area C1) (IGETC area 3A)

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

~~Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E.~~

Advisories: ENGL 01A

This course includes critical and popular approaches to film. Students will study film form, genre, style, criticism, and history. They will read screenplays and film criticism and theory and view the films under consideration to obtain a better understanding of the film discipline. (2/19)

ENGL-15: History of Dramatic Literature

Designations: (CSU breadth area C1)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: ENGL 01A

Advisories: ENGL 01B

This course traces origins and development of drama from classic to contemporary periods. It examines drama as a literary genre, including analysis of theme, style, character, and dramatic sub-genres. (12/18)

ENGL-18: African and African American Literature

Designations: (CSU breadth area C2) (IGETC area 3B)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: ENGL 01A

Advisories: ENGL 01B

This is an introductory course in African literature written in English or translated from African languages or French into English. It will present a survey of major works from colonial and post-colonial literature to introduce students to African works of merit, cultural relevance, and universal application. In addition to enabling students to view African works within a global context, its goal will be to show the connection of themes, issues, and styles between African and African-American literature and experience as well. Works studied will include epics and narratives, poetry and song lyrics, short fiction, novels, essays, films, and drama in an effort to assist students in acquiring an appreciation of important literary voices that have heretofore been neglected in literature studies. (5/12)

ENGL-83A: Foundations in Academic Literacy III

Unit(s): 5

Lecture Hours: 5

Lab Hours: 0

Advisories: ENG 122

At an introductory level, this course focuses on effective critical reading and thinking skills, basic research strategies, and academic composition with simple documentation. Students write a variety of paragraphs and short essays informed by assigned readings, discussion, and/or rudimentary research using a variety of source material. (2/16)

ENGL-84A: Foundations in Academic Literacy II

Unit(s): 5

Lecture Hours: 5

Lab Hours: 0

Prerequisites: ENGL 83A or ENGL 83E.

At an intermediate level, this course focuses on effective critical reading and thinking skills, basic research strategies and academic composition with proper documentation. Students write a range of increasingly complex short essays informed by assigned readings, discussion, and/or research using a variety of source material, including both fiction and non-fiction. (3/16)

ENGL-85A: Foundations in Academic Literacy I

Unit(s): 5

Lecture Hours: 5

Lab Hours: 0

Prerequisites: ENGL 84A or ENGL 84E.

At a pre-transfer level, this course focuses on effective critical reading and thinking skills, research strategies, and scholarly composition with proper documentation. Students compose a range of academic writing informed by assigned readings, discussion, and/or research using primarily nonfiction source material. (5/19)

ENGL-85AC: Accelerated Foundations in Academic Literacy

Unit(s): 5

Lecture Hours: 5

Lab Hours: 0

This is an intensive course that focuses on effective critical reading and thinking, research strategies, and scholarly composition with proper documentation at the pre-transfer level. Students compose a range of academic writing including expository, analytical, and argumentative essays informed by assigned readings, discussion, and/or research using primarily non-fiction source material. (5/16)

ENGL-95S: Enhanced Academic Literacy

Unit(s): 2

Lecture Hours: 2

Lab Hours: 0

Corequisites: ENGL 01A.

This course is designed to provide supplemental instruction and support for students enrolled in a linked section of English 01A. Students will further develop academic skills in reading, writing, and researching. In addition, they will learn to address strategies for academic success and be able to utilize computerized technology necessary for a composition course. (12/18)

ENGINEERING

ENGR-14: C++ Programming

Also: (CPSC 14)

Designations: (C-ID COMP 122)

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Prerequisites: MATH C or MATH 61.

Advisories: CPSC 01; ENGL 01A.

This is the entry-level comprehensive concepts course for computer science majors, and recommended for science and math majors. Algorithm design, logic diagrams, problem-solving, coding, and debugging are emphasized using a structured language such as C++. (2/18)

ENGR-15: Elementary Mechanics (Statics)

Designations: (C-ID ENGR 130)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: PHYS 04A

One-way Corequisite: MATH 04C.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is the study of rigid bodies when acted upon by forces and couples in 2-D and 3-D space. Included are trusses, frames, machines, beams, friction, centroids, centers of mass, and moments of inertia. (2/08)

ENGR-18: Electrical Circuits Analysis

Designations: (C-ID ENGR 260)

Unit(s): 4

Lecture Hours: 3

Lab Hours: 3

Prerequisites: PHYS 04B

One-way Corequisite: MATH 06.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course covers basic circuit analysis emphasizing resistive circuits, natural and forced response of inductive and capacitive circuits, phasor analysis, and semiconductor elements. Lab involves construction and measurement of circuits using power supplies, breadboards, multimeters, oscilloscopes, and function generators. (11/15)

ENGR-30: Introduction to Engineering

Unit(s): 2

Lecture Hours: 1

Lab Hours: 3

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH C or MATH 61.

~~This course covers three areas: a description of engineering careers, a factual comparison of engineering degrees and transfer universities, and a discussion of the academic skills required to earn an engineering degree. Successful students will be able to articulate their engineering career goals. The course includes laboratory activities and field trips to engineering companies.~~

The course explores the branches of engineering, the functions of an engineer, and the industries in which engineers work. Explains the engineering education pathways and explores effective strategies for students to reach their full academic potential. Presents an introduction to the methods and tools of engineering problem solving and design including the interface of the engineer with society and engineering ethics. Develops communication skills pertinent to the engineering profession. (4/19)

ENGR-45: Engineering Materials

Unit(s): 4

Lecture Hours: 3

Lab Hours: 3

Prerequisites: CHEM 04A; MATH 04A; PHYS 04A.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is an introduction to the atomic and microscopic structure of modern engineering materials. The effect of structure and manufacturing processes on the mechanical, electrical, and other physical properties of materials are studied. Metals, alloys, ceramics, polymers, and composites are explored. (5/13)

ENGR-49A-ZZ: Special Topics in Engineering

Unit(s): 0.5 - 3

Lecture Hours: 0-3

Lab Hours: 0-9

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E ; LRNR 30; MATH C or MATH 61.

This course covers special topics in engineering to meet needs that cannot be included in the current engineering courses. It will assist students in acquiring the most up-to-date information possible in order to cope with the rapidly changing world of technology and design. (2/18)

ENGLISH AS A SECOND LANGUAGE

ESL-84E: Foundations in Academic Literacy II for Non-Native Speakers

Unit(s): 5

Lecture Hours: 5

Lab Hours: 0

This course is intended for students whose primary language is not English. At a low-advanced ESL level, this course focuses on effective critical reading and thinking skills, research strategies and academic composition with proper documentation. Students write a range of increasingly complex short essays informed by assigned readings, discussion, and/or research using a variety of source material including non-fiction. (12/18)

ESL-85E: Foundations in Academic Literacy I for Non-Native Speakers

Unit(s): 5

Lecture Hours: 5

Lab Hours: 0

This course is intended for ESL students and is equivalent in content to ENGL 85A. This course focuses on effective critical reading and thinking skills, research strategies, scholarly composition with proper documentation, and advanced editing skills. Students compose a range of academic writing informed by assigned readings, discussion, and/or research using primarily non-fiction source material. (12/18)

ESL-92: ESL Reading and Writing

Unit(s): 5

Lecture Hours: 5

Lab Hours: 0

Advisories: Upon entering the course it is recommended that the student be able to: Completion of Non Credit ESL Level 5 or at least three years of the study of ESL/ELD in high school or adult school programs or use complete sentences in Standard American English to carry on a conversation with a native speaker while using the telephone and read English magazines and newspapers and write complete sentences that may have some grammatical errors.

This is an intermediate writing and reading course for students whose native language is not English (ESL). This course focuses on reading strategies to improve fluency, vocabulary, and comprehension. Students will write about reading by using a step-by-step process to compose well-ordered paragraphs. (12/15)

ESL-98: ESL Pronunciation and Speaking

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: Upon entering the course it is recommended that the student be able to: Completion of Non Credit ESL Level 5 or at least three years of the study of ESL/ELD in high school or adult school programs or use complete sentences in Standard American English to carry on a conversation with a native speaker while using the telephone and read English magazines and newspapers and write complete sentences that may have some grammatical errors.

This is a pronunciation and speaking course. In this course students will practice the consonant and vowel sounds as well as learn how stress and intonation affect a person's ability to understand what is said. Students will use the pronunciation skills and vocabulary presented while practicing conversations on topics related to assigned readings. It is recommended that students take this course concurrently with ESL 92. (12/15)

FIRE TECHNOLOGY

FIRE-24: Work Experience in Fire Technology

Unit(s): 0

Advisories: ENGL 85A ENGL 85AC ENGL 85E.

This course enables students to earn college credit for learning or improving skills or knowledge on-the-job. Occupational Work Experience is discipline-specific and must connect to the student's major or occupational goal(s). Seventy-five (75) hours of documented paid work experience equals 1 unit of credit. Sixty (60) hours of documented volunteer experience equals 1 unit of credit. A student may enroll in up to 16 total units of work experience at Merced College. Students must have an established work site prior to enrolling in the course. (12/18)

FIRE-30: Fire Protection Organization

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course provides an introduction to fire protection; career opportunities in fire protection and related fields; philosophy and history of fire protection; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; and introduction to fire strategy and tactics. (11/04)

FIRE-31: Fire Behavior and Combustion

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: FIRE 30

Advisories: ENGL 85AC or ENGL 85E.

This course presents the theory and fundamentals of how and why fires start, spread, and are controlled; an in-depth study of fire chemistry and physics; fire characteristics of materials; extinguishing agents; and fire control techniques. (3/19)

FIRE-32: Fire Prevention Technology

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Corequisites: FIRE 30

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course provides fundamental information regarding the history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use of fire codes, identification and correction of fire safety education and suppression systems. (12/18)

FIRE-33: Fire Protection Equipment and Systems

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: FIRE 30

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course provides information relating to features of design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection, and portable fire extinguishers. (12/18)

FIRE-34: Building Construction for Fire Protection

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: FIRE 30

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is the study of components of building construction that relate to fire safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at fires. The development and evolution of building and fire codes will be studied in relationship to past fires in residential, commercial, and industrial occupancies. (12/18)

FIRE-35: Firefighting Tactics and Strategy

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: FIRE 30

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course relates basic fire chemistry, equipment, and manpower, to fire fighting tactics and strategy, methods of attack, and pre-planning. (12/18)

FIRE-36: Hazardous Materials

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: FIRE 30

One-way Corequisite: FIRE 31

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course presents the theory and fundamentals of how and why fires start, spread, and are controlled: an in-depth study of fire chemistry and physics, fire characteristics of materials, extinguishing agents, and fire control techniques. (112/18)

FIRE-37: Fire Hydraulics

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: FIRE 30 or current volunteer, paid call, seasonal or full-time firefighter for a certified fire protection department.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80.

This course is a basic review of mathematics, hydraulic laws and formulas, and water supply and pump requirements as applied to fire service. (11/10)

FIRE-39: Fire Company & Organization Procedure

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: FIRE 30

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is a review of fire department organization, fire company organizations, the company officer, fire equipment, maintenance training, fire prevention, firefighting, company firefighting capability, and records and reports. (2/11)

FIRE-40: Principles of Fire and Emergency Services Safety and Survival

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: FIRE 30

This course introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavior change throughout the emergency services. (10/16)

FIRE-47A: Fire Investigation-1A

Unit(s): 2

Lecture Hours: 36 Total

Lab Hours: 0

Prerequisites: FIRE 30 or current volunteer, paid call, or seasonal or full-time firefighter for a certified fire protection department.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is an introduction to arson, laws related to arson, types of incendiary fires, and methods of determining fire cause and recognizing and preserving evidence. A special emphasis will be placed on report-writing techniques. (11/18)

FIRE-47B: Fire Investigation-1B

Unit(s): 2

Lecture Hours: 36 Total

Lab Hours: 0

Prerequisites: FIRE 47A

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course covers evidence related to arson and fire deaths, interviewing, and interrogating. Investigation of structure, wildland, and vehicle fires are covered as well as fire scene documentation; search and seizure laws are also covered. (11/18)

FIRE-49A-ZZ: Special Topics in Fire Technology

Unit(s): 0.5 - 4

Lecture Hours: 0.5 - 4

Lab Hours: 0 - 12

Prerequisites: FIRE 30

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is designed to address special topics in fire technology to meet current needs of students. The course will allow pre-service and in-service personnel to maintain the most current training standards during emergency operations. (11/16)

FIRE-63A: Basic Firefighter I, Academy A

Unit(s): 8

Lecture Hours: 7

Lab Hours: 3

Prerequisites: FIRE 30

Limitations on Enrollment: Physician's clearance for strenuous activity.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course provides manipulative and technical training in basic concepts

of fire department organization, miscellaneous equipment and tools, fire behavior and extinguishment theory, fire fighter safety, self-contained breathing apparatus, and portable fire extinguishers. The course also provides training in ropes, knots, hitches, hoses, nozzles, appliances, ground ladders, forcible entry, and confined space rescue. Students must supply instructor-approved personal protective equipment (required instructional material). (11/18)

FIRE-63B: Basic Firefighter I, Academy B

Unit(s): 8

Lecture Hours: 7

Lab Hours: 3

Prerequisites: FIRE 63A

Limitations on Enrollment: Physician's clearance for strenuous activity.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course provides manipulative and technical training in basic concepts of ventilation, fire control, salvage and overhaul operations, fire protection water systems, fire protection systems, fire prevention and investigation, communications, vehicle extrication, wildland fire fighting, urban interface, and hazardous materials. (11/18)

FIRE-65C: Wildland Firefighting Strategy & Tactics

Unit(s): 1

Lecture Hours: 1

Lab Hours: 0

Prerequisites: FIRE 30 or current volunteer, paid call, or seasonal or full-time firefighter for a certified fire protection department.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course stresses the fundamentals of initial-attack wildland firefighting and how to apply wildland firefighting strategy and tactics during the suppression effort which also includes live fire control. Must have instructor approved fire protective gear. (11/18)

FIRE-65E: Introduction to Hazardous Materials Awareness

Unit(s): 0.5

Lecture Hours: 5

Lab Hours: 0

Prerequisites: FIRE 30 or current volunteer, paid call, or seasonal or full-time firefighter for a certified fire protection department.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is a general introduction to hazardous materials awareness with emphasis on placards, identification and recognition, decision-making in emergencies, detecting hazardous materials presence, and estimating the likely harm without intervention. (11/18)

FIRE-65F: Hazardous Materials-First Responder Operations (H M F.R.O.)

Unit(s): 1

Lecture Hours: 207 Total

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; FIRE 30 or currently a paid call, seasonal, of full-time firefighter.

This course covers how hazardous materials can harm people, the environment, and property, and how the first responder may use clues to recognize a hazardous materials incident and implement actions to protect themselves and the public. (11/18)

FIRE-65G: First Responder Operations-Decontamination (DECON FRO)

Unit(s): 0.5

Lecture Hours: 5

Lab Hours: 0

Advisories: FIRE 30 or current volunteer, paid call, or seasonal or full-time firefighter for a certified fire protection department, FIRE 65F.

This course covers how to safely and competently perform "Fully/Primary" decontamination in at least "Level B" personal protective equipment based on agency or generic Decon SOP. This course builds upon FRO competencies to perform decontamination functions within the contamination reduction zone. (11/18)

FIRE-65H: Fire Command I-Module C

Unit(s): 2

Lecture Hours: 2

Lab Hours: 0

Prerequisites: FIRE 30 or current volunteer, paid call, or seasonal or full-time firefighter for a certified fire protection department.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course provides fundamental principles of wildland fire control and management. Topics to be covered include firefighter safety, wildland fire behavior, strategy and tactics, wildland-urban intermix fires, the Incident Command System, and large fire organization. Special attention will be focused on the role fulfilled by individual engine companies during fire control operations. (11/18)

FIRE-66A: Volunteer Firefighter Basic Skills

Unit(s): 2.5

Lecture Hours: 2.5

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course provides the firefighter with basic knowledge of fire behavior and control and basic skills to safely perform essential fire ground tasks with minimal supervision. Students must supply instructor-approved personal protective equipment (a required instructional supply). (2/13)

FIRE-66D: Equipment Operator for Volunteer Firefighters

Unit(s): 2

Lecture Hours: 2

Lab Hours: 0

Prerequisites: FIRE 30 or current volunteer, paid call, or seasonal or full-time firefighter for a certified fire protection department.

Limitations on Enrollment: Full-time firefighter or minimum of one continuous year as a paid-call firefighter; valid California Class B (commercial or firefighter) permit with tank and air brake endorsements. If the student has a commercial California Driver's License, it must indicate manual transmission and have a current health questionnaire.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course provides the firefighter with basic knowledge of radio communications use regarding size-up and report conditions. Forms and reports related to operating equipment and incidents are covered as well as emergency equipment placement, and strategy and tactics for structure, wildland, and vehicle fires. Auto extrication and defensive driving and pump theory are included. (11/18)

FIRE-67A: Rope Rescue

Unit(s): 1

Lecture Hours: 1

Lab Hours: 0

Prerequisites: FIRE 30

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is designed to introduce the novice to the basics of equipment nomenclature, rope design and construction, care and maintenance, and knots and webbing as they apply to rope rescue emergencies. (11/18)

FIRE-67B: Auto Extrication

Unit(s): 0.5

Lecture Hours: 5

Lab Hours: 0

Prerequisites: FIRE 30 or currently a paid call, seasonal, or full-time firefighter.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E ;

This course provides classroom instruction of vehicle rescue concepts. It introduces students to common vehicle rescue tools and hands-on practice of basic techniques used to free persons entrapped in vehicles as a result of traffic collisions. To successfully complete the skills portion, students must have the ability to lift tools that may weigh in excess of 50 pounds and perform other rigorous physical tasks. Students must supply instructor approved personal protective equipment (required instructional material) equivalent to that of a structural firefighting ensemble. This shall, at a minimum, include a helmet with face shield and/or goggles, leather gloves, turnout coat and pants, and turnout boots (or steel toed lace-up

leather boots at least 8" in height with lugged soles). (11/18)

FIRE-68B: Basic Incident Command System (I-200)

Unit(s): 1

Lecture Hours: 1

Lab Hours: 0

Limitations on Enrollment: Instructor-verified ICS (I-100) completion.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is designed for the entry-level and veteran firefighter. The subject matter relates to principles and features of ICS, organization, incident facilities, incident resources and responsibilities associated with ICS Assignments. Student must have instructor verified ICS (1-100) completion. (2/11)

FIRE-68C: Incident Command System-Intermediate (I-300)

Unit(s): 1.5

Lecture Hours: 1.5

Lab Hours: 0

Prerequisites: FIRE 68B

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is designed for the entry-level and veteran firefighter. The subject matter relates to organization and staffing for incidents or events, incident resources management, air operations, and incident event planning. (11/11)

FIRE-68D: Advanced Incident Command System (I-400)

Unit(s): 2

Lecture Hours: 2

Lab Hours: 0

Prerequisites: FIRE 68C

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This is an advanced course in the Incident Command System. This course is designed for senior personnel who are expected to perform in a management capacity in an Area Command or multi-agency coordination system. This course is designed to provide overall incident management skills rather than tactical expertise. (11/18)

FIRE-69A: First Responder Medical

Unit(s): 2.5

Lecture Hours: 2.5

Lab Hours: 0

Prerequisites: FIRE 30 or currently a paid call, seasonal, or full-time firefighter.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is designed to meet the state requirements for emergency medical personnel. The course relates to patient assessment, cardiovascular systems, fractures, splinting, childbirth, and environmental emergencies. (11/18)

FIRE-69B: First Responder Re-Certification

Unit(s): 1.5

Lecture Hours: 1.5

Lab Hours: 0

Prerequisites: FIRE 69A

Limitations on Enrollment: Must possess a current valid CPR card in Basic Life Support of Health Care Providers (or equivalent) as outlined by the American Heart Association.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is designed to meet the state re-certification requirements for emergency medical personnel. The course relates to patient assessment, cardiovascular systems, fractures, splinting, childbirth and environmental emergencies. Must possess a current valid CPR card in Basic Life Support of Health Care Providers. (11/18)

FIRE-70: Fire Department Administration

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: FIRE 30 or current volunteer, paid call, or seasonal or full-time firefighter for a certified fire protection department.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is designed to cover broad subject matter for potential fire officers to receive information necessary to organize and administer fire department operations. (11/18)

FIRE-71A: Fire Instructor I

Unit(s): 2.25
Lecture Hours: 405 Total
Lab Hours: 0
Prerequisites: FIRE 30 or current volunteer, paid call, or seasonal or full-time firefighter for a certified fire protection department.
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is designed for the fire company officer who conducts in-service training programs. The course provides a variety of methods and techniques to help personnel select, develop and organize material for in-service programs. Methods of evaluation and opportunity to apply the major principles of learning through demonstrations are stressed. The course is certified by the office of the California State Fire Marshal. (11/18)

FIRE-71B: Fire Instructor II

Unit(s): 2
Lecture Hours: 2
Lab Hours: 0
Prerequisites: FIRE 71A
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is designed for the fire company officer who conducts in-service training programs. The course provides instruction in the use of visual aids, test construction, and teaching demonstrations. The successful completion of this course and the State Fire Marshal's examination will result in State certification. (11/18)

FIRE-72A: Fire Command I -- Module A

Unit(s): 2
Lecture Hours: 40 Total
Lab Hours: 0
Prerequisites: FIRE 73A, FIRE-73B

This course is designed to provide the fire company officer with information and experience in command and control techniques at the scene of an emergency. (11/18)

FIRE-72B: Fire Command I -- Module B

Unit(s): 2
Lecture Hours: 40 Total
Lab Hours: 0
Prerequisites: FIRE 72A
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is designed to provide the fire company officer with information and experience in command and control techniques at the scene of a hazardous materials emergency. (11/18)

FIRE-73A: Fire Inspector 1A

Unit(s): 2
Lecture Hours: 40 Total
Lab Hours: 0
Prerequisites: FIRE 30 or current volunteer, paid call, or seasonal or full-time firefighter for a certified fire protection department.
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

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. (10/17)

FIRE-73B: Fire Inspector 1B

Unit(s): 2
Lecture Hours: 40 Total
Lab Hours: 0
Prerequisites: FIRE 73A

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. (10/17)

FIRE-75: Fire Management I-Management for Company Officers

Unit(s): 2
Lecture Hours: 40 Total
Lab Hours: 0
Prerequisites: FIRE 30 or current volunteer, paid call, or seasonal or full-time firefighter for a certified fire protection department.
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course will provide instruction to improve the student's managerial effectiveness and will require demonstration of growth and development in the use of managerial skills. The course will stress resource identification and utilization. (11/18)

FIRE-76A: Fire Apparatus Driver/Operator 1A (Emergency Vehicle Operations)

Unit(s): 2
Lecture Hours: 40 Total
Lab Hours: 0
Prerequisites: FIRE 63A, FIRE 63B.

Limitations on Enrollment: Must possess a valid California Drivers License, Class B, firefighter restricted (minimum); must be physically fit per department standards; must not have a hearing loss of 25 decibels or more in 3 of 4 frequencies; must have vision better than, or corrected to, far visual acuity of 20/30 with contact lenses or spectacles; and must be a paid call, volunteer, or full-time firefighter at a certified fire protection agency.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course will provide fire service personnel with knowledge of the laws and requirements that pertain to emergency vehicle operation, basic maintenance and troubleshooting, and documentation of fire apparatus. (11/18)

FIRE-76B: Fire Apparatus Driver/Operator 1B (Pump Operations)

Unit(s): 2
Lecture Hours: 40 Total
Lab Hours: 0
Prerequisites: FIRE 76A.

Limitations on Enrollment: Must possess a valid California Drivers License, Class B, firefighter restricted (minimum); must be physically fit per department standards; must not have a hearing loss of 25 decibels or more in 3 of 4 frequencies; must have vision better than, or corrected to, far visual acuity of 20/30 with contact lenses or spectacles; and must be a paid call, volunteer, or full-time firefighter at a certified fire protection agency.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80.

This course will provide fire service personnel with information on pump construction, theory of pump operation, and methods for performing basic hydraulics. Further, students will receive information and techniques on basic inspections, documentation, maintenance, and troubleshooting fire pumps. This course provides the student with information on pump construction and theory of pump operations. Topics include methods for performing basic hydraulics and techniques on basic inspections, documentation, maintenance, and troubleshooting fire pumps. Each student also has the opportunity to increase his or her pumping skills during simulated pumping conditions. (11/18)

FRUIT PRODUCTION**FPRO-13: Fruit Tree Maintenance**

Unit(s): 3
Lecture Hours: 2
Lab Hours: 3
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80 or MATH 85.

This course is designed to evaluate management decisions for fruit and nut trees. Management topics will include studies of climate zones, soil selection, financing, farm organization, irrigation systems, field layout, varietal selection, nutritional needs, harvesting, labor management,

marketing, and budgeting. The student will be required to prepare a budget and calendar of orchard operations. (2/13)

FRENCH

FREN-01: Elementary French I

Designations: (CSU breadth area C2) (IGETC area 6)

Unit(s): 5

Lecture Hours: 5

Lab Hours: 0

Advisories: ENGL 85A, ENGL 85AC, or ENGL 85E.

This is a beginner's course. The course will focus on the development of listening, speaking, reading, and writing in a cultural context, with primary emphasis on communicative competency. Students will learn how to express in French the most basic functions of everyday life. This course is not recommended for native speakers. (11/12)

FREN-02: Elementary French II

Designations: (CSU breadth area C2) (IGETC area 6)

Unit(s): 5

Lecture Hours: 5

Lab Hours: 0

Prerequisites: FREN 01 or 2 years of high school French.

FREN-02 is the continuation of FREN 01. This course will focus on the further development of listening, speaking, reading, and writing in cultural context, with primary emphasis on communicative competency. Students will learn how to express in French basic functions of everyday life. This course is not recommended for native speakers. (11/12)

FREN-03: Intermediate French I

Designations: (CSU breadth area C2) (IGETC area 3B/6)

Unit(s): 5

Lecture Hours: 5

Lab Hours: 0

Prerequisites: FREN 02.

Advisories: LRNR 30. FREN-03 is a continuation of FREN 02.

This course reviews and further develops grammatical concepts introduced in FREN 01 and FREN 02, as well as introduces the student to new concepts. Through varied readings, composition, and discussion, the student will increase with his or her vocabulary and cultural knowledge. (12/12)

FREN-04: Intermediate French II

Designations: (CSU breadth area C2) (IGETC area 3B/6)

Unit(s): 5

Lecture Hours: 5

Lab Hours: 0

Prerequisites: FREN 03.

Advisories: LRNR 30.

This course is a thorough review of the fundamentals of reading, writing, speaking and understanding French, designed to aid the student in preparing for advanced studies in French composition, grammar, and conversation as well as literature in French, history and culture. (02/18)

GENERAL EDUCATIONAL DEVELOPMENT (NONCREDIT)

GED-101: Basic Skills Development and GED Preparation

Unit(s): 144-324 hours Total, Open Entry

This 144-324 hour course is designed to build the basic academic skills of adult learners in the areas of reading comprehension, language and evidence-based writing, mathematical reasoning, life, physical, and earth sciences, and social science. Special emphasis is placed on analytical reading skills, problem solving, and test preparation. The content of this course is reflective of the all new modifications to the GED exam—that will become effective in January of 2014. Subject matter included are the areas covered by the GED exam such as science, social studies, literature, mathematics and writing. (5/19)

GEOGRAPHY

GEOG-01: Physical Geography

Designations: (C-ID GEOG 110) (CSU breadth area B1) (IGETC area 5A)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is a spatial study of the Earth's dynamic physical systems and processes. Topics include: Earth-sun geometry, weather, climate, water, landforms, soil, and the biosphere. Emphasis is on the interrelationships among environmental and human systems and processes and their resulting patterns and distributions. Tools of geographic inquiry are also briefly covered; they may include: maps, remote sensing, Geographic Information Systems (GIS) and Global Positioning Systems (GPS). (10/14)

GEOG-01L: Physical Geography Laboratory

Designations: (C-ID GEOG 111) (CSU breadth area B1/B3) (IGETC area 5C)

Unit(s): 1

Lecture Hours: 0

Lab Hours: 3

One-way Corequisite: GEOG 01.

~~Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.~~

This course focuses on the development of skills and analytic thinking in explaining landform processes, weather phenomena, climate patterns, and vegetation patterns. Exercises include contour map drawing, analysis of data and drawing graphs, study of weather maps, stereo photo interpretation, and landform processes. (5/19)

GEOG-02: World Geography

Designations: (C-ID GEOG 125) (CSU breadth area D) (IGETC area 4)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ~~ENGL 85A or ENGL 85AC or ENGL 85E.~~ ENGL 01A

~~GEOG-02 is a survey of the geography of the world's regions:~~

~~The study includes the ways in which environmental resources are utilized to satisfy the needs of mankind. There is emphasis on economic development, population, and food problems. Knowledge of the cultural and economic interaction between regions will enable the student to better understand contemporary world problems and potentials. (5/03)~~

Survey of the world's culture regions and nations as interpreted by geographers, including physical, cultural, and economic features. Emphasis on spatial and historical influences on population growth, transportation networks, and natural environments. Identification and importance of the significant features of regions. (5/19)

GEOG-12: Introduction to Human Geography

Designations: (IGETC area 4) (C-ID GEOG 120) (CSU breadth area D)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

Introduction to origins and global distribution of cultures. Examines cultural adaptations to the earth, human modifications of the landscape, and patterns of human organization as exemplified in population, agriculture, language, religion, political organization, popular culture, and economic development. Issues addressed include famine, political conflict, multiculturalism, suburban sprawl, industrial relocation and third world development. (11/14)

GEOG-15: Introduction to Weather and Climate

Designations: (IGETC area 5A) (C-ID GEOG 130) (CSU breadth area B1)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

Introduction to the Earth's atmosphere: topics include atmospheric structure and composition, solar radiation and energy balances, temperature, seasonal changes, atmospheric moisture, clouds and fog, precipitation, air pressure, winds, air masses and fronts, cyclones, weather forecasting, climate and climate change. (11/14)

GEOLOGY

GEOL-01: Physical Geology

Designations: (C-ID GEOL 101) (CSU breadth area B1/B3) (IGETC area 5A/5C)

Unit(s): 4

Lecture Hours: 3

Lab Hours: 3

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH C.

This is a beginning course in geology stressing the beneficial and destructive forces of nature and their causes. The course includes a study of the development of landscapes, origin of minerals and rocks, geologic work of ground water, the phenomena of earthquakes, volcanism, metamorphism and other fundamental concepts of geology. Lab work includes the identification and study of rocks and minerals, study of topographic and geologic maps and aerial photographs, and introduction to cross section and profiles of topographic maps. A field trip is required for this class. (2/14)

GEOL-02: Historical Geology

Designations: (C-ID GEOL 111) (CSU breadth area B1/B3) (IGETC area 5A/5C)

Unit(s): 4

Lecture Hours: 3

Lab Hours: 3

Advisories: ARCH 01 or GEOL 01; ENGL 01A.

This course covers the geological history of the earth and the development of plant and animal life as traced through the rock and fossil records. The correlation between geologic changes through time, the uses of the fossil record in determining geologic history, and the formation of economic mineral deposits is emphasized throughout the course. A field trip is required for this course. (2/13)

GEOL-03: Earth Science

Designations: (IGETC area 5A/5C) (C-ID GEOL 121) (CSU breadth area B1/B3)

Unit(s): 4

Lecture Hours: 3

Lab Hours: 3

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E

An introduction to the essentials of Earth Science including the geosphere, atmosphere, hydrosphere, and solar system. This course focuses on the interactions between physical and chemical systems of the Earth such as the tectonic cycle, rock cycle, hydrologic cycle, weather and climate. This course is designed to meet the content requirement for earth and space science for the Liberal Studies - Elementary Teaching preparation pathway. (2/14)

GERMAN

GERN-01: Elementary German I

Designations: (CSU breadth area C2) (IGETC area 6)

Unit(s): 5

Lecture Hours: 5

Lab Hours: 0

Advisories: ENGL 84A.

This is a beginner's course. The course will focus on the development of listening, speaking, reading, and writing in a cultural context, with primary emphasis on communicative competency. Students will learn how to express in German the most basic functions of everyday life. (10/16)

GERN-02: Elementary German II

Designations: (CSU breadth area C2) (IGETC area 3B/6)

Unit(s): 5

Lecture Hours: 5

Lab Hours: 0

Prerequisites: GERN 01 or two years of high school German.

GERN-02 is a continuation of GERN 01. This course will focus on the further development of listening, speaking, reading, and writing in a cultural context, with primary emphasis on communicative competency. Students will learn how to express in German basic functions of everyday life. (10/16)

GERN-03: Intermediate German I

Designations: (CSU breadth area C2) (IGETC area 3B/6)

Unit(s): 5

Lecture Hours: 5

Lab Hours: 0

Prerequisites: GERN 02.

Advisories: LRNR 30. GERN-03 is a continuation of GERN 02.

This course reviews and further develops grammatical concepts introduced in GERN 01 and GERN 02, as well as introduces the student to new concepts. Through varied readings, composition, and discussion, the student will increase his or her vocabulary and cultural knowledge. (10/16)

GERN-04: Intermediate German II

Designations: (CSU breadth area C2) (IGETC area 3B/6)

Unit(s): 5

Lecture Hours: 5

Lab Hours: 0

Prerequisites: GERN 03.

Advisories: LRNR 30.

This course is a thorough review of the fundamentals of reading, writing, speaking and understanding German, designed to aid the student in preparing for advanced studies in German composition, grammar, and conversation, as well as literature in German, history and culture. (10/16)

GUIDANCE (NONCREDIT)

GUI-101: Introduction to College

Unit(s): 1.5 to 6, ~~Open Entry~~

This course will acquaint students with the College, academic regulations, the availability of campus resources, and the importance of educational planning. (11/18)

GUI-102: Probation Solutions-Level 1

Unit(s): 1.5 Total, Open Entry

Successful completion of this course is required for Level I academic and progress probation students to continue enrollment. The student will learn strategies for successful course progression and removal from probation status. They will also learn viable approaches for successfully attaining their academic goals. (10/13)

GUIDANCE

GUID-30: Foundations and Strategies for College Success

Designations: (CSU breadth area E)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ~~ENGL 85A or ENGL 85AC or ENGL 85E.~~

This comprehensive course integrates the cultivation of skills, values, and attitudes indicative of confident, capable students/individuals with problem solving and critical/creative thinking. The course focuses on the following topics: life management, goal setting, career decision making, educational planning, college expectations and opportunities, instructor-student relationships, cultural diversity, lifestyle choices affecting health maintenance, stress management, campus resources, learning styles and strategies, and study skills. This course is recommended for all new students. (2/19)

GUID-45: Pathways to Transfer

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is an introduction to the process of transfer from community college to a four-year college or university. Students will research and evaluate colleges and universities based on degrees offered, transfer requirements, application process, housing, financial aid, scholarships, support services, and student life. Students will develop an education plan and a portfolio of personalized research information to assist them in the transfer process. (10/10)

GUID-48: Life and Career Planning

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ~~ENGL 85A~~ or ENGL 85AC or ~~ENGL 85E~~.

This is a structured sequential course in life and career planning. Experiences are provided that encompass education, occupation, and job trends. The total individual is explored; issues such as life roles, values, goals, life styles, preferences, coping skills, and personal barriers as they relate to decisions will be covered. (2/19)

GUID-53: Practical Strategies for College Success

Unit(s): 1

Lecture Hours: 1

Lab Hours: 0

Advisories: ENGL 83A.

The course is designed to introduce practical strategies for college success. Topics addressed will include: orientation, assessment and awareness of values, choices and behaviors that impact college success, understanding the college catalog, college policies, and campus resources, choosing a major and understanding graduation and transfer requirements, goal setting, study strategies, and educational planning. (12/15)

GUID-54: Foundations and Strategies for Academic Recovery

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 84A.

This course is appropriate for students wishing to improve their academic standing. Each student will identify his/her educational goal and develop an appropriate plan for achieving that goal. Academic policies will be addressed and strategies to get off and stay off probation, such as, informed decision-making, problem solving, classroom behavior, and behavior modification will also be studied. This course is recommended for all students on academic and/or progress probation. (9/13)

HISTORY

HIST-03A: History of Western Civilization, Part 1

Designations: (C-ID HIST 170) (CSU breadth Area C2 & D) (IGETC Area 3B & 4)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 01A.

This course provides a broad historical survey of humanity's social, political, economic, and intellectual experiences for Western Civilization from prehistory to 1650. (01/18)

HIST-03B: History of Western Civilization, Part 1

Designations: (C-ID HIST 180) (CSU breadth Area C2 & D) (IGETC Area 3B & 4)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 01A.

This course provides a broad historical survey of humanity's social, political, economic, and intellectual experiences for Western Civilization from 1650 to the present. (03/18)

HIST-04A: World History Part 1

Designations: (C-ID HIST 150) (CSU breadth area C2/D) (IGETC area 3B)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 01A.

This course provides a broad historical survey of humanity's social, political, economic, and intellectual experiences for all major world civilizations from pre-history through at least 1500. (12/17)

HIST-04B: History of Civilization: Part II

Designations: (C-ID HIST 180) (CSU breadth area C2/D) (IGETC area 3B)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 01A.

This course provides a broad historical survey of humanity's social, political, economic, and intellectual experiences for all major world civilizations from approximately the 16th century to the present. (12/17)

HIST-05: History of Europe From 1901 to the Present

Designations: (CSU breadth area C2/D) (IGETC area 3B/4)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ~~ENGL 85A~~ or ~~ENGL 85AC~~ or ~~ENGL 85E~~ ENGL 01A.

HIST-05 is a one-semester survey course on 20th century and early 21st century European history (1901 to the present). The political, economic, cultural, and social development of 20th century and recent European history will be covered. There will be emphasis on the traumatic changes brought about by political realignment, colonialism, war, revolution, and economic upheaval. (3/19)

HIST-07: History of Southeast Asia

Designations: (CSU breadth area D) (IGETC area 4)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 01A.

This course provides a broad historical survey of Southeast Asia from pre-historic times to the present. This course includes the study of traditional and modern Southeast Asia, cultural achievements, and contributions to both Eastern and Western civilizations. (01/18)

HIST-09A: China: Introduction to East Asian Civilization

Designations: (CSU breadth area C2) (IGETC area 3B/4)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 01A; ~~LRNR 30~~; PHIL 10.

This course provides a broad historical survey of China, the Far East's oldest civilization, from pre-historic times to the present with emphasis on China's cultural achievements and contributions to both Eastern and Western civilizations. (3/19)

HIST-09B: Japan: Introduction to East Asian Civilization

Designations: (CSU breadth area C2) (IGETC area 3B)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 01A.

This course provides a broad historical survey of Japan from pre-historic times to the present. The course includes the study of traditional and modern Japan, significant institutions, cultural achievements, and contributions to both Eastern and Western civilizations. (10/17)

HIST-10: History of the Middle East

Designations: (CSU breadth area D) (IGETC area 4)

Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Advisories: ENGL 01A.

This course provides a broad historical survey of the Middle East from the ancient civilizations of Mesopotamia to the present. Topics of focus will include the impact of pre-Islamic civilization on the modern Middle East; the advent, progression, and influence of Islamic faith and culture in the Middle East; the global interplay between the Middle East and the larger world through various eras of Middle Eastern history; the religious, ethnic, social, economic, military, and political developments that shape the modern Middle East; examination contemporary issues facing the Middle East. (12/17)

HIST-17A: United States History and United States Constitution

Designations: (CSU breadth area C2/D/F1/F2) (IGETC area 3B/4) (C-ID HIST 130)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Advisories: ENGL 01A.

This is an extensive survey course of United States history from the period of exploration to the Reconstruction Period. The course covers the social, political, economic, and constitutional development of the nation. Course will emphasize the development of critical and historical thinking skills. (5/12)

HIST-17AH: Honors United States History and United States Constitution

Designations: (CSU breadth area C2/D/F1/F2) (IGETC area 3B/4) (C-ID HIST-130)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Limitations on Enrollment: Enrollment in the Honors Program. (See the college catalog for a description of enrollment requirements.)
Advisories: ENGL 01A; ENGL 13/ENGL 13H or PHIL 13/PHIL 13H.

This course covers the social, political, economic and constitutional development of the nation. There will be an emphasis on academic rigor, analytical research, writing, critical thinking, and collaborative learning. (5/12)

HIST-17B: United States History and California State and Local Government

Designations: (CSU breadth area C2/D/F1/F2) (IGETC area 3B/4)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Advisories: ENGL 01A.

This course is a continuation of HIST 17A from the end of the Reconstruction Period in 1877 to the present. It examines national, state, and local history from the late 19th century to the present. The course covers the social, political, economic, and constitutional development of the nation. (5/12)

HIST-17BH: Honors United States History and California State and Local Government

Designations: (CSU breadth area C2/D/F1/F2) (IGETC area 3B/4) (C-ID HIST 140)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Limitations on Enrollment: Enrollment in the Honors Program. (See the college catalog for a description of enrollment requirements.)
Advisories: ENGL 01A; ENGL 13/ENGL 13H or PHIL 13/PHIL 13H.

This course examines our national, state, and local history and government from the late 19th century to the present. There will be an emphasis on academic rigor, analytical research, writing, critical thinking, and collaborative learning. (5/12)

HIST-19: Women in American History

Designations: (IGETC area 4) (CSU breadth area C2/D)

Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Advisories: ENGL 01A.

This course is a review of the history of women in America covering the period from 1600 to the present. The emphasis of the course is a multicultural and multi-class approach, examining the problems of women of various ethnicities, races and classes in America. The formation of gender roles is discussed along with an analysis of women's political and economic status across the period. The course will analyze women's struggle for equal rights, the impact of women's participation in significant events in American history, and regional and cultural differences in the way women are treated in society. Emphasis will be on California local and state governments, their operations and how women have politically participated in California. (11/15)

HIST-22: History of Minorities -- Black Emphasis

Designations: (CSU breadth area D/F2) (IGETC area 4)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Advisories: ENGL 01A.

This course is a political and social history of American society and culture as seen from the Black perspective. It is a survey course covering the period from 1600 to the present. This course presents in-depth the historical background and development of American institutions and ideals. (2/13)

HIST-23: The History of Hispanic-Americans in the Southwest U.S.

Designations: (CSU breadth area D) (IGETC area 4)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Advisories: ~~ENGL 85A or ENGL 85AC or ENGL 85E~~ ENGL 01A.

This course is an introduction to the history of the Mexican-American, and is designed to examine the contributions of Hispanics to the U.S. Emphasis will be placed upon the exploration, settlement, and ideology of Hispanics throughout the U.S. The course has pragmatic and relevant historical coverage that includes pre-Columbian to Hispanic civil rights movements. (4/06)

HIST-29: History of California

Designations: (IGETC area 3B/4) (CSU breadth area C2/D)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is a survey of the early history of California through to the present, starting with the original peoples of California, the discovery and settlement of the area by the Spanish, the Mexican period, American conquest and occupation, and the gold rush. The course also examines topics including the economic, social, cultural, and political consequences of railroad expansion, and early twentieth-century urbanization. It also includes the impact of the Great Depression and World War II, water projects, protest and reform movements of the 1960's, the rise of conservatism and recent political trends. (2/15)

HIST-49A-ZZ: Special Topics in History

Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Advisories: ENGL 01A.

This is a course covering a variety of topics of current interest to students of history. Different topics will be emphasized each time the course is offered. Each letter may be taken only once. (03/18)

HISTORY (NONCREDIT)

HST-900: American Citizenship

Unit(s): 72 Hours, Open Entry
Advisories: ENG 802.

This course is best suited for non-U.S. citizens. It will provide non-U.S.

citizens with a study of the federal and state system of government and the U.S. Constitution, preparing them for the naturalization citizenship interview with United States Citizenship and Immigration Services (USCIS). The course will include civil rights, voting, historical development of the U.S., types of government, the electoral process, political parties, the executive, legislative, and judicial branches of government, and the relationship between the state and federal systems of government. The student can practice reading, writing, speaking, listening, and pronunciation in English. (12/15)

HEALTH (NONCREDIT)

HLT-322: Beginning Fall and Injury Prevention for Older Adults

Unit(s): 36 Hours

This 36-hour course is designed to teach older adults how physical activity can help reduce incidences of slips, sprains, and falls. The course is a combination of lecture, demonstration, and practice of muscle development and strengthening techniques. Diet and nutrition for supporting health and maintaining healthy weight is also discussed. (11/18)

HEALTH

HLTH-10: Contemporary Health

Designations: (CSU breadth area E)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course surveys the human condition from birth to death. Emphasis is placed on the impact of personal choice throughout life. Mental health, stress, alcohol, drugs, tobacco, disease processes, nutrition, fitness, sexuality, aging, environmental issues, and other related topics are studied and examined. The student is challenged to assume responsibility for his or her own health, well being, and lifestyle. (5/07)

HLTH-15: Drugs, Alcohol, and Tobacco

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course will give students a basic understanding of the psychophysiological effects of drugs, alcohol, and tobacco. Included in the study will be use patterns, individual and societal problems that arise from abuse, and the medicinal effects. Personal coping skills will be included that can help individuals develop drug-free lifestyles. (12/06)

HMONG

HMNG-01: Elementary Hmong I

Designations: (CSU breadth area C2) (IGETC area 6)

Unit(s): 5

Lecture Hours: 5

Lab Hours: 0

Advisories: ENGL 84A.

This course is a study of the fundamentals of pronunciation, audio-lingual training, and phonology; syllabication; appreciation of basic elements of the Hmong culture; use of the most frequent words in Hmong; basic sentences in conversation; reading and mastery of verb forms; practical vocabulary through conversation and practice in class and at home; elementary composition. (12/12)

HMNG-02: Elementary Hmong II

Designations: (CSU breadth area C2) (IGETC area 3B/6)

Unit(s): 5

Lecture Hours: 5

Lab Hours: 0

Prerequisites: HMNG 01.

This course is for the continuation of HMNG 01. The focus will be on further development of listening, speaking, reading and writing in a cultural context.

There will be extensive use of Hmong grammar, written composition and oral communication. Selections from Hmong literature and history will be read and discussed in Hmong. Stress is given to reading, writing, speaking and understanding Hmong as these communication skills apply to practical situations. (9/12)

HUMAN SERVICES

HMSV-20: Social Welfare & Social Work

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 01A.

A practical and general study of theoretical concepts and institutional frameworks that guide social welfare policy and practice. This course provides an overview of the social work profession and the social welfare system within which it operates, including federal, state, and county organizations. Students will also review employment opportunities and requirements in social welfare. (11/14)

HMSV-21: Human Behavior and the Helping Process

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 01A.

This course examines the history and philosophies of human services; identifies what constitutes genuine and empathic relationships; analyzes the role of conflict in individual and societal systems; demonstrates a broad range of relevant communication skills and strategies, and assists students in designing integrated services using innovative practices in diverse settings. The course includes components on personality development; social and political influences that shape interactive behavior, and guidelines for identifying normal and exceptional behavior, as well as, practical ways of helping people who have problems in living. (11/14)

HMSV-22: Survey and Utilization of Community Resources

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 01A.

This course is designed to introduce students who are seeking careers in Human Services to community resources that facilitate the helping process. Students will become acquainted with various agencies, organizations (profit & nonprofit), and institutions that offer promotion, prevention, treatment, and rehabilitation within the community. Other components of this course address the importance of advocating for community empowerment, participation, and change. Students will also begin the process of gaining a sense of self in relationship to community, and develop an understanding of social dynamics as they relate to power structures. (11/14)

HMSV - 24: Work Experience in Human Services

Unit(s): 1-8

Lecture Hours: 0

Lab: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course enables students to earn college credit for learning and/or improving skills or knowledge on-the-job. Occupational Work Experience is discipline specific and must connect to the student's major or occupational goal(s). Seventy-five (75) hours of documented paid work experience equals 1 unit of credit. Sixty (60) hours of documented volunteer experience equals 1 unit of credit. A student may enroll in up to 16 total units of work experience at Merced College. Students must have an established work site prior to enrolling in the course. (11/16)

HMSV-41: Case Management

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is designed to give the student an introduction to case

management skills, including screening, assessment, treatment planning, and referral support. (11/14)

HMSV-42: Introduction to Counseling Skills

Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is oriented to counseling clients within the field of human services. Course work is designed to give the student an introduction to counseling theory and classroom experience in applying basic counseling skills. (11/14)

HMSV-43: Ethics in Counseling

Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course focuses on professional responsibilities in the field of human services. Awareness of state and federal laws and regulations, and the codes of conduct governing counseling in the human services are examined. Effective approaches and the examination of legal, ethical, and moral responsibilities and referral practices of the counselor will also be presented. (11/14)

HMSV-44: Leadership and Counseling in Groups

Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is an introduction to the dynamics of group counseling. The group will study itself (under supervision) and learn various leadership skills. The factors involved in problems of communication, effective emotional responses and personal growth will be highlighted. (11/14)

HONORS

HNRS-40A: Honors Seminar: The 60's Experience

Unit(s): 2
Lecture Hours: 2
Lab Hours: 0
Limitations on Enrollment: Enrollment in the Honors Program.

This course will focus on the in-depth discussion and analysis of the philosophy, politics, and music of the 1960's. (11/12)

HNRS-40B: Honors Seminar: Native American Philosophy

Unit(s): 2
Lecture Hours: 2
Lab Hours: 0
Limitations on Enrollment: Enrollment in the Honors Program.

This course will focus on the in-depth discussion and analysis of Native American philosophy, politics, and music. (11/12)

HNRS-40C: Honors Seminar: Philosophy and Rock Music

Unit(s): 2
Lecture Hours: 2
Lab Hours: 0
Limitations on Enrollment: Enrollment in the Honors Program.

This course will discuss and analyze traditional philosophical questions through the use of classic rock music. (11/12)

HNRS-40D: Honors Seminar: The Philosophy of Sex and Love

Unit(s): 2
Lecture Hours: 2
Lab Hours: 0
Limitations on Enrollment: Enrollment in the Honors Program.

This course will focus on the in-depth discussion and analysis of religious and philosophical theories pertaining to sex and love. (11/12)

HUMANITIES

HUM-01: Studies in Humanities--Ancient Through Renaissance

Designations: (CSU breadth area C2) (IGETC area 3B)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E.
Advisories: ENGL 01A.

The principal aims of this course are to examine human existence and cultural endeavors from earliest ancient civilizations through the Renaissance. Students will examine the continuities of human endeavors through fine arts, literatures, philosophies, religions, and the sciences with an integration of certain non-Western cultures. (5/09)

HUM-01H: Honors Studies in Humanities--Ancient Through Renaissance

Designations: (CSU breadth area C2) (IGETC area 3B)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E.
Limitations on Enrollment: Enrollment in the Honors Program. See the college catalog for a description of enrollment requirements.
Advisories: Advisory ENGL 01A.

The principal aim of this course is to examine human existence and cultural endeavor from the earliest ancient civilizations through the Renaissance. Students will examine developments in the fine arts, literature, philosophy, religion, and the sciences from a variety of cultures, both Western and non-Western. There will be an emphasis on collaborative learning, research, and writing. (11/15)

HUM-02: Studies in Humanities--Renaissance to Present

Designations: (CSU breadth area C2) (IGETC area 3B)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E.
Advisories: ENGL 01A.

The principal aims of this course are to examine human existence and cultural endeavors from the Renaissance to the present. Students will examine the continuities of human endeavors through fine arts, literatures, philosophies, religions, and the sciences, with an integration of certain non-Western cultures. (5/09)

HUM-02H: Honors Studies in Humanities--Renaissance to Present

Designations: (CSU breadth area C2) (IGETC area 3B)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E.
Limitations on Enrollment: Enrollment in the Honors Program. See the college catalog for a description of enrollment requirements.
Advisories: Advisory ENGL 01A.

The principal aim of this course is to examine human existence and cultural endeavors from the Renaissance to the present. Students will examine developments in the fine arts, literature, philosophy, religion, and the sciences from a variety of cultures, both Western and non-Western. There will be an emphasis on collaborative learning, research, and writing. (11/15)

HUM-15: Comparative Cultures

Designations: (CSU breadth area C2/D) (IGETC area 3B/4)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Advisories: ENGL 01A.

This course surveys the historical development and social structures of several different cultures in the United States. Cultures discussed normally include African American, Asian American, Mexican American and Native American. Emphasis will be placed on issues of ethnicity and pluralism. (3/12)

HUM-21: Humanities and Film

Designations: (CSU breadth area C2) (IGETC area 3A)
 Unit(s): 3
 Lecture Hours: 2
 Lab Hours: 3
 Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is an introduction to the humanities through the study of film. Film criticism will be combined with the analysis of philosophical, literary, and/or artistic themes. Feature-length films will be screened. (3/12)

INDUSTRIAL TECHNOLOGY**INDT-10: Agricultural and Industrial Technical Skills**

Also: (MECH 10)
 Unit(s): 3
 Lecture Hours: 2
 Lab Hours: 3
 Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80.

This course provides an introduction to basic technical skills required throughout the industrial areas. The course includes identification and use of tools and materials, tool sharpening and care, hot and cold metal work, pipefitting, electrical wiring fundamentals, basic woodwork, concrete materials and mixes, and sketching and estimating. (11/12)

INDT-25: Fluid Power

Unit(s): 3
 Lecture Hours: 2
 Lab Hours: 3
 Advisories: EENGL 85E.

This course covers the operational theory and practical applications of hydraulics, pneumatics and vacuum components and systems. This includes adjustment, service, and functional operation of pumps, controls, transmission systems, actuators and fluidics. The design and application of fluidic systems as they relate to industrial machinery will be covered together with systematic methods of trouble shooting. (12/18)

INDT-32: Building Construction Concepts

Unit(s): 3
 Lecture Hours: 2
 Lab Hours: 3
 Advisories: ENGL 84A; MATH 80.

This course will provide the student with an understanding of construction concepts by building scaled modulars of each area of house construction (floor, wall, and roof framing; installation of windows and doors). The student will learn the concepts of stairwell and fireplace framing. (3/06)

INDT-35: Electrical Wiring: Residential and Industrial

Unit(s): 3
 Lecture Hours: 2
 Lab Hours: 3
 Limitation on Enrollment: 25.

This course covers basic residential and industrial theory. Topics include electrical theory, wiring in accordance with the latest version of the National Electrical Code, blueprint reading, layout of electrical circuits according to blueprints, switches, electrical connections, grounding and electrical safety, materials, appliance connections, industrial wiring and components, power poles and low voltage remote control devices. Students may petition, through the Office of Admissions and Records, to retake the course as the National Electrical Codes change. (11/18)

INDT-38I: Industrial Technology Computer Applications and Literacy

Unit(s): 3
 Lecture Hours: 2
 Lab Hours: 3
 Advisories: ENGL 85E.
 Limitation on Enrollment: 25

This course explores usage in the workplace with emphasis on industrial technology (IT) situations and applications. Computer applications including word processing, spreadsheets, databases, and presentation managers will be covered. Also included will be other software and

hardware appropriate to industrial technology. (11/18)

INDT-40: Commercial Refrigeration Systems

Unit(s): 3
 Lecture Hours: 2
 Lab Hours: 3
 Advisories: ENGL 85E.

This course presents Commercial Refrigeration Systems to students. Systems studied will range from fractional to large tonnage refrigeration systems. Medium and low temperature systems, multiple defrost methods, and energy efficiency will be studied. Diagnostic and repair procedures on commercial systems and related equipment will be covered. (11/18)

INDT-41: Industrial Power Transmission

Unit(s): 3
 Lecture Hours: 2
 Lab Hours: 3
 Advisories: ENGL 85E.
 Limitation on Enrollment: 25

This course covers industrial power transmission systems. The components studied are gear reduction, torque multiplication, direct drive, belt drive, chain drive, bearings, seals, and related components. (11/18)

INDT-49: Electrical Codes and Ordinances

Unit(s): 3
 Lecture Hours: 3
 Lab Hours: 0
 Advisories: ENGL 85E.
 Limitation on Enrollment: 25

This is a course in the interpretation and application of the National Electrical Code (NEC), and other national, state and local electrical codes and ordinances which regulate the installation, alteration and maintenance of electrical circuits, systems and equipment. Students may petition, through the Office of Admissions and Records, to retake the course as the National Electrical Codes change. (11/18)

INDT-50: HVAC -- Heating and Control Systems

Unit(s): 6
 Lecture Hours: 4
 Lab Hours: 6
 Advisories: ENGL 85E.
 Limitation on Enrollment: 25

This course will enable students to identify and understand the operation of the various components found in heating and air conditioning units. Students will perform diagnostic and repair procedures on the above units and apply basic electrical concepts as they relate to HVAC industry heating and control technology. (11/18)

INDT-51: HVAC -- Ventilation and Air Conditioning Systems

Unit(s): 6
 Lecture Hours: 4
 Lab Hours: 6
 Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; INDT 50, INDT 52; MATH 80 or MATH 85.

This course will enable students to identify and understand the operation of various components and systems found in air conditioning refrigeration systems. Students will perform diagnostic and repair procedures on air conditioning refrigeration systems and related equipment. Thermodynamic and psychometric principles as they relate to air conditioning systems will be covered. (1/14)

INDT-52: Refrigerant Usage Certification and R-410A Safety

Unit(s): 1
 Lecture Hours: 1
 Lab Hours: 0
 Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course prepares students for EPA certification in refrigerant handling and R410A safety. The Clean Air Act and Montreal protocol will be discussed. Types I, II and III certification test requirements will be discussed. EPA testing will be accomplished as a component of the course. A testing fee will be required for those who wish certification. Certified technicians will

perform laboratory exercises utilizing recovery equipment and procedures. (1/14)

INDT-53: Heat Pump Systems

Unit(s): 3
Lecture Hours: 2
Lab Hours: 3
Prerequisites: INDT 51 and INDT 52.

This course studies the operation, installation, and service of heat pump systems. (12/18)

INDT-54: Residential HVAC Installation

Unit(s): 3
Lecture Hours: 2
Lab Hours: 3

This course prepares learner for entry-level employment in the HVAC installation trade. Topics covered in the course are installation materials, techniques and California mechanical/electrical codes related to residential HVAC system installation. (12/18)

INDT-71AA-ZZ: Industrial Technology Special Topics

Unit(s): 0.5-4
Lecture Hours: 0.5-4
Lab Hours: 1.5 - 216
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80 or MATH 85.

This course is the study of basic principles, processes, and theories of the special topic being presented during the semester. (1/14)

JAPANESE

JPNS-01A: Elementary Japanese

Designations: (CSU breadth area C2)
Unit(s): 2.5
Lecture Hours: 2.5
Lab Hours: 0
Advisories: ENGL 84A.

This course will focus on the development of listening, speaking, reading, and writing in a cultural context, with primary emphasis on communicative competency. Students will learn to express in Japanese the most basic functions of everyday life. (2/09)

JPNS-01B: Elementary Japanese

Designations: (CSU breadth area C2) (IGETC area 6)
Unit(s): 2.5
Lecture Hours: 2.5
Lab Hours: 0
Prerequisites: JPNS 01A.

This course will continue to focus on the development of listening, speaking, reading, and writing in a cultural context, with primary emphasis on communicative competency. Students will learn how to express in Japanese the most basic functions of everyday life. (12/11)

JPNS-02: Elementary Japanese

Designations: (CSU breadth area C2) (IGETC area 6)
Unit(s): 5
Lecture Hours: 5
Lab Hours: 0
Prerequisites: JPNS 01B. JPNS-02 is the continuation of JPNS 01B.

This course will focus on the further development of listening, speaking, reading, and writing in a cultural context, with primary emphasis on communicative competency. Students will learn how to express in Japanese basic functions of everyday life. (2/10)

KINESIOLOGY

KINE-01: Introduction to Kinesiology

Designations: (C-ID KIN 100)
Unit(s): 3
Lecture Hours: 3

Lab Hours: 0

Prerequisites: ~~ENGL 85A~~ or ENGL 85AC or ~~ENGL 85E~~.

Advisories: ~~LRNR 30~~.

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. Career opportunities in the areas of teaching, coaching, allied health, and fitness professions. (2/19)

KINE-02: First Aid and CPR for the Professional Rescuer

Designations: (C-ID KIN 101)

Unit(s): 3
Lecture Hours: 3
Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course involves the theory and detailed demonstration of the first aid care of the injured. The student will learn to assess a victim's condition and incorporate proper treatment. Standard first aid, CPR for the professional rescuer, and AED certification(s) can be granted upon successful completion of requirements. (2/13)

KINE-03: Introduction to Athletic Training

Unit(s): 3
Lecture Hours: 2
Lab Hours: 3

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This is an introductory course in recognition, assessment, management, care and prevention of injuries occurring in physical activities. (2/14)

KINE-04: Essentials of Exercise Science

Unit(s): 3
Lecture Hours: 3
Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

The purpose of this course is to introduce students to foundational scientific principles related to exercise science. Students will be introduced to the structures and functions of the systems of the body. Additionally, the basic principles of exercise science and training adaptations will be discussed. The students will also be introduced to the proper administration of fitness testing. (11/16)

KINE-05: Foundations of Exercise Program Design

Unit(s): 3
Lecture Hours: 2.5
Lab Hours: 1.5

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

The purpose of this course is to introduce the fundamentals of personal fitness training. This course will successfully prepare students to take a national personal training certification. Participants will receive practical experience in fitness testing, injury prevention, client assessment and training concepts. The course examines different components of fitness, exercise science, assessment, and exercise program design. (11/16)

KINE-06: Group Fitness Instruction

Unit(s): 3
Lecture Hours: 2.5
Lab Hours: 1.5

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course introduces students to exercise science concepts and their use in teaching group exercise. The course emphasizes the integration of anatomy and applied kinesiology with teaching principles and techniques for a variety of group exercise formats. Additionally, the course focuses on motor learning and effective group leadership, while teaching and monitoring human movement. Students will receive technical information and practical experience as preparation for group fitness instructor certification and exam. (11/16)

KINE-07: Rehabilitation Techniques for Athletic Training

Unit(s): 3
Lecture Hours: 2.5
Lab Hours: 1.5
Prerequisites: KINE 03

This course will provide students with applications and methods in athletic injury treatment and rehabilitation. A practical approach to rehabilitation programs will be presented through design, implementation, and supervision. This course will include a lab component to provide students the opportunity to apply the concepts that are introduced. (11/16)

KINE-09: Adaptive Physical Education

Designations: (CSU breadth area E)

Unit(s): 1

Lecture Hours: 0

Lab Hours: 3

Advisories: Advise that student provide medical verification of disability and recommendation of medical intervention.

This course is a continuing program of individualized instruction for the physically disabled student allowing that student long-range participation in an adapted exercise physiology environment designed to create more physical independence for the student. (9/15)

KINE-12A: Beginning Baseball

Unit(s): 1-2

Lecture Hours: 0

Lab Hours: 3-6

Advisories: 2 years varsity high school playing experience and/or instructors approval.

This is a course designed to teach the basic fundamentals of baseball. Hitting, fielding, throwing, base running, team play, and basic rules and strategies will be covered. Team competition is also included. (2/13)

KINE-12B: Intermediate Baseball

Unit(s): 1-2

Lecture Hours: 0

Lab Hours: 3-6

Advisories: KINE 12A.

Intermediate Baseball will cover techniques of the game, rules, and strategy. Individual and team techniques will be emphasized. Students will participate in intermediate level individual and team techniques in relationship to baseball strategy. (2/13)

KINE-13: Beginning Basketball

Unit(s): 1

Lecture Hours: 0

Lab Hours: 3

Advisories: Good general health; absence of medical conditions that would prevent planned physical activity.

This course offers the beginning student the opportunity to develop and improve fundamental skills involved in basketball, such as, ball handling, shooting, defensive and offensive tactics, and physical endurance. It also covers team strategy and play. Rules, strategy, and sportsmanship are also stressed. (2/14)

KINE-14: Beginning Volleyball

Unit(s): 1

Lecture Hours: 0

Lab Hours: 3

Advisories: Good general health; absence of medical conditions that would prevent planned physical activity.

This course begins with the basic skills and court positions necessary to enjoy the sport. Each class session begins with warm-up exercises and "dry-land" drills. Skill period ends with class participation in a volleyball match. (2/14)

KINE-15: Softball

Designations: (CSU breadth area E)

Unit(s): 1

Lecture Hours: 0

Lab Hours: 3

Advisories: Good general health; absence of medical conditions that would prevent planned physical activity.

This is a course designed to teach the fundamentals of softball. Batting, throwing, catching, base running, team play, rules and strategy will be

covered. (11/15)

KINE-16: Football-Offensive Development

Unit(s): 1

Lecture Hours: 0

Lab Hours: 3

Advisories: Good general health; absence of medical conditions that would prevent planned physical activity.

This course offers the student the opportunity to develop and improve the fundamental skills involved in football, such as passing, receiving, kicking, blocking (with the aid of blocking dummies), team play and strategy. Rules and class competition will also be included. (2/14)

KINE-17: Soccer

Unit(s): 1

Lecture Hours: 0

Lab Hours: 3

Advisories: Good general health; absence of medical conditions that would prevent planned physical activity.

The purpose of this course is to provide beginning instruction in the techniques, tactics and strategies associated with competitive soccer. Special emphasis is placed on drills and competitive play situation. (5/19)

KINE-19: Water Polo

Unit(s): 1

Lecture Hours: 0

Lab Hours: 3

Advisories: KINE 24B.

This course is designed to develop the basic fundamentals of water polo. Focus will be placed on fundamental skill development, conditioning, rules, and terminology. This course provides the opportunity for intermediate and advanced swimmers to develop a greater understanding of the game of water polo. (2/14)

KINE-20: Aqua Aerobics

Unit(s): 1

Lecture Hours: 0

Lab Hours: 3

Advisories: Good general health; absence of medical conditions that would prevent planned physical activity.

This course is designed to improve cardiorespiratory fitness, muscular fitness, and flexibility. Exercises are performed in the pool to add resistance and minimize impact on bones and joints. Non-swimmers and swimmers will benefit from this course. (1/14)

KINE-23: Lifeguard Training

Unit(s): 2

Lecture Hours: 1.5

Lab Hours: 1.5

Limitations on Enrollment: Students must pass American Red Cross lifeguarding prerequisite skills.

Advisories: KINE 24B.

This course provides entry-level lifeguard participants with the knowledge and skills to prevent, recognize and respond to aquatic emergencies and to provide care for breathing and cardiac emergencies, injuries and sudden illnesses until emergency medical services (EMS) personnel take over. Upon completion of the course students can earn certification through the American Red Cross in lifeguard training, first aid, Title 22, and CPR/AED for the professional rescuer. (11/13)

KINE-24: Work Experience in Kinesiology

Unit(s): 1-8

Lecture Hours: 0

Lab: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course enables students to earn college credit for learning and/or improving skills or knowledge on-the-job. Occupational Work Experience is discipline specific and must connect to the student's major or occupational goal(s). Seventy-five (75) hours of documented paid work experience equals 1 unit of credit. Sixty (60) hours of documented volunteer experience equals 1 unit of credit. A student may enroll in up to 16 total units of work

experience at Merced College. Students must have an established work site prior to enrolling in the course. (11/16)

KINE-24A: Beginning Swimming

Unit(s): 1
Lecture Hours: 0
Lab Hours: 3

Advisories: Good general health; absence of medical conditions that would prevent planned physical activity.

This course is a general introduction to swimming and aquatics. It is designed for the beginner or non-swimmer who wants to learn aquatic fundamentals and receive stroke instruction in the front crawl, elementary backstroke, and sidestroke. (2/14)

KINE-24B: Techniques and Stroke Development for Swimming

Unit(s): 1
Lecture Hours: 0
Lab Hours: 3

Advisories: KINE 24A.

This course is designed for the intermediate swimmer. Emphasis is placed on technique and stroke development of the front crawl, elementary backstroke, and side stroke. Back crawl, breaststroke, butterfly, turns, dives, and fitness and training concepts will also be introduced. (2/14)

KINE-24C: Swimming for Fitness

Unit(s): 1
Lecture Hours: 0
Lab Hours: 3

Advisories: KINE 24B.

This course is designed for the swimmer who has mastered the basic skills and is ready for more advanced swimming techniques. Emphasis is placed on the competitive swimming strokes, turns, starts, and principles of training. (2/14)

KINE-30: Group Exercise

Designations: (CSU breadth area E)

Unit(s): 1
Lecture Hours: 0
Lab Hours: 3

Advisories: Upon entering the course it is recommended that the student be able to: Good general health; absence of medical conditions that would prevent planned physical activity.

This course uses a variety of group exercise to improve cardiorespiratory fitness, muscular fitness, and flexibility. Strenuous physical activity is required. Good general health advised. (2/15)

KINE-31: Aerobic Training

Unit(s): 1
Lecture Hours: 0
Lab Hours: 3

Advisories: Good general health; absence of medical conditions that would prevent planned physical activity.

This class uses a variety of aerobic activities to improve cardio-respiratory endurance. Machines used include stair climber, treadmills, cycles, rowing, recumbent bikes and cross trainers. Emphasis will be placed on monitoring physiological response to exercise and teaching proper warm-up, training at target rate, and cool down. A pre-test and post-test will be administered to evaluate fitness level and monitor improvement. (2/14)

KINE-32: Circuit Weight Training

Unit(s): 1
Lecture Hours: 0
Lab Hours: 3

Advisories: Good general health; absence of medical conditions that would prevent planned physical activity.

The equipment (single station exercise machines) and routine utilized in the fitness lab are designed to exercise all major muscle groups for a well-rounded fitness program with the non-athletic in mind. Circuit weight training has proven beneficial for people of all ages and genders, who are interested in weight training, a desire to increase muscle tone and cardiovascular fitness. (2/14)

KINE-33: Weight Training

Unit(s): 1
Lecture Hours: 0
Lab Hours: 3

Advisories: Good general health; absence of medical conditions that would prevent planned physical activity.

An open laboratory experience for those people who desire an individualized strength program using a combination of exercise machines and free weights. This class is designed specifically to improve strength. The class is suited for athletes and men and women of all age groups who are interested in muscle toning and muscle building. (2/14)

KINE-34: Fitness Through Activity

Unit(s): 1
Lecture Hours: 0
Lab Hours: 3

Advisories: Good general health; absence of medical conditions that would prevent planned physical activity.

Students will attain optimal levels of fitness by applying techniques used in a variety of team and/or individual activities. Drills and activities closely emulate actual conditions of competition performance. (2/14)

KINE-35: Flexibility and Cardiovascular Fitness

Designations: (CSU breadth area E)

Unit(s): 2
Lecture Hours: 0
Lab Hours: 6

Advisories: Good general health; absence of medical conditions that would prevent planned physical activity.

Practical application of all aspects of flexibility and cardiovascular conditioning are presented and performed. A system of class presentation is used to insure gradual, safe, and total physiological adaptation of the student to exercise. A gradual progressive, safe and eventually total body fitness experience is pursued. (1/15)

KINE-36: Walking for Fitness

Designations: (CSU breadth area E)

Unit(s): 1
Lecture Hours: 0
Lab Hours: 3

Advisories: Good general health; absence of medical conditions that would prevent planned physical activity.

This course is designed to improve cardiovascular efficiency, flexibility and strength through the use of walking and related activities. Students will use the latest techniques to improve walking performance. (4/16)

KINE-41: Tennis

Designations: (CSU breadth area E)

Unit(s): 1
Lecture Hours: 0
Lab Hours: 3

Advisories: Upon entering the course it is recommended that the student be able to: Good general health; absence of medical conditions that would prevent planned physical activity.

This course teaches basic skills of tennis including gripping the racket, body positioning, foot work, swing and follow through. Emphasis is placed on forehand, backhand, and the serve fundamentals. Drills and actual game participation are emphasized. History, rules, scoring and tennis etiquette are also taught. (2/15)

KINE-42: Golf

Designations: (CSU breadth area E)

Unit(s): 1
Lecture Hours: 0
Lab Hours: 3

Advisories: Good general health; absence of medical conditions that would prevent planned physical activity.

Through lecture, demonstration, video tapes, and drills, the basic principles of the golf swing will be studied and analyzed. Golf course and player

etiquette will be stressed in addition to the rules of golf. This class also includes student participation, practicing golf shots, playing golf holes and learning about tournament competition. (2/15)

LANDSCAPE HORTICULTURE

LAND-10A: Plant Identification and Usage: Fall

Designations: (C-ID AG 112)

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course covers the identification, growth habits, culture and ornamental use of landscape and indoor plants adapted to climates of California. Plants emphasized will come from the current California Association of Nursery and Garden Centers (CAN & GC) and California Landscape Contractors Association (CLCA) plant lists. Topics include botanical nomenclature, plant hardiness and growth zones, growth habits, plant structural characteristics and soil nutritional requirements. Landscape uses are stressed along with cultural practices. Plants covered are those best observed and identified in the fall of the year. (10/17)

LAND-10B: Plant Identification and Usage: Spring

Designations: (C-ID AG 108)

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course covers the identification, growth habits, culture and ornamental use of landscape and indoor plants adapted to climates of California. Plants emphasized will come from the current California Association of Nursery and Garden Centers (CAN & GC), and California Landscape Contractors Association (CLCA) plant lists. Topics include botanical nomenclature, plant hardiness and growth zones, growth habits, plant structural characteristics, and soil nutritional requirements. Landscape uses are stressed along with cultural practices. Plants covered are those best observed and identified in the spring of the year. (1/06)

LAND-11: Elements of Landscape Horticulture

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80.

This is a course in the study of landscape horticulture with emphasis on nursery operations, landscaping, turf management, and floral industries. Topics include basic botany, cultural practices, propagation, structures and layout, pest management, planting, container gardening and houseplants, floral design, plant identification, turf grass installation and care, and survey of career opportunities. (12/06)

LAND-12: Landscape Design

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80.

This course includes the principles of landscape design and studies in form, space, color, texture, scale, balance, utility, and contrast. Materials used in landscape developments, site analysis, problems of design, correct use of plant material relating to ecology and function of landscape structures in the plan will be encompassed in this course. Basic irrigation design is also a component of the course. (9/14)

LAND-14: Landscape Construction and Installation

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80.

This course covers the fundamentals of landscape construction including soil preparation, paving and construction materials, hand and power tool use, turf and plant installation, plan reading, estimating and bid preparation. The course also covers local codes and state requirements and prepares

students to pass the C-27 Landscaping Contractor's License Exam. (10/05)

LAND-15: Landscape Maintenance

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80.

This course prepares students to enhance the function and aesthetic value of public and private landscapes by applying appropriate maintenance techniques. Topics include planting, pruning, watering, soil fertility, pest management, weed control, and landscape maintenance business practices. (10/05)

LAND-16: Plant Propagation

Designations: (C-ID AG 116)

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80.

This course teaches the principles of sexual and asexual propagation, seeding, cuttings, grafting, budding, and layering. The student will also be exposed to dedicated plant structures relating to propagation, specialized propagation media and rooting aids. (1/08)

LAND-17: Nursery and Garden Center Practice

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80.

This course is a study of commercial retail nursery and garden center operations dealing with wholesale and retail nursery practices, including plant care, merchandising, and management practices. (1/06)

LAND-24: Work Experience in Landscape Horticulture

Unit(s): 1-8

Lecture Hours: 0

Lab Hours:

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course enables students to earn college credit for learning and/or improving skills or knowledge on-the-job. Occupational Work Experience is discipline specific and must connect to the student's major or occupational goal(s). Seventy-five (75) hours of documented paid work experience equals 1 unit of credit. Sixty (60) hours of documented volunteer experience equals 1 unit of credit. A student may enroll in up to 16 total units of work experience at Merced College. Students must have an established work site prior to enrolling in the course. (11/16)

LAND-50: Residential Gardening

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course teaches the basic needs in residential gardening. Included in this course are plant identification, basic landscape design, sprinkler installation and care, fumigation and lawn installation, pruning, pest and disease recognition and control, soils, fertilization, and weed control. Also included will be foliage plant care for interiors. This course may be repeated three times (Intercollegiate Vocational Academics). (9/14)

LANGUAGE (NONCREDIT)

LANG-716: Spanish in the Workplace

Unit(s): 54 Total, Open Entry

This 54 hour introductory course is designed for non-Spanish speakers who wish to develop specific conversational skills that are related to their work or community environment. Special words and phrases are taught with an emphasis on basic vocabulary and word recognition skills that will result in improved communication with Spanish-speaking customers, patients, students, and clients. (12/13)

LAW (NONCREDIT)

LAW-765: Spanish Language Interpreter for Court and Administrative Hearings

Unit(s): 108 Total, Open Entry

This 108 hour course is designed to help prepare students to take the state and or federal exams for Spanish language interpreters. It provides an introduction to the court system and an overview of the administrative hearing process. Topics also include public speaking, memory development, note taking, simultaneous interpretation, and legal and medical terminology. Fluency in Spanish and English reading, writing, and speaking will enhance student success. Students may repeat this course. (10/13)

LIBERAL STUDIES

LBST-10: Introduction to Education I

Designations: (C-ID EDUC 200)

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Limitations on Enrollment: Students must obtain a fingerprint clearance and negative TB clearance.

Advisories: AOM 30; ENGL 01A; MATH 81.

Students are introduced to the profession of teaching through an understanding of the California State Content Standards, the Credential process, the role of the public school teacher, and the personal qualities and characteristics necessary to be a successful teacher. Practical experiences in the classroom will include a minimum of 45 hours tutoring in area schools in K-3 Language Arts. This course is intended for students who plan to teach in the K-8 grade levels; the course is required of students in their first year of the CSU Stanislaus Liberal Studies Program. Students must provide own transportation to off-campus school sites. Note: Fingerprint clearance and TB clearance are required. Students must dress appropriately as recommended by off campus school sites. Observation placements will not be available for students with felony convictions. (1/14)

LBST-20: Introduction to Education II

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Prerequisites: LBST 10.

Limitations on Enrollment: Students must obtain a fingerprint clearance and a negative TB clearance.

Students are provided additional opportunities to explore the teaching profession and how their personalities will fit with their career choice. Students will observe students and teachers in 4-8 Math and Science classroom environments and share observations with faculty and peers in weekly meetings to note differences in students, teaching/learning styles, and their personal reactions to the classroom setting. Placements for LBST 20 will be in a classroom setting different from placements for LBST 10 so students may obtain maximum variety of experience. This course is intended for students who plan to teach in the K-8 levels; the course is required of students in their second year of the CSU Stanislaus Liberal Studies Program. Students must provide own transportation to off-campus school sites. Note: Fingerprint clearance and TB clearance are required. Students must dress appropriately as recommended by off-campus school sites. Observation placements are required for class and will not be available for students with felony convictions. Insufficient observation exposure will negatively affect grades. (1/14)

LBST-24: Work Experience in Education

Unit(s): 1-8

Lecture Hours: 0

Lab: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course enables students to earn college credit for learning and/or improving skills or knowledge on-the-job. Occupational Work Experience is discipline specific and must connect to the student's major or occupational goal(s). Seventy-five (75) hours of documented paid work experience

equals 1 unit of credit. Sixty (60) hours of documented volunteer experience equals 1 unit of credit. A student may enroll in up to 16 total units of work experience at Merced College. Students must have an established work site prior to enrolling in the course. (11/16)

LBST-30: Children's Literature

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: ENGL 01A.

This course is designed for prospective and current teachers who wish to acquire in-depth knowledge about the selection and use of children's literature in the K-8 classroom. The students will explore school district policies regarding literature selection and different genres, including, but not limited to, culturally diverse graphic novels, picture and story books, folklore and folktales, young adult literature, non-fiction such as biographies, math and science materials. Students will analyze literature for structural and organizational features. (1/14)

LEARNING RESOURCES

LRNR-30: Information Competency in the Electronic Age

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E.

Advisories: AOM 50B, keyboard at a minimum rate of 25 wpm at 95% accuracy.

This course is designed to introduce students to library research and resources including information retrieval tools. Course work will include library literacy, research methods, and information technology literacy, including database applications, as well as consideration of ethical and legal implications of computer applications and information use. The student will learn techniques for successful research including documentation and citation of resources, evaluation of information resources, and bibliography production. (11/09)

MATHEMATICS (NONCREDIT)

MAT-101: College Prep Math 1: Operation of whole Numbers

Unit(s): 45-63 Total, Open Entry

Advisories: ENG 121.

This is an introductory course of the whole number system, including counting, notation, and the number line. Particular emphasis is placed on the basic computational skills, addition, subtraction, multiplication, and division. (12/14)

MAT-102: College Prep Math II: Applications of Whole Numbers

Unit(s): 45-63 Total: Open Entry

Advisories: ENG 121; MAT 101.

This is an introductory course of the whole number system, with an emphasis on application problem solving. Particular emphasis is placed on the area, volume, and perimeter of geometric figures. (12/14)

MAT-103: College Prep Math III: Operation of Fractions

Unit(s): 36-54 Hours

Advisories: ENG 121.

This course begins with a short review of the whole number system, exponents, and the order of operations. The course covers the meaning fractions, and the four basic operations using them: addition, subtraction, multiplication, and division. Special emphasis will be placed on thought problems, including life skills. The course will conclude with an introduction to ratios, rates, and proportions. (03/18)

MAT-104: College Prep Math IV: Operations of Decimals

Unit(s): 36-54 Hours

Advisories: ENG 121.

This course begins with a short review of fractions. The course covers the meaning of decimals, and the four basic operations using them: addition, subtraction, multiplication, and division. Special emphasis will be placed

on thought problems, including life skills. The course will conclude with an introduction to unit conversions, and basic geometry. (03/18)

MATHEMATICS

MATH-B: Applied Mathematics

Unit(s): 5

Lecture Hours: 5

Lab Hours: 0

Prerequisites: MATH 80.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course will explore mathematical applications from various vocational and technical areas. It will be an intense course covering a review of prealgebra, ratios, proportions, percents, measurements, basic algebra, plane and solid geometry. (2/13)

MATH-C: Intermediate Algebra

Unit(s): 4

Lecture Hours: 4

Lab Hours: 0

Prerequisites: MATH 81.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course covers factoring, functions and graphs, solving linear, quadratic, piecewise defined, exponential, and logarithmic equations, rational expressions and equations, complex numbers, and conic sections. (10/13)

MATH-02: Precalculus

Designations: (CSU breadth area B4) (IGETC area 2) (C-ID MATH 155)

Unit(s): 4

Lecture Hours: 4

Lab Hours: 0

Prerequisites: MATH 25.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is designed to prepare students for calculus. Topics of study include polynomials, complex numbers, algebra of functions, inverse functions, exponential, logarithmic, trigonometric functions and their graphs, systems of equations and inequalities, topics in analytic geometry, and polar coordinates. (10/13)

MATH-02H: Honors Precalculus

Designations: (IGETC area 2) (CSU breadth area B4) (C-ID MATH 155)

Unit(s): 4

Lecture Hours: 4

Lab Hours: 0

Prerequisites: MATH 25.

Limitations on Enrollment: Enrollment in the Honors Program; see the college catalog for a description of enrollment requirement.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is designed to prepare students for calculus. Topics of study include polynomials, complex numbers, algebra of functions, inverse functions, exponential, logarithmic, trigonometric functions and their graphs, systems of equations and inequalities, topics in analytic geometry, and polar coordinates. There will be an emphasis in the use of available technology, mathematical writing, and collaborative learning. (10/13)

MATH-03: Business Calculus

Designations: (C-ID MATH 140) (CSU breadth area B4) (IGETC area 2A)

Unit(s): 4

Lecture Hours: 4

Lab Hours: 0

Prerequisites: MATH C or MATH 61.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course covers the techniques of calculus in the business world: functions, graphs, limits, exponential and logarithmic functions, differentiation, integration, techniques and applications of integration, partial derivatives, optimization, and the calculus of several variables. (02/18)

MATH-04A: Calculus I

Designations: (C-ID MATH 211) (CSU breadth area B4) (IGETC area 2)

Unit(s): 4

Lecture Hours: 4

Lab Hours: 0

Prerequisites: MATH 02 or MATH 02H.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course covers limits, continuity, differentiation and integration of algebraic and trigonometric functions along with their respective applications. (12/15)

MATH-04B: Calculus II

Designations: (C-ID MATH 221) (CSU breadth area B4) (IGETC area 2)

Unit(s): 4

Lecture Hours: 4

Lab Hours: 0

Prerequisites: MATH 04A.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is a continuation of MATH 04A, addressing conic sections, transcendental functions, methods of integration, hyperbolic functions, improper integrals, Taylor's Formula, infinite series, and plane curves and polar coordinates. (2/12)

MATH-04C: Multi-Variable Calculus

Designations: (C-ID MATH 230) (CSU breadth area B4) (IGETC area 2)

Unit(s): 4

Lecture Hours: 4

Lab Hours: 0

Prerequisites: MATH 04B.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course covers vectors and solid analytic geometry, vector-valued functions, partial differentiation, multiple integrals, and topics in vector calculus including Green's and Stokes' theorems. (3/10)

MATH-06: Elementary Differential Equations

Designations: (C-ID MATH 240) (CSU breadth area B4) (IGETC area 2)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: MATH 04C.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 08.

This course is an introduction to ordinary differential equations (ODEs), including analytical, graphical and numerical methods, as well as a variety of modeling applications. It introduces both theoretical and practical considerations, including definitions, existence and uniqueness of solutions, techniques for solving first-order ODEs and higher-order linear ODEs, series solutions and singular points for linear differential equations, Laplace transforms, homogeneous versus nonhomogeneous equations, linear systems, and numerical methods. (2/08)

MATH-07: Discrete Structures

Also: (CPSC 07)

Designations: (IGETC area 2) (C-ID MATH 160) (CSU breadth area B4)

Unit(s): 3

Lecture Hours: 2.5

Lab Hours: 1.5

Prerequisites: CPSC 06 or ENGR 14 or CPSC 14; MATH 04A.

This course is an introduction to the discrete structures used in Computer Science with an emphasis on their applications. Topics covered include: functions, relations and sets; basic logic; proof techniques; basics of counting; graphs and trees; and discrete probability. (12/15)

MATH-08: Linear Algebra

Designations: (C-ID MATH 250) (CSU breadth area B4) (IGETC area 2)

Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Prerequisites: MATH 04B.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is an introduction to systems of linear equations, matrices, determinants, vector spaces, linear transformations, eigenvalues and eigenvectors with a strong emphasis on applications. (3/12)

MATH-10: Elementary Statistics

Designations: (C-ID MATH 110) (CSU breadth area B4) (IGETC area 2)

Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Prerequisites: MATH C or MATH 61 or MATH 62 or MATH-88.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course covers descriptive statistics, including organization and presentation of data; elementary probability including permutations, combinations, binomial and normal distributions; inferential statistics, including random sampling, hypothesis testing, regression, and correlation and chi-square distribution. (11/17)

MATH-11: Elementary Statistics

Designations: (C-ID MATH 110) (CSU breadth area B4) (IGETC area 2A)

Unit(s): 4
Lecture Hours: 4
Lab Hours: 0
Prerequisites: MATH C or MATH 61 or MATH 62 or MATH-88.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course covers descriptive statistics, including the organization and presentation of data; common distributions such as the binomial, normal, and chi-squared distributions; inferential statistics including confidence intervals, hypothesis testing, correlation, and regression. (02/18)

MATH-15: Finite Mathematics

Designations: (C-ID MATH 130) (CSU breadth area B4) (IGETC area 2)

Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Prerequisites: MATH C or MATH 61 or MATH 62.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course covers algebra review, linear models, systems of linear equations, matrices, linear programming, mathematics of finance, set theory, and probability. (11/17)

MATH-20A: Basic Structure of Mathematics I

Designations: (CSU breadth area B4) (C-ID MATH 120)

Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Prerequisites: MATH C or MATH 61 or MATH 62.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is designed to complete the first course of a two-course sequence in basic concepts of mathematics required for students preparing to teach at the elementary school level. It covers elementary set theory, numeration systems, number theory, the set of integers, the set of rational numbers, and the set of real numbers. (11/17)

MATH-20B: Basic Structure of Mathematics II

Designations: (CSU breadth area B4)

Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Prerequisites: MATH 61 or MATH 62 or MATH C .

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 20A.

This course is designed to complete the second course of a two-course sequence in basic concepts of mathematics required for students preparing to teach at the elementary school level. The course covers the structure

of plane and solid geometry, measurement, introduction to coordinate geometry, elementary probability and statistics. (11/17)

MATH-25: Trigonometry

Designations: (CSU breadth area B4)

Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Prerequisites: MATH C or MATH 61 .

Advisories: ENGL 83E or ENGL 85A or ENGL 85AC.

This course is a review of right triangle geometry, real numbers, functions and graphs, trigonometric functions and their graphs, identities, inverse trigonometry functions, solve trigonometric equations, solve right triangles, solve triangles using the Law of Sines, and Law of Cosines. (11/17)

MATH-26: College Algebra for Liberal Arts

Designations: (C-ID MATH 150) (CSU breadth area B4) (IGETC area 2)

Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Prerequisites: MATH C or MATH 61 or MATH 62 .

Advisories: ~~ENGL 85A or~~ ENGL 85AC ~~or ENGL 85E.~~

This is a college level course in algebra for majors in the Liberal Arts. The course will cover topics on functions, including polynomial, rational, radical, exponential, absolute value, and logarithmic functions. Solving various types of equations, linear systems, and their applications for problem solving will also be discussed. (4/19)

MATH-27: Precalculus and Trigonometry

Designations: (C-ID MATH 955) (CSU breadth area B4) (IGETC area 2A)

Unit(s): 6
Lecture Hours: 6
Lab Hours: 0
Prerequisites: MATH C or MATH 61.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is designed to prepare students for calculus. Topics of study include polynomials, complex numbers, algebra of functions, inverse functions, exponential, logarithmic, trigonometric functions and their graphs, systems of equations and inequalities, topics in analytic geometry, polar coordinates and vectors. (02/18)

MATH-61: Beginning & Intermediate Algebra for STEM

Unit(s): 6
Lecture Hours: 6
Lab Hours: 0
Prerequisites: MATH 80.

Advisories: ENGL 85A ENGL 85AC ENGL 85E

This course covers topics in both beginning and intermediate algebra. The beginning algebra topics include order of operations, graphing linear equations, solving equations and inequalities that are linear in form, operations on polynomials, and a brief introduction to functions. The intermediate algebra topics include factoring, graphing linear and non-linear functions, including piecewise defined graphs, problem solving with nonlinear equations, working with complex numbers, and graphing conic sections. This course is designed to prepare students for mathematics course work in trigonometry and precalculus.

MATH-62: Beginning & Intermediate Algebra for Liberal Arts

Unit(s): 5
Lecture Hours: 5
Lab Hours: 0
Prerequisites: MATH-80.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E

This course covers the four basic operations on real numbers and algebraic expressions. Topics include order of operations, graphing and solving linear and absolute value equations and inequalities, systems of linear equations, quadratic, variation, geometric, financial, polynomial, exponential, and logarithmic models. This course is designed for non-STEM majors. (11/17)

MATH-80: Prealgebra

Unit(s): 4
Lecture Hours: 4
Lab Hours: 0

This course covers the real number system and operations of addition, subtraction, multiplication, and division including whole numbers, integers, decimals, fractions and application problems involving percents, ratios, proportions, and square roots. It also covers real world application problems, formulas, measurement concepts, and an introduction to algebra including addition, subtraction, and multiplication of algebraic expressions. (12/18)

MATH-81: Beginning Algebra

Unit(s): 4
Lecture Hours: 4
Lab Hours: 0
Prerequisites: MATH 80.
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course covers the four basic operations on real numbers and algebraic expressions. It also includes the order of operations, graphing and solving linear and absolute value equations and inequalities, systems of linear equations, exponents, polynomials, and a brief introduction to functions. (5/19)

MATH-88: Preparation for Elementary Statistics

Unit(s): 4
Lecture Hours: 4
Lab Hours: 0
Prerequisites: MATH 80.
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

An accelerated one-semester course to transfer-level Elementary Statistics covering core concepts from arithmetic, pre-algebra, elementary and intermediate algebra, and descriptive statistics that are needed to understand the basics of college-level statistics. Concepts are taught through the context of descriptive data analysis. Topics include arithmetic and algebra skills needed to understand the concepts and formulas, solving and graphing linear equations, modeling with linear functions, and solving contextualized problems. This course is NOT intended for math, science, computer science, business, or engineering majors. Non-degree applicable. (11/17)

MATH-90: Fundamentals of Arithmetic

Unit(s): 3
Lecture Hours: 3 Lab Hours: 0

This course is an intensive review of the whole number system, including counting, notation, word names, and the number line. Particular emphasis is placed on the basic computational skills: addition, subtraction, multiplication, and division. Written problems and life skills will be emphasized throughout the course. (5/19)

MATH-91: Fundamentals of Decimals and Fractions

Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Prerequisites: MATH 90.

This course begins with a short review of the whole number system using basic computational skills. The course covers the meaning of decimals and fractions, and the four basic operations using them: addition, subtraction, multiplication, and division. Special emphasis will be placed on thought problems, including life skills. The course will conclude with an introduction to prime factoring, exponents, basic geometry, and order of operation. (10/06)

MATH-95P: Precalculus Support

Unit(s): 1
Lecture Hours: 0
Lab Hours: 4-5 3
Coerequisites: MATH 02.

A review of the core prerequisite skills, competencies, and concepts needed in precalculus. Topics include concepts from elementary algebra,

intermediate algebra, and trigonometry. Intended for students who are concurrently enrolled in precalculus. (11/18)

MATH-95S: Statistics Support

Unit(s): 1
Lecture Hours: 0
Lab Hours: 4-5 3
Coerequisites: MATH 10 or MATH 02.

A review of the core prerequisite skills, competencies, and concepts needed in statistics. Topics include concepts from prealgebra, elementary and intermediate algebra, and the development of critical thinking skills needed for statistical analysis. Intended for students who are concurrently enrolled in Elementary Statistics. (11/18)

MECHANIZED AGRICULTURE & DIESEL EQUIPMENT MECHANICS

MECH-06: Fundamentals of Oxy-Fuel Welding and Shielded Metal Arc Welding

Unit(s): 3
Lecture Hours: 2
Lab Hours: 3
Advisories: ENGL 84A; MATH 80 or MATH 85.

This course emphasizes development of minimum skill standards in welding. The Shielded Metal Arc Welding (SMAW), Oxy-Fuel Welding (OFW) and Oxy-Fuel Cutting (OFC) processes are covered as prescribed in the (AWS) American Welding Training Qualification (QC 10) entry-level standards. (12/18)

MECH-08: Applied Mechanical Welding

Unit(s): 3
Lecture Hours: 2
Lab Hours: 3
Prerequisites: MECH 30.

This course presents the skills and knowledge required in the Mechanized Ag/Diesel Technology field. Skills covered include Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW), Oxyfuel Cutting and Brazing(OFC & OFB), and metal fabrication. Skills will be fashioned around industry-accepted standards of performance. (12/17)

MECH-10: Agricultural and Industrial Technical Skills

Also: (INDT 10)
Unit(s): 3
Lecture Hours: 2
Lab Hours: 3
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80.

This course provides an introduction to basic technical skills required throughout the industrial areas. The course includes identification and use of tools and materials, tool sharpening and care, hot and cold metal work, pipe fitting, electrical wiring fundamentals, basic woodwork, concrete materials and mixes, and sketching and estimating. (2/19)

MECH-12: Agriculture Equipment-Fall

Designations: (C-ID AG 108)
Unit(s): 3
Lecture Hours: 2
Lab Hours: 3
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80.

This Course is a study of the use, maintenance, adjustment, calibration, and repair of the equipment commonly used in California agriculture, with emphasis on primary and secondary tillage, planting, chemical application, and harvesting equipment. The selection and operation of both machinery and tractors will be practiced. Safety will be stressed throughout. (9/12)

MECH-13: Agriculture Equipment-Spring

Unit(s): 3
Lecture Hours: 2
Lab Hours: 3
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80.

This Course is a study of the use, maintenance, adjustment, calibration,

and repair of the equipment commonly used in California agriculture during the spring production season, with emphasis on primary and secondary tillage, planting, chemical application, and harvesting equipment. The selection and operation of both machinery and tractors will be practiced. Safety will be stressed throughout. (2/19)

MECH-15: Small Engine Repair/Maintenance

Unit(s): 3
Lecture Hours: 2
Lab Hours: 3

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80.
This course is a complete introduction to the operation, construction, maintenance, repair, and adjustment of two-cycle and four-cycle engines. It is designed for persons without prior experience in small engines. Theory and practical work including safety and the care and use of specialized tools used in small engine repair and maintenance will be covered. Examples of types of engines to be used will include lawn mower, power saw, pump, conveyor, self-propelled small carts, and any other small engines. (11/12)

MECH-21: Hydraulics

Unit(s): 3
Lecture Hours: 2
Lab Hours: 3

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80.

This is an introduction to the principles of hydraulics applied to farm and light industrial equipment. The course includes a study of the technical language of fluid power, including graphical symbols, industrial standards, components, and maintenance of hydraulic units. (2/19)

MECH-22A: Diesel Engines

Unit(s): 4
Lecture Hours: 2
Lab Hours: 6

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80.

This course explores the operation and repair of modern diesel engines. Principles and theories are studied by **running; operating,** testing, diagnosing, disassembling and reassembling **components, systems, and engines diesel engines and their components.** (2/19)

MECH-23: Diesel Fuel Systems Diagnostics

Unit(s): 2
Lecture Hours: 1
Lab Hours: 3

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80.

This course includes the study of common types of diesel fuel injection systems. Design and theory of operation of distributor type, multi-plunger inline type, and common rail diesel fuel injection systems will be covered. Testing and diagnostic procedures for various fuel systems is an important part of the course. Service and adjustments of injectors, nozzles, and governors will also be covered. (2/19)

MECH-24: Power Trains

Unit(s): 4
Lecture Hours: 2
Lab Hours: 6

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80.

This course is a study of the function and repair of a power train from the clutch through the final drive. Topics will include the theory of operation, maintenance, diagnosis, and repair of clutches and torque converters, mechanical and hydraulic transmissions, differential, and final drives. Safety will be stressed throughout. (9/12)

MECH-26: Power Equipment Electrical Systems

Unit(s): 3
Lecture Hours: 2
Lab Hours: 3

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80.

This course is a study of the fundamentals of electricity with applications to current power equipment electrical systems. Theory and service procedures will include the following systems: starting, charging, lighting, and accessories. (2/19)

MECH-27: Applied Diesel Technical Skills

Unit(s): 2
Lecture Hours: 1
Lab Hours: 3
Prerequisites: MECH 22A.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 85 80.

This course includes applied skill in the service and repair of diesel engines and their sub-systems. Emphasis is placed upon in-frame service/rebuild applications, electronic service information, and component installation and timing. Testing and diagnostic procedures for after service/repair is an important part of the course. Industry safety is emphasized throughout the course. (3/19)

MECH-30: Equipment Mechanics Skills

Unit(s): 2
Lecture Hours: 1
Lab Hours: 3

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80.

This course is an introduction to skills and safety required within the Diesel Mechanics and Mechanized Agriculture areas. The course will include identification and use of hand tools and power equipment used within the equipment mechanic area. Emphasis will be placed on precision measuring and use of the following equipment: hydraulic press, pullers, cleaners, hoists, jacks, securing, dynamometers, valve grinders, boring machines, sharpening tools, reamers, hones, glass bead machine, boil out tank, forklifts, and other specialty tools. An in-depth study will also occur on fasteners and plumbing used within the equipment mechanic area. (9/12)

MECH-31: Equipment Safety

Unit(s): 1
Lecture Hours: 1
Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80.

This course is a study of safety on and about farm equipment and machines. The safe operation and daily maintenance of machines commonly used in the daily operation of farming operations will be covered along with hitching, driving, and operational safety skills. The safety rules and laws that apply to agriculture equipment will be stressed. (11/12)

MECH-32: Applied Electrical and Hydraulic Service

Unit(s): 3
Lecture Hours: 2
Lab Hours: 3

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80; MECH 21, MECH 26.

This course is designed to give **the** students knowledge and competencies in modern cab and chassis electrical, electronics, electrohydraulics, and hydraulic systems. Testing, diagnosis, repair, and replacement of computer-controlled systems, monitors, sensors, lighting systems, wiring harness, electrohydraulic systems, and hydraulic systems will be emphasized throughout the course. (2/19)

MECH-33: Power Equipment Air Conditioning

Unit(s): 2
Lecture Hours: 1
Lab Hours: 3

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80.

This is a study of power equipment air conditioning fundamentals designed to give the student knowledge and competencies in modern power equipment HVAC systems. Current EPA regulations that govern retrofit as well as the use of refrigerant installation, diagnostic, and recycling equipment are also covered. Environmental impacts by various protection procedures are emphasized. (9/12)

MECH-35: Compact Power Equipment

Unit(s): 3
Lecture Hours: 2
Lab Hours: 3

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80; MECH 15.

This is a study in basic principles of modern small equipment and engines

and explores design, operation, and proper maintenance of equipment and current compact engines approved by the California Air Resources Board. Topics include application of compact engine systems to various machines, power transmission systems, attachments, related engine systems to various machines, power transmission systems, attachments, related engine systems, equipment operation, problem solving, and component failures. (9/12)

MECH-51: Truck Brake and Chassis

Unit(s): 4
Lecture Hours: 2
Lab Hours: 6

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; **MATH-85**.

This course is a study of truck and bus mechanics. It includes a study of the running gear, tires, wheels, brakes, electrical systems wiring, services, maintenance, and safety inspection. Troubleshooting and servicing are major portions of this course. (2/19)

MECH-70AA-ZZ: Special Topics in Mechanized Agriculture

Unit(s): .5 - 4
Lecture Hours: 0-4
Lab Hours: 0-12

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 85.

This course is the study of basic principles, processes, and theories of a special topic being presented during the semester. The material covered may not be part of an already existing program or presented as a licensing or certification course. Students may petition, through the Office of Admissions and Records, to retake the course as the topics change. (2/14)

MECH-71: Specialized Industry Training

Unit(s): .5 - 4
Lecture Hours: 0-4
Lab Hours: 0-12

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80 or MATH 85.

This course is designed to present current information and materials on equipment computer, fuel, engine, powertrain and emission systems. Students may petition, through the Office of Admissions and Records, to retake the course as industry changes. (2/14)

MEDICAL (NONCREDIT)**MED-717: Medical Assisting**

Unit(s): 960 Total, Open Entry
Advisories: none.

This entry level course designed for the adult students who desire vocational training in the field of medical assisting. Course instruction includes an overview of the career of medical assisting, knowledge of medical law and ethics, oral and written communication skills, medical terminology, anatomy and physiology, and administrative and clinical office procedures. (12/18)

MANAGEMENT**MGMT-31: Principles of Management**

Unit(s): 3
Lecture Hours: 3
Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This introductory management course gives an overview of the management function and its role in organizations. It is designed to provide the fundamentals of management theories. This course will focus on the management concepts of planning, ethics, motivation, communication and leading. (10/10)

MGMT-32: Human Resource Management

Unit(s): 3
Lecture Hours: 3
Lab Hours: 0

Advisories: AOM 30; ENGL 85A or ENGL 85AC or ENGL 85E.

This course involves the study of the principles and methods involved in effective human resource utilization in organizations. It provides an overview of responsibilities and practices involved in recruiting, selecting, promoting, terminating and retiring employees, performance appraisal, job development and analysis, wage and salary administration, and effective working relationships. (2/10)

MGMT-33: Elements of Effective Leadership

Unit(s): 3
Lecture Hours: 3
Lab Hours: 0

Advisories: AOM 30; ENGL 85A or ENGL 85AC or ENGL 85E.

This course deals primarily with the techniques of leadership in organizational settings. Topics discussed include leadership styles, the behavioral aspects of leadership, and effective leadership characteristics. (2/10)

MGMT-37: Small Business Entrepreneurship

Unit(s): 3
Lecture Hours: 3
Lab Hours: 0

Advisories: AOM 30.

This course is designed to educate prospective new business owners. Topics include the business environment, enterprise management, legal considerations, financing, insuring a business, budgeting, and marketing for a small business. (12/15)

MGMT-50A: Challenges of Leadership: Difficult People/Tough

Conversations
Unit(s): 0.5
Lecture Hours: .5
Lab Hours: 0

~~Advisories: ENGL 84A.~~

This course is designed to equip the participant with skills needed to deal with the various challenges of leading people. Special emphasis will be placed on practical and proven tools to deal with difficult people and have tough conversations. The topic of accountability will be explored in regard to individual performance and organizational success. Participants will learn about progressive discipline and how to resolve performance problems. Pass/No Pass only. (5/19)

MGMT-50B: Values and Ethics

Unit(s): 0.5
Lecture Hours: .5
Lab Hours: 0

~~Advisories: ENGL 84A.~~

This course is designed to acquaint the participant with the importance of values and ethics in the workplace. Emphasis will be placed on how values influence actions, evaluating ones ethical behavior, and helping people do the right thing. Pass/No Pass only. (5/19)

MGMT-50C: Time Management

Unit(s): 0.5
Lecture Hours: .5
Lab Hours: 0

~~Advisories: ENGL 84A.~~

This course is designed to introduce the student to time management principles and specific tools that assist in making maximum use of time. Emphasis will be placed on how to prioritize, identifying time wasters, and goal setting. Pass/No Pass only. (5/19)

MGMT-50D: Communication in the Workplace

Unit(s): 0.5
Lecture Hours: .5
Lab Hours: 0

~~Advisories: ENGL 84A.~~

This course is designed to introduce the student to key elements in communication within business organizations. Topics will include verbal and nonverbal communication, listening skills and specific workplace communication skills. Pass/No Pass only. (5/19)

MGMT-50F: Team Building

Unit(s): 0.5
Lecture Hours: .5
Lab Hours: 0

~~Advisories: ENGL 84A:~~

This course is designed to provide the student with an understanding of how teams work together, common problems teams encounter, and how to solve them. Students will learn to recognize various personalities and how their strengths and weaknesses impact a team. Students will be introduced to team building in the workplace. Pass/No Pass only. (5/19)

MGMT-50G: Decision Making and Problem Solving

Unit(s): 0.5
Lecture Hours: .5
Lab Hours: 0

~~Advisories: ENGL 84A:~~

This course is designed to introduce the student to decision making and problem solving techniques including brainstorming, creativity in the workplace, how to find new perspectives, and seeking alternatives. Pass/No Pass only. (5/19)

MGMT-50H: Customer Service

Unit(s): 0.5
Lecture Hours: .5
Lab Hours: 0

~~Advisories: ENGL 84A:~~

This course is designed to provide the student with **certain** key skills and attitudes in order to effectively meet the needs of customers. **The** Participants will be introduced to the key elements of outstanding customer service. Topics will also include understanding and exceeding customer expectations, and how to deal with unrealistic expectations. The course addresses **why customers leave, and the long-term value of customers, both internal and external customers.** Pass/No Pass only. (5/19)

MGMT-50I: Attitude in the Workplace

Unit(s): 0.5
Lecture Hours: .5
Lab Hours: 0

~~Advisories: ENGL 84A:~~

This course is designed to provide students with certain key skills in the area of attitude so that they may effectively maintain a positive attitude in the workplace and at home. Students will be introduced to the concepts of how attitudes are communicated, and how to adjust one's attitude. Pass/No Pass only. (5/19)

MGMT-50J: Thrive and Survive in the Workplace

Unit(s): 0.5
Lecture Hours: .5
Lab Hours: 0
Advisories: ENGL 84A.

This course focuses on the qualities that employers desire in employees and what it takes to thrive and survive in the workplace. Attitude, communication, and work ethics will be stressed. Pass/No Pass only. (1/13)

MGMT-50K: Generational Diversity: Managing Cross Generational Teams

Unit(s): 0.5
Lecture Hours: .5
Lab Hours: 0

~~Advisories: ENGL 84A:~~

America has multiple generations working side by side in the workplace. This course is designed to equip students with knowledge and skills to work with and lead cross-generational teams. Pass/No Pass only. (5/19)

MGMT-50L: Authentic Leadership: Know Yourself/Lead Your People

Unit(s): 0.5
Lecture Hours: .5
Lab Hours: 0

~~Advisories: ENGL 84A:~~

This course is designed to help participants recognize the importance of authenticity in leadership. Participants will learn what followers look for in a leader. The importance of trust in a leader and on a team will be explored. The connection of authenticity and employee engagement will be defined. Pass/no pass only. (5/19)

MGMT-50M: Cultural Diversity

Unit(s): 0.5
Lecture Hours: .5
Lab Hours: 0
Advisories: ENGL 84A.

This course is designed to help students understand, respect and value different cultural backgrounds. This course will help students interface more effectively with culturally diverse co-workers and customers. Topics will include our own cultural programming, the four layers of diversity, exploring differences and stereotyping. Pass/No Pass only. (2/11)

MGMT-50N: Employee Engagement

Unit(s): 0.5
Lecture Hours: .5
Lab Hours: 0

~~Advisories: None:~~

This course will define what Employee Engagement is and what it looks like in the workplace. Participants will learn the difference between engaged, disengaged, and actively disengaged employees and how they impact the workplace. Participants will learn five key ways to engage employees. They will learn strategies to implement to help keep employees engaged. Participants will also learn how to re-engage disengaged employees. (5/19)

MGMT-50P: Emotional Intelligence

Unit(s): 0.5
Lecture Hours: .5
Lab Hours: 0

~~Advisories: ENGL 84A:~~

This course is an introduction to the principles of Emotional Intelligence (EQ). EQ is the ability to identify and understand your emotions and those of others and use this understanding to guide your behavior and manage relationships. Topics covered include the five competencies of EQ: self-awareness, self-regulation, motivation, and effective relationships. Pass/No Pass only. (5/19)

MGMT-50S: Leading With Your Strengths

Unit(s): 0.5
Lecture Hours: .5
Lab Hours: 0
Advisories: ENGL 84A.

This course will help students understand their unique strengths and how applying their strengths can give them their best opportunity for success. Through the Strengths-finder 2.0 assessment, students will learn strategies to apply their strengths in the workplace and in everyday life. Students will also learn how to recognize the strengths of others and how to apply this knowledge to help teams work effectively together. Pass/No Pass only. (2/15)

MGMT-50T: Strengths Based Leadership

Unit(s): 1
Lecture Hours: 1
Lab Hours: 0

This course will help students understand their unique Strengths and how applying their Strengths can give them their best opportunity for success in leadership. Through the Discover Your CliftonStrengths/Strengthsfinder 2.0 assessment, students will learn strategies to apply their strengths in the workplace, in everyday life, and in leadership. Students will also learn how to recognize the strengths of others and how to apply this knowledge to help teams work effectively together. (4/19)

MGMT-50U: Unconscious Bias Reduction in the Workplace and Community

Unit(s): 0.5

Lecture Hours: .5

Lab Hours: 0

This course investigates the attitudes and behaviors formed around unconscious bias. Unconscious bias affects human understanding and decisions in an implicit manner. Students will study various forms of bias including gender, racial, and occupational bias. They will look at the influence of diversity, culture and the significance of ingroup, out group, privilege and equity. Emphasis is placed on creating connection in organizations and communities through research and diverse conversations. (4/19)

MGMT-51C: Leadership Essentials: What Emerging Leaders Need to Know

Unit(s): 0.5

Lecture Hours: 5

Lab Hours: 0

~~Advisories: ENGL 84A~~

This course is designed to acquaint the student with the essential things new and emerging leaders need to know. The roles, functions and responsibilities of a leader will be examined, as well as professionalism, coaching and mentoring. Pass/No Pass only. (5/19)

MGMT-51F: Conflict Resolution

Unit(s): 0.5

Lecture Hours: 5

Lab Hours: 0

~~Advisories: ENGL 84A~~

This course is designed to introduce participants to the meaning of conflict, the causes of conflict, and strategies for resolving interpersonal conflict as well as dealing with difficult customers. Pass/No Pass only. (5/19)

MGMT-51G: Stress Management

Unit(s): 0.5

Lecture Hours: 5

Lab Hours: 0

Advisories: ENGL 84A.

This course is designed to acquaint the participant with key elements of stress management. Topics will include the recognition of stress, causes of stress, and the benefits of stress management. Various stress management techniques will be covered. Pass/No Pass only. (1/08)

MGMT-52C: Successful Business Speaking

Unit(s): 0.5

Lecture Hours: 5

Lab Hours: 0

Advisories: ENGL 84A.

This course is designed to assist the student in developing the skills necessary to successfully speak in a variety of business situations. Topics will include overcoming stage fright, how to gain credibility with the audience, how to make a presentation appealing and tips and techniques to be a better presenter. Pass/No Pass only. (11/15)

MGMT-52D: Managing Organizational Change

Unit(s): 0.5

Lecture Hours: 5

Lab Hours: 0

Advisories: ENGL 84A.

This course is designed to provide the participant with an understanding of change and the influence it has on an organization and the individuals in that organization. Topics will include understanding organizational change, stages of change, and how to manage organizational change. Pass/No Pass only. (1/08)

MARKETING**MKTG-30: Principles of Marketing**

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course provides a broad understanding of the promoting, pricing, and distribution of products and services. Promotional mixes are studied

including sales promotion, advertising, packaging, personal selling, public relations, and publicity. A study is made of understanding customer needs and behaviors; developing a product and/or service mix to satisfy customer needs, and profitability. Legal, political, cultural, social, economic, competitive, and ethical aspects of marketing are discussed. (2/14)

MKTG-31: Retailing and E-Commerce

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: BUS 10; ENGL 85A or ENGL 85AC or ENGL 85E.

This introductory management course gives an overview of the management function and its role in organizations. It is designed to provide the fundamentals of management theories. This course will focus on the management concepts of planning, ethics, motivation, communication and leading. (12/15)

MKTG-33: Advertising

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: AOM 30; ENGL 85A or ENGL 85AC or ENGL 85E.

This is an introductory course in advertising principles and techniques. Areas of study will include advertising agencies, preparation of advertisements, including copywriting, illustration and layouts, media selection, budgeting for advertising, psychology and persuasion of advertisements, and the use of advertising as a tool in sales promotion. (12/11)

MUSIC, APPLIED**MUSA-20: Applied Music**

Designations: (C-ID MUS 160)

Unit(s): 0.5

Lecture Hours: 0

Lab Hours: 1.5

Limitations on Enrollment: Students enrolling in MUSA*20 must be able to demonstrate a level of performance competence on their selected instrument or voice at a level equivalent to that of a music major attending a four-year college or university in the appropriate term of their freshman or sophomore year of studies.

Advisories: Concurrent participation in an appropriate ensemble and enrollment in appropriate-level major preparation courses (Theory, Musicianship, Keyboard, etc.)

This course provides for private individual instruction in voice, piano, or traditional band or orchestra instruments at a level equivalent to that of a music major in the appropriate term of their freshman or sophomore year of music studies. It requires one lesson per week with a private instructor approved by the music department faculty. A minimum of 15 lessons must be verified. A jury examination by the music department faculty is required at the conclusion of the course. This course can be repeated three times. (12/13)

MUSA-21A: Voice I

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Limitations on Enrollment: Must demonstrate the ability to match pitch; see instructor.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This is a course in elementary voice training. It emphasizes posture, diaphragmatic-intercostals breathing, breath support, breath control, tonal placement, articulation, stage presence, and overcoming performance anxiety. Critical evaluation, demonstration, and written reviews will be required. A basic understanding of music fundamentals, although not required, would be highly desirable. (12/13)

MUSA-21B: Voice II

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: MUSA 21A.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This is a course for those singers who desire to develop their abilities in song interpretation. Particular emphasis is placed on music theatre literature and presentation. Character development, motivation, blocking, facial and body gestures and emotional discovery are all incorporated into the song presentation. In lieu of the prerequisite, students may choose to challenge by audition with instructor. (12/13)

MUSA-25A: Guitar I

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is an introduction to the basic playing techniques, theory and history of the guitar. Students will develop a basic foundation for playing the guitar while surveying its historical development and various stylistic uses in artistic, folk, and popular music. (12/18)

MUSA-25B: Guitar II

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: MUSA 25A.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is a continuation of skills and techniques learned in MUSA 25A Beginning Guitar. Additional emphasis will be placed on classical and popular guitar styles. Chord-melody, bar chords, and hybrid picking techniques are introduced. (12/18)

MUSA-27A: Class Piano I

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is designed for the beginning piano student with little or no background in piano. It is designed to develop sight reading skill and keyboard technique incorporated into solo and ensemble music. (12/13)

MUSA-27B: Class Piano II

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: MUSA 27A.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is a continuation of MUSA 27A. It is the second semester of class piano studies. The student will perform musical pieces with greater accuracy and musical expression. (12/13)

MUSIC, ENSEMBLE

MUSE-41: Concert Band

Designations: (C-ID MUS 180)

Unit(s): 1

Lecture Hours: 0

Lab Hours: 3

Limitations on Enrollment: Audition by instructor.

This course provides experience in performing concert and symphonic band literature chosen from Classical, Romantic, Modern and contemporary eras. Literature may range from sacred to secular in the genres of classical, traditional, pop, and jazz band repertoire. Attention will be given to the composers of the literature and particular performance practices historically applicable. Public performance and exchange concerts are scheduled in addition to class rehearsals. This course may be repeatable three times. (3/16)

MUSE-42: Jazz Ensemble

Designations: (C-ID MUS 180)

Unit(s): 1

Lecture Hours: 0

Lab Hours: 3

Limitations on Enrollment: Audition by instructor.

This course is a study of jazz music in the big band tradition and modern eras, as is standard first semester lower division college performance ensemble classes. Attention will be given to the composers of the literature and those particular performance practices which are historically applicable. The course emphasizes individual, sectional and ensemble instrumental performance. Tone, intonation, balance, precision, breath control, articulation, style, and improvisation are included. The jazz ensemble makes several public performances each year. This course may be repeatable three times. (3/16)

MUSE-43: Guitar Ensemble

Designations: (C-ID MUS 180)

Unit(s): 1

Lecture Hours: 0

Lab Hours: 3

Prerequisites: MUSA 25A.

Limitations on Enrollment: Audition by instructor.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MUSA 25B.

This course specializes in the study and performance of guitar literature chosen from a wide range of classical, modern and contemporary musical eras. The Merced College Guitar Ensemble is a continuation of the skills and techniques learned in Guitar II. Students taking this course perform together in small and large group formats. Music selected to perform will be in a variety of styles including classical, jazz, popular, and international folk genres. Emphasis on group playing and the development of individual style will be encouraged. This course may be repeated up to three times. (2/16)

MUSE-44: Chorale

Designations: (C-ID MUS 180)

Unit(s): 1

Lecture Hours: 0

Lab Hours: 3

Limitations on Enrollment: Audition by instructor.

This course specializes in the study and performance of choral literature chosen from Renaissance, Baroque, Classical, Romantic, Modern and contemporary eras and may include both sacred and secular genres of classical, pop, and jazz choral literature. Attention will be given to the composers of the literature and particular performance practices historically applicable. An emphasis will be made on literature written or arranged for large vocal ensembles. Emphasis includes part-singing, intonation, breath control, vocal development, blend, tone coloring, and choral balance. The Chorale performs several times throughout the year. This course may be repeated three times. (3/16)

MUSE-45: Chamber Singers

Designations: (C-ID MUS 180)

Unit(s): 1

Lecture Hours: 0

Lab Hours: 3

Limitations on Enrollment: Audition by instructor.

This course specializes in the study and performance of choral literature chosen from all historic eras and may include both sacred and secular genres of classical, pop, and jazz choral literature. Attention will be given to the composers of the literature and particular performance practices historically applicable. Focus will be placed on literature written or arranged for small vocal ensembles. Emphasis includes part-singing, intonation, breath control, vocal development, blend, tone coloring, and choral balance. The Chamber Singers perform several times throughout the year. This course may be repeated three times. (3/16)

MUSIC, GENERAL

MUSG-10: Music Fundamentals

Designations: (C-ID MUS 110) (CSU breadth area C1) (IGETC area 3A)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 84A.

This course is a study of music fundamentals, including principles and

procedures of rhythm and pitch notation, musical symbols, scales, key signatures, intervals, diatonic chords. The course is applicable to those who have learned to play and sing without training in fundamentals and to beginners in music. This course is open to all students. (12/18)

MUSG-11: Classical Music History I

Designations: (CSU breadth area C1) (IGETC area 3A)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is a study of the important composers and their works in classical music from early music (e.g., Gregorian chant) to Bach (600 to 1750). Students will develop an understanding and appreciation of various types of classical music from different eras as a medium of cultural development and as a background toward further musical study. (12/13)

MUSG-12: Classical Music History II

Designations: (CSU breadth area C1)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is a study of the important composers and their works in classical music from the classical era to the present day. Emphasis is on classical, romantic, impressionistic, nationalistic, and contemporary periods in classical music history. Students will develop an understanding and appreciation of various types of classical music from different eras as a medium of cultural development and as a background toward further musical study. (12/13)

MUSG-13: Jazz Music History

Designations: (CSU breadth area C1) (IGETC area 3A)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course presents the history of jazz music from 1890 to present, including an introduction and analysis of major jazz artists and their contributions to this American art form. Special emphasis will be given to developing listening skills appropriate to the understanding and appreciation of jazz. International influences and the development of jazz as a world musical form will be discussed. This course is a listener's guide to the appreciation of jazz and incorporates principles of structure, expression, instrumentation, cultural and social issues integral to jazz music. (12/13)

MUSG-14: American Popular Music History

Designations: (CSU breadth area C1) (IGETC area 3A)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course presents an introduction to the history and literature of the popular music movement in the United States; it is a study of the relationships of popular music to the social history of America. Emphasis is on styles and personalities of folk, blues, jazz, musical theater, country & western, and rock "n" roll. This course is designed for the non-music major. (12/13)

MUSG-17: Introduction to Digital Music

Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Prerequisites: MUSG 10.

An introduction to the principles, uses, and applications of professional music software and MIDI hardware. Students work with MIDI software and hardware in order to explore the basic possibilities of digital music technology, including composition, sequencing, arranging, digital recording, and printing music. (12/13)

MUSIC, THEORY**MUST-01: Music Theory I (Diatonic Harmony)**

Designations: (C-ID MUS 120)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Prerequisites: MUSG 10.

This course provides a thorough study of diatonic harmony found in music literature of the common practice period. This includes an introduction to harmonic and voice leading principles, triads & 7th chords, and harmonic progression. This courses is open to all students. While previous training in music is not required, it is expected that the student understands basic principles found in music (e.g., ability to read music.) This is a core requirement for the student who is pursuing an AA in music. (12/13)

MUST-02: Music Theory II (Diatonic Harmony II)

Designations: (C-ID MUS 130)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Prerequisites: MUST 01.

This course is a continuation of MUST 01. It is the second semester of music theory studies. It completes a thorough study of diatonic harmony while introducing basic concepts found in chromatic harmony. This course is open to all students who meet the prerequisites but is intended for the music major. This is a core requirement for the student who is pursuing an AA in music. (12/13)

MUST-03: Music Theory III (Chromatic Harmony)

Designations: (C-ID MUS 140)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Prerequisites: MUST 02.
Advisories: Advisory MUSA 27B.

This course examines chromatic music theory as it relates to classical and popular music using skills acquired in MUST 01 and MUST 02. This course covers concepts that help the student develop as a musician. These skills are essential to both performance and song writing. It is open to all students interested in music who have met the prerequisites of the course. This is a core requirement for the student who is pursuing an AA in music. (12/13)

MUST-04: Music Theory IV (Music Theory of the 20th & 21st Centuries)

Designations: (C-ID MUS 150)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Prerequisites: MUST 03.
Advisories: MUSA 27B.

This course incorporates the concepts from Music Theory III. In addition, through writing and analysis, the course will include: post-Romantic techniques such as borrowed chords and modal mixture, chromatic mediant, Neapolitan and augmented-sixth chords, 9th, 11th and 13th chords, altered chords and dominants; and 20th century techniques such as: Impressionism, tone rows, set theory, pandiatonicism and polytonalism, meter and rhythm. (2/14)

MUST-05: Aural Skills I

Designations: (C-ID MUS 125)
Unit(s): 1
Lecture Hours: 5
Lab Hours: 1.5
Advisories: MUSG 10.

Basic drill in the singing and recognition of intervals, scales, and diatonic melodies, in treble, bass, alto, and tenor clefs. Dictation of diatonic melodies and counterpoint in first and second species. (12/13)

MUST-06: Aural Skills II

Designations: (C-ID MUS 135)

Unit(s): 1

Lecture Hours: 5

Lab Hours: 1.5

Prerequisites: MUST 05.

Basic drill in the singing and recognition of intervals, scales, and diatonic melodies, in treble, bass, alto and tenor clefs. Dictation of diatonic melodies and counterpoint in first and second species. Use of computer music programs. (12/13)

MUST-07: Aural Skills III

Designations: (C-ID MUS 145)

Unit(s): 1

Lecture Hours: 5

Lab Hours: 1.5

Prerequisites: MUST 06.

This course applies and develops the rhythmic, melodic, and harmonic materials of Music Theory III through ear training, sight singing, analysis, and dictation. (12/13)

MUST-08: Aural Skills IV

Designations: (C-ID MUS 155)

Unit(s): 1

Lecture Hours: 5

Lab Hours: 1.5

Prerequisites: MUST 07.

Advisories: MUSA 27B.

This course applies and develops the rhythmic, melodic, and harmonic materials of Music Theory IV through ear training, sight singing, analysis, and dictation. (12/13)

MUST-09: Jazz Theory and Improvisation

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: MUSG 10.

This course is a study of the basic techniques used in the understanding and performance of improvisation in the jazz style. Topics include the modes of the major scale and chord relationships, blues scales and progressions, ii-V-I progressions, rhythm changes, jazz standards and chromaticism. A study of the rhythms associated with jazz include swing, Latin, and contemporary styles. Students must provide their own instrument. (12/13)

NUTRITION

NUTR-10: Nutrition

Designations: (C-ID NUTR 110) (CSU breadth area E)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: ENGL 01A.

Advisories: MATH 81.

This course presents an in-depth study of the essential nutrients and their functions, and the chemical composition of foods and their utilization in the body. It includes discussion on the nutritional values of foods, current topics in nutrition and nutritional needs throughout the life cycle. The relationship between diet and diseases will also be covered. (11/18)

NUTR-12: Culture and Cuisine of the World

Unit(s): 3

Lecture Hours: 2.5

Lab Hours: 1.5

Advisories: ENGL 01A.

This course will explore both traditional and contemporary food customs and cultures of people around the world. Comparisons of food patterns related to social, religious, economic, and geographic significance will be studied. The availability, distribution and preparation of food throughout the world is considered as well as nutritional status of various cultures as it related to agricultural, food safety and health factors. Opportunities to explore cultural food identity and experiences will be offered. (12/18)

NUTR-20: Principles of Foods

Designations: (C-ID NUTR 120)

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ENGL 01A; MATH 91; NUTR 44.

This course will study the application of food science principles with emphasis on ingredient function and interaction, food preparation techniques, sensory evaluation standards, food safety and sanitation, and nutritional values. (10/15)

NUTR-24: Work Experience in Nutrition

Unit(s): 1-8

Lecture Hours: 0

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course enables students to earn college credit for learning or improving skills or knowledge on-the-job. Occupational Work Experience is discipline-specific and must connect to the student's major or occupational goal(s). Seventy-five (75) hours of documented paid work experience equals 1 unit of credit. Sixty (60) hours of documented volunteer experience equals 1 unit of credit. A student may enroll in up to 16 total units of work experience at Merced College. Students must have an established work site prior to enrolling in the course. (11/16)

NUTR-25: Introduction to Nutrition and Food Careers

Unit(s): 1

Lecture Hours: 1

Lab Hours: 0

This introductory course will orient students to careers in the culinary, dietetics, food service management and food science field. An overview of both educational and experiential requirements for professionals as well as ethics will be presented. Students will prepare portfolios, research professional organizations, and nutrition and food information literacy. In addition, students planning on taking field experience and/or volunteer work in the field will complete necessary background checks, locate and complete vaccination records and other additional requirements. (12/18)

NUTR-26A: Independent Study in Foods and Nutrition

Unit(s): 1

Lecture Hours: 0

Lab Hours: 3

Prerequisites: NUTR 10.

One-way Corequisite: NUTR 45.

This course is an in-depth study in the student's area of interest. The food and nutrition student will complete an appropriate project related to the food and nutrition field of study. It will be planned, arranged, and carried out with instructor supervision. (10/16)

NUTR-26B: Independent Study in Foods and Nutrition

Unit(s): 2

Lecture Hours: 0

Lab Hours: 6

Prerequisites: NUTR 10.

One-way Corequisite: NUTR 45.

This course is an in-depth study in the student's area of interest. The food and nutrition student will complete an appropriate project related to the food and nutrition field of study. It will be planned, arranged, and carried out with instructor supervision. (10/16)

NUTR-26C: Independent Study in Foods and Nutrition

Unit(s): 3

Lecture Hours: 0

Lab Hours: 9

Prerequisites: NUTR 10.

One-way Corequisite: NUTR 45.

This course is an in-depth study in the student's area of interest. The food and nutrition student will complete an appropriate project related to the food and nutrition field of study. It will be planned, arranged, and carried out with instructor supervision. (10/16)

NUTR-37: Nutrition and Food Service Supervised Field Experience

Unit(s): 3

Lecture Hours: 1

Lab Hours: 6

Prerequisites: NUTR 44.

One-way Corequisite: NUTR 42, NUTR 45.

Limitations on Enrollment: Students must provide proof of a negative TB skin test or chest x-ray within past six months, immunizations and criminal background check.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 91

This course is designed to help students learn problem solving and communication skills. The student is engaged in on-the-job learning activities under the supervision of a Dietary Service Supervisor or Registered Dietitian and College Nutrition Professor. Learning objectives are established based on Dietary Service Supervisor functions. Students rotate through experiences in healthcare facilities, schools and own work site if applicable. Students will be required to follow dress standards required by the facility in which they work. This course is recommended at or near the completion of the Dietary Service Supervisory Program. Students are required to show proof of a current negative TB clearance (within last 6 months) and other immunizations required by the clinical facility to which they are assigned along with criminal background check. (1/15)

NUTR-40: Food Service Management

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: NUTR 45; ENGL 01A or ENGL 85A.

This course covers the principles of food service management for a variety of food service operations including childcare, schools, hospitals, eldercare, and restaurants. Emphasis is on food service personnel, communications, and business operations. (12/18)

NUTR-41: Infant and Toddler Feeding

Also: (CLDV 41)

Unit(s): 1

Lecture Hours: 1

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course focuses on feeding typical and atypical developing infants beginning at birth with breast milk, formulas, first foods and progresses to textures and foods appropriate for the toddler. Course focuses on how to feed a baby, prevent baby bottle tooth decay and choking prevention. Students will learn about appropriate snacks, food safety aspects and food preparation for children with varying needs. Finally students will have the opportunity to design an age appropriate menu meeting the Child Care Food Program Guidelines. This course is recommended for child development and foods and nutrition students (11/15)

NUTR-42: Quantity Food Preparation

Unit(s): 3

Lecture Hours: 2.5

Lab Hours: 1.5

One-way Corequisite: NUTR 44.

Limitations on Enrollment: Students in this class volunteer in the kitchen at the CDC and must also adhere to law concerning workers/volunteers in child care or community care facilities.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 91.

This course addresses the preparation and service for quantity food service operations. The focus is on food production. Recipe standardization, equipment and layout, application of safe food handling ,supervisory functions including record-keeping and quality assurance. (12/16)

NUTR-43: Children and Weight Concerns

Unit(s): 1

Lecture Hours: 1

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is designed to provide an overview of the problem of childhood obesity. Students will explore reasons for the recent epidemic in our

country and review the trends. Factors including pressure by the media and the connection to eating disorders will be studied. Students will look at the role of the family, school and community in addressing childhood obesity. This course is recommended for Foods and Nutrition and Child Development. (4/14)

NUTR-44: Food Safety and Sanitation

Unit(s): 2

Lecture Hours: 2

Lab Hours: 0

This beginning course is designed to teach basic food safety principles of personal and institutional sanitation. This includes the proper storage, preparation, and service as well as HACCP, food allergies, regulations and pest management. An emphasis is placed on the Supervisor's role in maintaining high standards for these principles. This course meets the California Retail Food Code requirement section numbers 113947.1 through 113947.6. This course is required by the Dietetary Service Supervisory Program and is highly recommended to those interested in working in Food Service industry as well as application to lifelong learning. (12/18)

NUTR-45: Introduction to Medical Nutrition Therapy

Unit(s): 2

Lecture Hours: 2

Lab Hours: 0

Advisories: ENGL 01A.

This course is designed to acquaint students with therapeutic and modified diets used in health care facilities. Topics include nutrition for disease states as well as normal nutrition needs. Students will become familiar with principles of nutrition intervention and client care. Students will be able to evaluate menus to meet the nutritional needs of patients. Cultural consideration and the management of long-term care residents will be emphasized. This course is required for the student planning a career in food service supervision especially in health care institutions and recommended for nursing students. (12/18)

NUTR-50: Baking Basics and Business

Unit(s): 1.5

Lecture Hours: 1

Lab Hours: 1.5

Advisories: MATH 80.

This is a course designed to introduce basic bakery production. With the growing interest and demand in the food industry it is imperative that students are introduced to basics of food safety practices, quantifying recipes and understand the business sense to provide a quality product. This lecture and laboratory class will plan baked items to prepare, consider costs involved making that product and in the foods laboratory will produce the product. Sensory evaluation techniques and quality control will be taught and practiced. (09/18)

NUTR-60: Sports and Exercise Nutrition

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course focuses on examining the effect of diet on physical performance. Students will have the opportunity to evaluate an athlete's dietary intake and physical activity. The subjects of nutritional supplements, sports drinks, and carbohydrate loading will also be presented. This course is required for Kinesiology majors and recommended for Foods and Nutrition majors. (10/16)

NUTR-70A-ZZ: Special Topics in Foods and Nutrition

Unit(s): 1-3

Lecture Hours: 1-3

Lab Hours: 0-9

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; NUTR 10.

This is a course designed to address special topics in Foods and Nutrition to meet current needs of students. Specific classes will be offered to expose and introduce students to current issues in the foods and nutrition field and provide most up-to-date information in order to be successful in

the industry. (10/13)

PHYSICAL EDUCATION

PHED-20: Introduction to Physical Education and Exercise Science

Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This is a survey class designed to introduce the professional foundations of physical education and exercise science. The course includes historical and philosophic development of physical education. This course will also acquaint the student with current issues, qualifications, and opportunities in the field. (1/05)

PHED-70L5: Special Topics in Water Exercise

Unit(s): 1
Lecture Hours: 0
Lab Hours: 3
Prerequisites: None.

This course uses water exercises as a means to improve strength, flexibility, and cardiovascular fitness. Swimmers and non-swimmers may take the course. (1/13)

PHED-70L6: Special Topics in Physical Education Lab

Unit(s): 1
Lecture Hours: 0
Lab Hours: 3
Prerequisites: None.

This is a course teaching a variety of special topics in physical education which have current interest to students. (1/13)

PHILOSOPHY

PHIL-01: Introduction to Philosophy

Designations: (CSU breadth area C2) (IGETC area 3B) (C-ID PHIL 100)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E.
Advisories: ENGL 01A.

This course introduces philosophical ideas and methods concerning self-identity, knowledge, reality and values. These topics will be discussed through reading primary philosophical texts taken from the traditional and modern Western philosophical canon, as well as from non-canonical sources. (4/13)

PHIL-01H: Honors Introduction to Philosophy

Designations: (CSU breadth area C2) (IGETC area 3B) (C-ID PHIL 100)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Prerequisites: ENGL 01A
Limitations on Enrollment: Enrollment in the Honors program.

This course introduces philosophical ideas and methods concerning self-identity, knowledge, reality and values. These topics will be discussed through reading primary philosophical texts taken from the traditional and modern Western philosophical canon, as well as from non-canonical sources. There will be an emphasis on philosophical research and writing. Students taking this class must be enrolled in the Honors Program. See the college catalog for a description of enrollment requirements. (4/13)

PHIL-02: Social and Political Philosophy

Designations: (CSU breadth area C2, D) (IGETC area 3B/4)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E.

Advisories: ENGL 01A.

This course examines philosophical issues concerning the nature of society and justifications for the authority of government. Concepts to be discussed include liberty, equality, justice, the common good, and the legitimate use of state power. (2/15)

PHIL-03: Ancient Philosophy

Designations: (CSU breadth area C2) (IGETC area 3B) (C-ID PHIL 130)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E.
Advisories: ENGL 01A.

This course presents an introduction to the history of philosophy from the ancient world through the Middle Ages, with emphasis on the development of Greek philosophy from the Pre-Socratics through Aristotle. (10/13)

PHIL-04: Modern Philosophy

Designations: (CSU breadth area C2) (IGETC area 3B) (C-ID PHIL 140)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E.
Advisories: ENGL 01A.

This course presents an introduction to the history of philosophy from the Renaissance to the present, with emphasis on Descartes through Kant. (4/13)

PHIL-05: Contemporary Ethical Issues

Designations: (CSU breadth area C2) (IGETC area 3B) (C-ID PHIL 120)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E.
Advisories: ENGL 01A.

This course examines the concept of morality and values, representative ethical theories, and their application to contemporary ethical issues such as capital punishment, abortion, war, animal rights and economic justice. (4/13)

PHIL-10: Critical Thinking

Designations: (CSU breadth area A3)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E.
Advisories: ENGL 01A.

This is a practical course in sound and logical reasoning. The focus of this course is to develop the abilities to analyze, to criticize, and to reach reasoned conclusions. This includes the ability to recognize and avoid common fallacies in reasoning, and to construct cogent arguments and essays. (3/08)

PHIL-12: Introduction to Logic

Designations: (CSU breadth area A3) (C-ID PHIL 110)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Prerequisites: ENGL 85A or ENGL 85AC or ENGL 85E.
Advisories: ENGL 01A.

This course introduces the study of valid reasoning with emphasis on deductive logic. Informal fallacies and the scientific method are also covered. (4/13)

PHIL-13: Critical Reasoning and Writing

Also: (ENGL 13)
Designations: (C-ID ENGL 105) (CSU breadth area A3) (IGETC area 1B)

Unit(s): 3
 Lecture Hours: 3
 Lab Hours: 0
 Prerequisites: ENGL 01A.

This course offers instruction in argumentative and critical writing, critical thinking, research strategies, information literacy, and proper documentation. Readings feature mostly non-fictional essays and books that reflect diverse cultural and gender perspectives on a variety of contemporary political and social issues, especially those involving race, ethnicity, and gender. ENGL 13/PHIL-13 meets the IGETC critical thinking/composition requirement. (3/12)

PHIL-13H: Honors Critical Reasoning and Writing

Also: (ENGL 13H)
 Designations: (C-ID ENGL 105) (CSU breadth area A3) (IGETC area 1B)
 Unit(s): 3
 Lecture Hours: 3
 Lab Hours: 0
 Prerequisites: ENGL 01A.
 Limitations on Enrollment: Enrollment in the Honors Program.

This course offers instruction in argumentative and critical writing, critical thinking, research strategies, information literacy, and proper documentation. Readings feature mostly non-fictional essays and books that reflect diverse cultural and gender perspectives on a variety of contemporary political and social issues, especially those involving race, ethnicity, and gender. ENGL 13/PHIL 13 meets the IGETC critical thinking/composition requirement. (3/12)

PHIL-15: Comparative Religions

Designations: (CSU breadth area C2) (IGETC area 3B)
 Unit(s): 3
 Lecture Hours: 3
 Lab Hours: 0
 Advisories: ENGL 01A.

This course surveys the historical background and fundamental philosophical concepts of the major religions of the world, including Hinduism, Buddhism, Shinto, Confucianism, Judaism, Christianity, Islam, and some typical basic religions. (4/06)

PHOTOGRAPHY

PHOT-10A: Introduction to Photography

Unit(s): 3
 Lecture Hours: 2
 Lab Hours: 3
 Advisories: ~~ENGL 85A~~ or ENGL 85AC or ~~ENGL 85E~~.

Introduction to Photography covers camera and darkroom principles of black and white photography. Topics include current aesthetic trends and compositional elements, image capture techniques, exposure control, film developing, contact prints, enlargements, lighting, filters, print finishing and photo mounting. (3/19)

PHOT-10B: Intermediate Photography

Unit(s): 3
 Lecture Hours: 2
 Lab Hours: 3
 Prerequisites: PHOT 10A or PHOT 11A.
 Advisories: ~~ENGL 85A~~ or ENGL 85AC or ~~ENGL 85E~~ AOM-50C.

This course deals with the aesthetic underpinnings and practical application of intermediate photographic principles relevant to film and digital cameras. The course emphasizes technical and compositional control and the perfection of image processing. Broad-based professional studio lighting practices factor into the course. (3/19)

PHOT-11A: Introduction to the Digital Camera

Unit(s): 3
 Lecture Hours: 2
 Lab Hours: 3
 Advisories: ~~ENGL 85A~~ or ENGL 85AC or ~~ENGL 85E~~ AOM-50C.

This course introduces students to the creative use of digital cameras

through lectures, hands-on experience and computer use. Instruction includes digital camera functions, technical and creative control, computer processing of images, and digital output options. Students gain essential knowledge of digital photographic strategies through image capture and creative Photoshop and Lightroom manipulation. (3/19)

PHOT-33: The History of Photography

Designations: (IGETC area 3A) (CSU breadth area C1)
 Unit(s): 3
 Lecture Hours: 3
 Lab Hours: 0
 Prerequisites: ~~ENGL 85A~~ or ~~ENGL 85AC~~ or ~~ENGL 85E~~.
 Advisories: ENGL 01A.

This historical survey course covers image capture techniques from the camera obscura through current digital technologies. The artistic significance and broad social implications of photography provide an underlying basis for critical analysis. The course includes lecture and discussion components coupled with visual presentations. (3/19)

PHOT-35: Studio Careers in Photography

Unit(s): 3
 Lecture Hours: 2
 Lab Hours: 3
 Prerequisites: PHOT 10B or PHOT 11A.

This course covers advanced studio lighting through black and white and color assignments. Students become acquainted with commercial equipment and image processing related to portraiture, weddings, fashion, product, and fine art photography. Assignments emphasize concept development, lighting, location work, and small and large products. Design and layout may be incorporated into specialized portfolio pieces. (01/18)

PHOT-36: Photo Portfolio Expressions

Designations: (CSU breadth area C1)
 Unit(s): 3
 Lecture Hours: 2
 Lab Hours: 3
 Prerequisites: PHOT 10B or PHOT 11A.

This course explores the possibilities of visual language in-relation to photographic self-promotion. Advanced camera techniques, film handling, digital methodology, professional portfolio construction and printing formats suggest the emphasis on personal expression and a marketable skill set. (01/18)

PHOT-49: Independent Study in Photography

Unit(s): 1
 Lecture Hours: 0
 Lab Hours: 3
 Prerequisites: PHOT 10A or PHOT 11A.
 Advisories: AOM 50C.

This course covers a variety of topics and/or activities of current interest in the field of photography. The student chooses the topic(s) of study for the semester. (1/18)

PHYSICAL SCIENCE

PHSC-01: Introduction to Physical and Earth Science

Designations: (CSU breadth area B1) (IGETC area 5A)
 Unit(s): 3
 Lecture Hours: 3
 Lab Hours: 0
 Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 81.

This is an introductory course presenting the nature of physical, earth, and space sciences and their relationship to other areas of scientific knowledge. The course will develop the major concepts and give an understanding of the general principles of physical, earth, and space science. As an introductory class, the course of study will focus on major principles and applications to modern observations and phenomena. This course is designed to meet the content requirement for physical science and for earth and space science for the Liberal Studies - Elementary Teaching preparation pathway. (10/12)

PHSC-01L: Introduction to Physical and Earth Science Laboratory

Designations: (CSU breadth areas B1/B3) (IGETC area 5C)

Unit(s): 1

Lecture Hours: 0

Lab Hours: 3

One-way Corequisite: PHSC 01.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 81

This introductory laboratory is designed to provide hands-on exploration in parallel with topics covered in the lecture course, PHSC 01. Emphasis will be placed on 1) classical science experimentation, 2) laboratory activities in the real world, and 3) support of the laboratory activities through use of modern technologies. Students planning on becoming K-12 teachers will find materials applicable to their future profession. (2/13)

PHSC-02: Survey of Chemistry and Physics

Designations: (IGETC area 5A) (CSU breadth area B1) (C-ID PHYS 140)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: MATH 81.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

An investigation of basic principles of physics and chemistry including matter, physical and chemical properties, energy, motion, light, atomic structure, bonding, solutions and chemical reactions. The inter-dependence of chemistry and physics will be emphasized. This course is intended for non-science majors. (11/14)

PHSC-02L: Survey of Chemistry and Physics Laboratory

Designations: (IGETC area 5C) (CSU breadth area B3) (C-ID PHYS 140)

Unit(s): 1

Lecture Hours: 0

Lab Hours: 3

Prerequisites: MATH 81.

One-way Corequisite: PHSC 02.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This introductory laboratory is designed to provide a hands-on exploration in parallel with the topics covered in the introduction to Survey of Chemistry and Physics lecture course - Physical Science 2. Emphasis will be placed on (1) classical science experimentation, (2) laboratory activities in the real world, and (3) support of the laboratory activities through use of modern technologies. This course is intended for non-science majors. (11/14)

PHYSICS

PHYS-02A: General Physics I

Designations: (C-ID PHYS 105) (CSU breadth area B1/B3) (IGETC area 5A/5C)

Unit(s): 4

Lecture Hours: 3

Lab Hours: 3

Prerequisites: MATH 02 or MATH 02H; or MATH 25 and MATH 26.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course is intended for students other than physics and engineering majors. PHYS-02A is the first semester of a one-year physics course designed to develop major concepts and give an understanding of general principles of physics. This course will also try to relate physics to other areas of knowledge and discuss science in general, and physics specifically, as part of the concept of culture and time. The development of ideas will begin with those of Aristotle and terminate with present-day concepts of the atom and nucleus. PHYS-02A will emphasize the universe, motion, forces in nature, energy, fields, conservation laws, waves, sound, light, and thermal phenomena. (10/13)

PHYS-02B: General Physics II

Designations: (CSU breadth area B1/B3) (IGETC area 5A/5C) (C-ID PHYS 110)

Unit(s): 4

Lecture Hours: 3

Lab Hours: 3

Prerequisites: PHYS 02A.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

PHYS-02B is a continuation of PHYS 02A with emphasis on electricity, magnetism, radiation, relativity, atomic and nuclear processes, astrophysics, cosmology, and a look toward the future. (12/12)

PHYS-04A: Physics I

Designations: (C-ID PHYS 205/200) (CSU breadth area B1/B3) (IGETC area 5A/5C)

Unit(s): 4

Lecture Hours: 3

Lab Hours: 3

Prerequisites: MATH 04A.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 04B.

This course is a calculus-based physics course intended for physics and engineering majors as well as some chemistry and math majors. PHYS-04A is the first semester of a three-semester sequence intended to give a technical introduction to physics with emphasis on concepts and principles of physics and problem-solving. PHYS-04A includes the areas of mechanics, wave motion, fluids, and thermal phenomena. (2/13)

PHYS-04B: Physics II

Designations: (C-ID PHYS 210/200) (CSU breadth area B1/B3) (IGETC area 5A/5C) Unit(s): 4

Lecture Hours: 3

Lab Hours: 3

Prerequisites: PHYS 04A.

One-way Corequisite: MATH 04B.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

PHYS-04B is a continuation of PHYS 04A with emphasis on the areas of electricity, magnetism, and light. (12/12)

PHYS-04C: Physics III

Designations: (CSU breadth area B1/B3) (IGETC area 5A/5C) (C-ID PHYS 200S)

Unit(s): 4

Lecture Hours: 3

Lab Hours: 3

Prerequisites: MATH 04B; PHYS 04B.

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

PHYS-04C is a continuation of PHYS 04B. It emphasizes the laws of thermodynamics, relativity, and topics of modern physics. (12/12)

PHYS-10: Concepts in Physics

Designations: (CSU breadth area B1) (IGETC area 5A)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 81.

This course is a survey of major concepts covered in physics. The concepts, as well as the understanding of general principles, will be developed through lecture, demonstrations, and discussion of everyday phenomena. Both classical and modern topics will be covered, to include mechanics, properties of matter, heat, sound, electricity, magnetism, light, atomic and nuclear physics, relativity, and astrophysics. This course provides an opportunity to work with the concepts of physics in a qualitative manner. (10/13)

PLANT SCIENCE

PLSC-10: Elements of Plant Science

Designations: (C-ID AG 106) (CSU breadth area B2/B3) (IGETC area 5B/5C)

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ~~ENGL 85A~~ or ENGL 85AC or ~~ENGL 85E~~; MATH 80.

This course is designed to provide the students with a working knowledge of fundamental structures and processes of plants. Principles to be applied cover plant structures, physiology, heredity, environmental relationship to growth, adaptation, and management of crops. Techniques of research,

exploration of plant growth, and identification of economical crops will be included. (3/19)

PLSC-12: Weeds

Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80 or MATH 85.

This is a study of classification, identification, and life cycle of common and poisonous weeds in California which are detrimental to cultivated crops, grasslands, animals, and man. Management practices include: prevention, mechanical, biological, and chemical methods. Weed establishment and chemical resistance are also covered. (2/14)

PLSC-13: Economic Entomology

Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80 or MATH 85.

This course will cover insects and mites of economic importance to agriculture. Morphology, taxonomy, identification, life cycles, hosts, habitat relationships, and control methods will be discussed. Collection and labeling of specimens will be required. (2/13)

PLSC-70A-Z: Special Topics in Plant Science

Unit(s): .5 - 4
Lecture Hours: .5 - 4
Lab Hours: 1.5 - 12
Prerequisites: None.

This course is the study of basic principles, processes, and theories of the special topic being presented during this semester.

PLSC-71A-Z: Topics in Agricultural Pest Control Updating

Unit(s): 1
Lecture Hours: 18 Total
Lab Hours: 0
Prerequisites: None.

This mini-course is designed to meet continuing education requirements for Agricultural Pest Control Advisors (P.C.A.), Qualified Agricultural Applicator Licensee (Q.L.), and the Qualified Applicator certificate as set forth by the California Department of Food and Agriculture (C.D.F.A.). Topics to be covered, but not restricted to plant science, are laws and regulations; pesticide management; insects, mites and other invertebrates; defoliation and plant growth regulators; nematodes; plant diseases; vertebrate pest control; and equipment and applicator safety. All topics of the course shall relate to the realm of Integrated Pest Management. This course is continually updated with the changes in laws and practices, and is presented each fall and spring semester. Each course offering must be approved by the regional continuing education accreditation committee and assigned an accreditation number as established by the C.D.F.A. (This course is offered on a credit/no credit basis.)

POLITICAL SCIENCE**POSC-01: Essentials of American Political System**

Designations: (CSU breadth area D/F2) (IGETC area 4) (C-ID POLS 110)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course will introduce students to institutions of American national government, the American political system, and California state and local government. The course includes a study of the United States Constitution and its application to federal, state, and local government. Emphasis is placed upon various roles of national and state government, constitutional rights and obligations of citizens, and the evolution and development of California state political institutions. This course meets the United States Constitution requirement and the federal, California state, and local

government requirement. (10/09)

POSC-02: An Introduction to World Political Systems Comparative Government and Politics

Designations: (CSU breadth area D) (IGETC area 4)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Advisories: ~~ENGL 85A or ENGL 85AC or ENGL 85E~~ ENGL-01A.

This course is a comparative study of the theory, history, structure, and application of the governmental systems of major European nations, as well as non-European countries. Emphasis will be placed on the governments of England, France, Germany, Russia, and Japan. (3/19)

POSC-03: Introduction to International Relations

Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Advisories: ENGL 01A.

An introduction to international relations theory with an examination of national, international, transnational, and sub-national actors and their institutions, interactions and processes as they relate to global issues. (3/19)

PSYCHOLOGY**PSYC-01A: Introduction to Psychology**

Designations: (C-ID PSY 110) (CSU breadth area D) (IGETC area 4)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

PSYC-01A is a survey course designed to provide an introduction to the facts and theories underlying human behavior. Special emphasis is given to the following topics: schools of psychology, physiological factors, sensation, perception, motivation, learning, thinking, emotion, abnormal behavior, personality, heredity, environment, and social factors. (12/08)

PSYC-01AH: Honors Introduction to Psychology

Designations: (C-ID PSY 110) (CSU breadth area D) (IGETC area 4)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Limitations on Enrollment: Enrollment in the Honors Program. See the current college catalog for a description of enrollment requirements.
Advisories: ENGL 01A.

PSYC-01AH is an in-depth survey course designed to provide an introduction to facts and theories underlying human behavior. Special emphasis is given to the following topics: schools of psychology, physiological factors, sensation, perception, motivation, learning, thinking, emotion, abnormal behavior, personality, heredity, environment, and social factors. There will also be an emphasis on research, writing, and critical thinking. (2/06)

PSYC-01B: Introduction to Psychological Research Methods

Designations: (C-ID PSY 200)
Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Prerequisites: PSYC 01A or PSYC 01AH; MATH 10 or PSYC 05.
Advisories: ENGL 01A.

This course reviews psychological methods of research. Attention will be focused on foundations of experimental design, procedures and methodology for collecting research data, and techniques used to analyze, report, and present findings in APA format. Research design will also be examined through a review of past psychological research and various branches of modern Psychology. (5/19)

PSYC-05: Introduction to Statistics in Psychology

Designations: (C-ID SOCI 125, MATH 110) (CSU breadth area B4) (IGETC area 2)

Unit(s): 3
 Lecture Hours: 3
 Lab Hours: 0
 Prerequisites: MATH C or MATH 61 or MATH 62 or MATH 88.
 Advisories: ENGL 01A.

The theory of parametric and nonparametric statistical methods and their application to psychological data. Topics include: descriptive statistics, probability and sampling distributions; statistical inference and power, linear correlation and regression, chi-square; t-tests; and one-way analysis of variance (ANOVA). Application of both hand-computation and statistical software printouts to data in a psychology context, including the interpretation of the relevance of the statistical findings. (2/18)

PSYC-09: Human Development

Also: (CLDV-09)
 Designations: (C-ID PSY 180) (CSU breadth area E)
 Unit(s): 3
 Lecture Hours: 3
 Lab Hours: 0
 Advisories: ENGL 85A or ENGL 85AC or ENGL 85E ENGL-01A.

This course is an introduction to the scientific study of human development from conception through death. It examines the interplay of biological, psychological, social, and cultural forces on the developing human being. (5/19)

PSYC-15: Biological Psychology

Designations: (C-ID PSY 150) (CSU breadth area B2/D) (IGETC area 4/5B)
 Unit(s): 3
 Lecture Hours: 3
 Lab Hours: 0
 Prerequisites: PSYC 01A or PSYC 01AH.
 Advisories: ENGL 85A or ENGL 85AC or ENGL 85E ENGL-01A.

An introduction to the scientific study of the biological bases for human thought and behavior. Topics include basic neuroanatomy and neurophysiology, research methods in biological psychology, the autonomic and peripheral nervous system; and the physiological mechanisms underlying sensation, perception, consciousness, motivation, emotion, learning, memory, and psychological disorders. (4/19)

PSYC-22: Human Sexuality

Designations: (C-ID PSY 130) (CSU breadth area D/E) (IGETC area 4)
 Unit(s): 3
 Lecture Hours: 3
 Lab Hours: 0
 Advisories: ENGL 85A or ENGL 85AC or ENGL 85E ENGL-01A.

This course explores the psychology of human sexuality. Psychological, biological, and sociocultural research is presented concerning all aspects of human sexuality in contemporary society. Specific topics include sexual anatomy and physiology, gender, sexual orientations, contraception, sexually transmitted infections, sexual dysfunction and sex for sale. (5/19)

PSYC-23: Personal and Social Adjustment

Designations: (C-ID PSY 115) (CSU breadth area D/E) (IGETC area 4)
 Unit(s): 3
 Lecture Hours: 3
 Lab Hours: 0
 Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course examines personality factors as they relate to the problems of growth and adjustment. Concepts covered in the course are personality development, the psychological bases of behavior, mental health, and interpersonal relations. Stress is placed on the importance of applying therapeutic principles and techniques in everyday life. (5/14)

PSYC-25: Introduction to Abnormal Psychology

Designations: (C-ID PSY 120) (CSU breadth area D) (IGETC area 4)
 Unit(s): 3
 Lecture Hours: 3
 Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E ENGL-01A

This course is designed to provide the student with an understanding of abnormal behavior as delineated in the "Diagnostic and Statistical Manual of Mental Disorders." Topics include classifications, clinical pictures, casual factors, treatment, and outcomes of maladaptive behavior. Special emphasis will be placed on assessment, therapy, and prevention of maladaptive behavior. (10/12)

PSYC-36: Developmental Psychology: Adolescence

Designations: (CSU breadth area D) (IGETC area 4)
 Unit(s): 3
 Lecture Hours: 3
 Lab Hours: 0
 Advisories: ENGL 85A or ENGL 85AC or ENGL 85E ENGL-01A

This course is a study of human development during adolescence. The focus is on major theories and psychological research relating to the physical, cognitive, and psychological research relating to the physical, cognitive, and psychosocial aspects of development during adolescence, with an emphasis on the influence of culture. (5/12)

PSYC-37: Sport Psychology

Unit(s): 3
 Lecture Hours: 3
 Lab Hours: 0
 Advisories: ENGL 01A.

This course will examine the Psychological Dimensions of Sport and Exercise Performance. Topics will include motivation, personality, emotions and mood as they relate to individual and group sports. Social psychology of sport and cognitive and behavioral interventions will also be discussed. Relevant and current literature in the field will be used to support concepts. (12/16)

PSYC-40: Drugs and Behavior

Designations: (CSU breadth area E)
 Unit(s): 3
 Lecture Hours: 3
 Lab Hours: 0
 Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course will examine psychoactive drugs and their mode of action on the central nervous system and on behavior. Motivational aspects of drug use and abuse and the psychological treatment of substance-use disorders will be evaluated. (11/14)

PSYC-49A-ZZ: Special Topics in Psychology

Unit(s): 3
 Lecture Hours: 3
 Lab Hours: 0
 Advisories: ENGL 01A.

This course is designed to address special topics in psychology to meet the needs of students. Special topics will include Theories of Personality, Cognitive Psychology, Learning and Memory, Motivation, Behavior Modification, Death and Dying, and Cross-Cultural Psychology. (1/07)

PSYC-95S: Statistics Support

Unit(s): 1
 Lecture Hours: 0
 Lab Hours: 1-5 3
 Prerequisites: PSYC 05.
 Advisories: ENGL 01A.

A review of the core prerequisite skills, competencies, and concepts needed in statistics. Topics include concepts from prealgebra, elementary and intermediate algebra, and the developmental skills needed for statistical analysis. intended for students who are concurrently enrolled in Introduction to Statistics in Psychology. (3/19)

RADIOLOGIC TECHNOLOGY, DIAGNOSTIC

RADT-10: Introduction to Radiologic Sciences and Health Care

Unit(s): 4
 Lecture Hours: 3
 Lab Hours: 3

Prerequisites: ALLH 67; RADT 50.

Limitations on Enrollment: Enrollment in the Diagnostic Radiologic Technology Program; Student supplied criminal background and drug screening clearances; physical evaluation within the last 6 months; negative TB screening or chest x-ray report with the last 6 months; current inoculations; annual flu vaccination; current CPR.

This course provides an overview of the foundations of radiography and the practitioner's role in the health care delivery system. Students will be oriented to the administrative structure of program, health science professions and career advancement, health care environment, cultural awareness in the radiologic sciences, ethics and the law, and regulatory agencies. The basic principles of radiation protection, patient care and pharmacology will also be presented. An overview of computer fundamentals, digital imaging, computer literacy, software applications, library use, time management, study skills and a mathematics review will be presented. (3/18)

RADT-11: Radiologic Procedures I

Unit(s): 4

Lecture Hours: 3

Lab Hours: 3

Prerequisites: BIOL 16; ENGL 01A.

Limitations on Enrollment: Enrollment in the Diagnostic Radiologic Technology Program; Minimum of 2.75 GPA in prerequisite courses.

Advisories: BIOL 18.

This course is designed to provide the knowledge base necessary to perform standard imaging as it relates to radiographic anatomy and positioning of the thoracic viscera, abdomen, upper extremities, shoulder girdle, lower extremities, hip & pelvis and upper gastrointestinal tract. The laboratory portion of this course will include positioning exercises and image evaluation of these areas to achieve both accuracy and speed. (3/18)

RADT-12A: Radiologic Procedures II

Unit(s): 4

Lecture Hours: 3

Lab Hours: 3

Limitations on Enrollment: Enrollment in the Diagnostic Radiologic Technology Program.

This course covers basic radiographic anatomy and positioning of the lower gastrointestinal tract, biliary system, genitourinary system, vertebral column, bony thorax, mobile and trauma radiography. The laboratory portion of this course will include positioning exercises and image evaluation of these areas to achieve both accuracy and speed. (3/18)

RADT-12B: Clinical Education I

Unit(s): 5

Lecture Hours: 0

Lab Hours: 15 hours TBA lab (270 Total TBA hours).

One-way Corequisite: RADT 12A.

Limitations on Enrollment: Enrollment in the Diagnostic Radiologic Technology Program.

This course provides clinical experience for application of theoretical principles and concepts covered in previous and current didactic coursework. Clinical experience in patient care and handling, positioning skills, equipment utilization, radiation protection application, patient information management, work efficiency and image evaluation is provided. (3/18)

RADT-13: Radiologic Sciences I

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Prerequisites: CHEM 02A; MATH 61 or MATH 62 or MATH C.

Limitations on Enrollment: Enrollment in the Diagnostic Radiologic Technology Program.

This course covers the nature and characteristics of radiation, x-ray production, and photon interactions with matter. It also establishes a knowledge base in radiographic and mobile equipment requirements and design. The laboratory portion of this course will focus on solving radiographic technical problems and verification of the basic laws of the

radiation sciences. (3/18)

RADT-14A: Radiologic Sciences II

Unit(s): 2

Lecture Hours: 27 Total

Lab Hours: 27 Total

Limitations on Enrollment: Enrollment in the Diagnostic Radiologic Technology Program.

This course covers the theory and application of factors that govern and influence the production of quality radiographic images. A basic knowledge of quality control, optimal imaging standards, image evaluation and factors that can affect image quality such as anatomy and positioning will be reviewed to assure consistency in the production of quality radiographic images. (3/18)

RADT-14B: Clinical Education II

Unit(s): 3.5

Lecture Hours: 0

Lab Hours: 189 Total TBA

Limitations on Enrollment: Enrollment in the Diagnostic Radiologic Technology Program.

This course provides continued clinical experience for application of theoretical principles and concepts covered in previous and current didactic coursework. Clinical experience in patient care and handling, positioning skills, equipment utilization, radiation protection application, patient information management, work efficiency and image evaluation is provided. (3/18)

RADT-15A: Radiologic Procedures III

Unit(s): 1

Lecture Hours: 5

Lab Hours: 1.5

Limitations on Enrollment: Enrollment in the Diagnostic Radiologic Technology Program.

This course is designed to provide a knowledge base necessary to perform standard radiographic procedures of the cranium, facial bones and paranasal sinuses. The laboratory portion of this course will include positioning exercises and image evaluation of these areas to achieve both accuracy and speed. (3/18)

RADT-15B: Clinical Education III

Unit(s): 5.5

Lecture Hours: 0

Lab Hours: 17 hours TBA lab (306 Total TBA hours).

Limitations on Enrollment: Enrollment in the Diagnostic Radiologic Technology Program.

This course provides continued clinical experience for application of theoretical principles and concepts covered in previous and current didactic coursework. Clinical experience in patient care and handling, positioning skills, equipment utilization, radiation protection application, patient information management, work efficiency and image evaluation is provided. (3/18)

RADT-15C: Advanced Radiologic Procedures I

Unit(s): 2

Lecture Hours: 2

Lab Hours: 0

Limitations on Enrollment: Enrollment in the Diagnostic Radiologic Technology Program.

This course covers advanced radiographic procedures of vascular and non-vascular procedures and interventional radiology. (3/18)

RADT-15D: Radiographic Pathology

Unit(s): 1.5

Lecture Hours: 1.5

Lab Hours: 0

Limitations on Enrollment: Enrollment in the Diagnostic Radiologic Technology Program.

The course introduces concepts related to disease and etiological consideration with emphasis on radiographic appearance of disease and impact on exposure factor selection. (3/18)

RADT-16A: Advanced Radiologic Procedures II

Unit(s): 2.5
 Lecture Hours: 2.5
 Lab Hours: 0
 Limitations on Enrollment: Enrollment in the Diagnostic Radiologic Technology Program.

This course is designed to provide entry-level radiography students with an introduction to and basic understanding of the operation of CT and MRI devices. In addition, the basic concepts of venipuncture and administration of diagnostic contrast agents will be introduced. The appropriate delivery of patient care during these procedures is emphasized. (3/18)

RADT-16B: Advanced Clinical Education I

Unit(s): 10
 Lecture Hours: 0
 Lab Hours: 540 Total TBA
 Limitations on Enrollment: Enrollment in the Diagnostic Radiologic Technology Program.

This course provides continued clinical experience for application of theoretical principles and concepts covered in previous and current didactic coursework. Clinical experience in patient care and handling, positioning skills, equipment utilization, radiation protection application, patient information management, work efficiency and image evaluation is provided. (13/18)

RADT-16C: Fluoroscopy

Unit(s): 2.25
 Lecture Hours: 405 Total
 Lab Hours: 0
 Limitations on Enrollment: Enrollment in the Diagnostic Radiologic Technology Program.

This course is designed to prepare the senior radiography student to sit for the California Radiologic Technologist Fluoroscopy Permit examination. (3/18)

RADT-17A: Radiologic Sciences III

Unit(s): 2
 Lecture Hours: 2
 Lab Hours: 0
 Limitations on Enrollment: Enrollment in the Diagnostic Radiologic Technology Program.

This course presents an overview of the principles of the interaction of radiation with living systems, the principles behind radiation protection, including the responsibilities of the radiographer for patients, personnel and the public. Radiation health and safety requirements of federal and state regulatory agencies, accreditation agencies and health care organizations are incorporated. (3/18)

RADT-17B: Advanced Clinical Education II

Unit(s): 7
 Lecture Hours: 0
 Lab Hours: 378 Total TBA
 Limitations on Enrollment: Enrollment in the Diagnostic Radiologic Technology Program.

This course provides clinical experience for reapplication of theoretical principles and concepts covered in previous and current didactic coursework to ensure continued competency. Clinical experience in patient care and handling, positioning skills, equipment utilization, radiation protection application, work efficiency and image evaluation is provided. (3/18)

RADT-18A: Integrative Study in Radiography

Unit(s): 2
 Lecture Hours: 2
 Lab Hours: 0
 Limitations on Enrollment: Enrollment in the Diagnostic Radiologic Technology Program.

This course covers a comprehensive analysis and assessment of all previous radiography instructional coursework in preparation for writing the national registry examination (ARRT). Job market readiness skills will

also be presented. (3/18)

RADT-18B: Advanced Clinical Education III

Unit(s): 9
 Lecture Hours: 0
 Lab Hours: 486 Total TBA
 Limitations on Enrollment: Enrollment in the Diagnostic Radiologic Technology Program.

This course provides clinical experience for reapplication of theoretical principles and concepts covered in previous and current didactic coursework. Clinical experience in patient care and handling, positioning skills, equipment utilization, radiation protection application, patient information management, work efficiency and image management and evaluation is provided. (3/18)

RADT-18C: Sectional Anatomy

Unit(s): 1
 Lecture Hours: 1
 Lab Hours: 0
 Limitations on Enrollment: Enrollment in the Diagnostic Radiologic Technology Program.

This course covers an introduction to sectional anatomy. Emphasis will be placed on the major anatomic structures normally seen in axial sections with some coronal and sagittal sections included. (3/18)

RADT-24: Work Experience in Radiology

Unit(s): 1-8
 Lecture Hours: 0
 Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course enables students to earn college credit for learning and/or improving skills or knowledge on-the-job. Occupational Work Experience is discipline specific and must connect to the student's major or occupational goal(s). Seventy-five (75) hours of documented paid work experience equals 1 unit of credit. Sixty (60) hours of documented volunteer experience equals 1 unit of credit. A student may enroll in up to 16 total units of work experience at Merced College. Students must have an established work site prior to enrolling in the course. (11/16)

RADT-50: Career Exploration in Medical Imaging

Unit(s): 1
 Lecture Hours: 0
 Lab Hours: 54 TBA Total
 Limitations on Enrollment: Negative TB screening test or chest x-ray (within last 6 months); some facilities may require criminal background and drug screening clearances; some facilities may require current immunizations.
 Advisories: ALLH 67; BIOL 16.

This course allows students to sample an experience in a medical imaging setting in order to enhance their understanding of the challenges and opportunities in considering a career in diagnostic medical imaging. The instructor of record will be responsible for arranging the student's clinical placement during the course's orientation meeting. (10/15)

READING

READ-80A: Foundations in Reading II

Unit(s): 2
 Lecture Hours: 2
 Lab Hours: 0

This introductory level course is designed as a support course for students to improve basic reading skills in cross-disciplinary content areas. The course will emphasize the application of reading strategies to improve students' abilities to read effectively in a variety of contexts. The course will stress comprehension, critical reading, vocabulary acquisition, and fluency. (1/17)

READ-81A: Foundations in Reading I

Unit(s): 2
 Lecture Hours: 2
 Lab Hours: 0

This intermediate reading course is designed as a support course for

students to improve a variety of reading comprehension skills and critical reading/thinking skills in cross-disciplinary content areas. The course will emphasize the application of reading strategies to improve students' abilities to read effectively in a variety of contexts. The course will stress comprehension, critical reading, vocabulary acquisition, and fluency. (1/17)

REAL ESTATE

REAL - 42: Real Estate Principles

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80.

This course is an analysis of principles of real estate in California, history of California real estate, property, contracts, agency, listings, real estate financing, deeds, liens and encumbrances, escrows and title insurance, land descriptions, real estate mathematics, and real estate licensing and state regulations. (1/09)

REAL-43: Real Estate Practices

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80.

This course is an analysis of problems related to establishing and conducting a real estate business, which includes but is not limited to preparing and evaluating listings, prospecting, advertising, the selling process, closing the sale, financing real estate, exchanges and specializing brokerage, income properties, management and leasing, taxes, land utilization, and professional and public relations. (11/15)

RECREATION

RECR-30: Introduction to Community Recreation

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course teaches a general orientation to the field of recreation and parks. It will include a history of the recreation and leisure services, a description of recreational forms, and the nature, scope, and significance of leisure, and recreation as a social force in contemporary society. Emphasis is placed on the role of the professional leader in a variety of settings. (12/06)

REGISTERED NURSING

REGN-01: Transition LVN to RN

Unit(s): 2

Lecture Hours: 1

Lab Hours: 3

Prerequisites: BIOL 16, BIOL 18, BIOL 20; ENGL 01A; MATH C or MATH 61 or MATH 62.

Limitations on Enrollment: California VN license.

Registered Nursing 01 is a series of lectures and discussions that provides the concepts and principles necessary to facilitate the transition of the Licensed Vocational Nurse to the changing role of the Registered Nurse. Incorporates best practices, professional standards, and legal and ethical responsibilities of the professional nurse as applied in various health care settings. Emphasis will be placed upon the registered nurse as a decision-making member of the health care team and the responsibilities to be assumed by such a practitioner. (3/19)

REGN-02: Clinical Skills Transition-LVN to RN

Unit(s): 1

Lecture Hours: 0

Lab Hours: 3 TBA

Prerequisites: REGN 01.

Limitations on Enrollment: California VN license, CPR Certificate,

enrolled acceptance into REGN Program 3rd semester.

Registered Nursing 02 consists of practice in the clinical setting with the skills and principles necessary to facilitate the transition of the Licensed Vocational Nurse to the changing role of the Registered Nurse. Emphasis is placed on nursing skills related to first year RN nursing concepts in clinical practice. (5/19)

REGN-15: Foundations of Nursing

Unit(s): 9

Lecture Hours: 4

Lab Hours: 15 TBA

Prerequisites: BIOL 16, BIOL 18, BIOL 20; ENGL 01A; MATH C or MATH-61 or MATH-62.

One-way Corequisite: None. Two-way corequisite: REGN 18.

Limitations on Enrollment: 1) Enrollment in the REGN program, 2) CPR card Module AC, 3) physical within past 6 months, 4) negative TB screening test within past 6 months or negative chest x-ray within past year, 5) proof of current immunizations, 6) criminal background clearance, 7) drug screening.

Registered Nursing 15 (Foundations of Nursing) focuses on foundational concepts necessary for safe, patient-centered nursing care to a diverse patient population while integrating legal and ethical responsibilities of the nurse. Introduces critical thinking applied to nursing, the nursing process, diversity, and communication techniques used when interacting with patients and members of the interdisciplinary team, and applies evidence-based nursing practice. Includes acquisition of basic nursing skills. Application of knowledge and skills occurs in the nursing skills laboratory and a variety of acute and long-term care clinical settings. (5/19)

REGN-18: Pharmacology in Nursing Practice

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

One-way Corequisite: None. Two-way corequisite: REGN 15.

Limitations on Enrollment: Enrollment in the REGN Program.

Advisories: VOCN 46A.

Registered Nursing 18, Pharmacology in Nursing Practice, presents an overview of the basic principles of pharmacology including major drug classifications and prototypes. Principles of medication administration include all aspects of best practice for safe, quality, patient-centered care including developmentally and culturally appropriate interventions. Includes dosage calculations. (2/13)

REGN-24: Acute Medical/Surgical and Nursing of the Childbearing Family

Unit(s): 10

Lecture Hours: 5

Lab Hours: 15 TBA

Prerequisites: REGN 15, REGN 18.

Limitations on Enrollment: Enrollment in the REGN program 2nd semester.

Registered Nursing 24 provides for the acquisition and application of nursing theory, communication, collaboration, and critical thinking skills necessary for safe, patient-centered nursing care to a developmentally and culturally diverse patient populations experiencing various common medical/surgical interventions and to the childbearing family. Incorporates best practices, professional standards, and legal and ethical responsibilities of the professional nurse as applied in various healthcare settings. Includes acquisition of nursing skills required in acute care and childbearing family settings. Application of knowledge and skills occurs in the nursing skills laboratory and clinical settings. (2/13)

REGN-34: Advanced Medical/Surgical Nursing and Pediatric Nursing

Designations: (CSU breadth area E)

Unit(s): 10

Lecture Hours: 5

Lab Hours: 15 TBA

Prerequisites: REGN 01 or REGN 24.

Limitations on Enrollment: Enrollment in the REGN program 3rd semester; CPR card Module AC; physical within past 6 months; negative TB screening test within past 6 months or negative chest

x-ray within past year; proof of current immunizations; criminal background clearance; drug screening.

This course enlarges upon the concepts presented in REGN 15 and REGN 24 by introducing principles of care to maintain and/or restore homeostatic mechanisms in acute health problems. Prototype disease processes associated with each concept are studied in relation to preventive and restorative nursing care. Concurrent practice in the college laboratory and clinical experience in community facilities are required. (2/13)

REGN-44: Acute Medical/Surgical Nursing and Mental Health

Nursing

Unit(s): 9

Lecture Hours: 4

Lab Hours: 15

Prerequisites: REGN 34.

Limitations on Enrollment: Enrollment in the REGN program 4th semester.

Registered Nursing 44 builds on REGN 34, focusing on complex medical/surgical conditions of the high acuity patient and the patient at various levels of mental health promotion and mental illness management. Builds on nursing theory, communication, collaboration, and critical thinking skills necessary for safe, patient-centered nursing care to developmentally and culturally diverse patient populations. Incorporates best practices, professional standards, and legal and ethical responsibilities of the professional nurse as applied in the acute care and mental health settings incorporating all aspects of the professional nurse. Application of knowledge and skills occurs in the acute care and community settings to facilitate an effective transition from student to registered nurse. (2/13)

SEWING (NONCREDIT)

SEW-402: Beginning Quilting

Unit(s): 36-54 Total, Open Entry

This 36-54 hour noncredit course will teach students the fundamentals of quilting. Students will learn ideas and techniques for creating quilted and patchwork bed covers, wall art, clothing and other quilted projects. Topics include piecing, appliqué, and other quilting skills. (5/19)

SEW-407: Needlecrafts and Sewing

Unit(s): 36-54 Total, Open Entry

This 36-54 hour course provides instruction in knitting, crocheting, stitchery and sewing with an emphasis on: making needlecrafts easier, learning the basic techniques in each of the areas, and learning how to select the right equipment, and the correct pattern for each level of expertise. (5/19)

SKILLS (NONCREDIT)

SKLS-210: Daily Living Skills

Unit(s): 435-455 Total, Open Entry

This 435-455 hour course is designed primarily for mentally and or physically disabled students who are functioning at very low levels. The course teaches the basic living skills necessary for successful social interaction, self-care, and to help enhance self-esteem. (11/13)

SOCIOLOGY

SOC-01: Introduction to Sociology

Designations: (C-ID SOCI 110) (CSU breadth area D) (IGETC area 4)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 01A.

This course provides an introduction into what it means to be "sociologically mindful" and to think "sociologically" while understanding the difference from other ways of seeing the social world. The course begins with the understanding of the differences between personal troubles and public issues, and how sociologist apply various theoretical perspectives to a wide range of issues, such as: culture; socialization; social structure of society; deviance; issues of feminization; family; gender; race; inequality;

economics; politics and population; and the relationship between the individual and society. The course accents international comparisons to show how similar institutions are structures and function differently in different societies around the world. (2/06)

SOC-02: Contemporary Social Problems

Designations: (C-ID SOCI 115)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 01A.

SOC-02 introduces fundamental theories and methodologies employed in the study of contemporary social problems. An emphasis is placed on analysis of causes and possible solutions to such problems as poverty, discrimination, crime, delinquency, alcoholism, drug abuse, suicide, family, and politics. A global perspective focuses on the international influences and contributions to various contemporary social problems. (2/06)

SOC-03: Marriage and the Family

Designations: (IGETC area 4) (CSU breadth area D) (C-ID SOCI 130)

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course provides an overview of sociological theories and concepts utilized to investigate marriage and family relationships. An empirical as well as experiential analysis of the changes in marriage and family functions, structures, and roles is emphasized. Special focus is paid to contemporary issues, concerns and debates regarding marriage and family dynamics.(7/17)

SOCIAL (NONCREDIT)

SOCL-760: Career and Life Planning

Unit(s): 435-455 Total, Open Entry

This course is designed for students who function at limited levels of cognitive development. It is designed to help students acquire positive workplace attitudes, skills, and habits. This course is 435 - 455 hours in duration. (11/13)

SOCL-761: Vocational Life Planning

Unit(s): 8 Total, Open Entry

This course is designed primarily for students who are part of the Merced College Independent Living Program (ILP). The course addresses issues and barriers that students will typically encounter while seeking and maintaining employment and success in becoming an independent adult. Course content includes instruction in the areas of education, employment, housing, money management, and daily living skills. (11/18)

SOIL SCIENCE

SOIL-10: Soil Science

Designations: (CSU breadth area B1/B3) (IGETC area 5A/5C) (C-ID AG 128)

Unit(s): 3

Lecture Hours: 2

Lab Hours: 3

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80 or MATH 85.

This course provides a basic knowledge of the physical, chemical, and biological properties of soils and their characteristics. The course includes factors of fundamental soil properties, soil and plant relationships, principles of soil formation, fertilizers and soil management, salinity, pH, erosion management, and nonagricultural uses. (2/13)

SOIL-11: Fertilizers and Soil Amendments

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E; MATH 80 or

MATH 85.

This course will cover the composition, value, selection and use of fertilizer materials and soil amendments. Soil, plant, and fertilizer relationships will be covered. Application practices common to area crops and soils will be discussed. (2/13)

SONOGRAPHY, DIAGNOSTIC MEDICAL

SONO-40: Basic Ultrasound Physics

Unit(s): 1.5
Lecture Hours: 18 Total
Lab Hours: 27 Total

Prerequisites: ENGL 01A; MATH C, MATH 26; PHYS 10 or RADT 13.
Limitations on Enrollment: Enrollment in the Diagnostic Medical Sonography program.

This course covers the basic principles and terminology of diagnostic ultrasound physics to include: a review of mathematical skills, transducers, beam dynamics and instrumentation. Hands-on instruction will introduce the student to necessary elementary scanning skills. (5/17)

SONO-41: Introduction to Sonography

Unit(s): 1.5
Lecture Hours: 18 Total
Lab Hours: 27 Total

Prerequisites: ALLH 67; BIOL 16, BIOL 18; ENGL 01A or COMM 01.
Limitations on Enrollment: Completion of a two-year Allied Health program that is patient-care related, such as radiologic technology, registered nursing, respiratory therapist, physical therapy, associate degree-licensed vocational nurse, or a baccalaureate degree in biological sciences with patient care experience; minimum cumulative GPA of 2.35 in prerequisite course work; enrollment in the Diagnostic Medical Sonography Program.

This course is an overview of diagnostic medical sonography and its role in health care delivery. Students will be oriented to the academic and administrative structure of the program, clinical affiliates, and to the profession as a whole. An introduction to the principles, instruments, and routine sonographic procedures will be emphasized. The laboratory portion of this course will include a hands-on orientation to the equipment, instrumentation, and scanning techniques. (2/15)

SONO-42A: Abdominal Sonography

Unit(s): 4
Lecture Hours: 3
Lab Hours: 3
Prerequisites: BIOL 16, BIOL 18.

Limitations on Enrollment: Enrollment in the Diagnostic Medical Sonography Program--Abdominal & OB/GYN Track.

This course covers abdominal sonographic positioning and scanning protocol; related anatomy and physiology to include the retroperitoneum; pathology and clinical symptomology and how they relate to the sonographic appearance of these structures. Interpretation and critique of normal and abnormal anatomy with correlation of clinical, didactic, and image information will be presented. The laboratory component of this course will include demonstration and scanning exercises to provide a "live lab" experience in conducting abdominal sonographic procedures. (2/08)

SONO-42B: Clinical Experience I

Unit(s): 9
Lecture Hours: 0
Lab Hours: 28
One-way Corequisite: None. Two-way corequisite: SONO 42A.
Limitations on Enrollment: Enrollment in the Diagnostic Medical Sonography Program--Abdominal & OB/GYN Track.

This course provides clinical experience for application of theoretical principles and concepts covered in previous and current didactic course work. Clinical experience in patient care and handling, scanning techniques, instrumentation, work efficiency, and image evaluation for abdominal imaging is provided. (5/17)

SONO-43A: OB/GYN Sonography

Unit(s): 4
Lecture Hours: 3
Lab Hours: 3
Limitations on Enrollment: Enrollment in the Diagnostic Medical Sonography Program--Abdominal & OB/GYN Track.

This course presents a review of anatomy and physiology of the gravid and nongravid pelvis. Techniques of transabdominal and transvaginal preparation are introduced. Symptomology of the female patient with correlation to the sonographic appearance of pathology are covered. First, second, and third trimester obstetrical assessment are covered in depth. (2/08)

SONO-43B: Clinical Experience III

Unit(s): 9
Lecture Hours: 0
Lab Hours: 28
One-way Corequisite: None. Two-way Corequisite: SONO 43A.
Limitations on Enrollment: Enrollment in the Diagnostic Medical Sonography Program--Abdominal & OB/GYN Track.

This course provides clinical experience for application of theoretical principles and concepts covered in previous and current didactic coursework. Clinical experience in patient care and handling, scanning techniques, instrumentation, work efficiency and image evaluation in all areas of general sonography is provided with emphasis in OB-GYN imaging. (5/17)

SONO-44A: Advanced Ultrasound Physics

Unit(s): 1.5
Lecture Hours: 1.5
Lab Hours: 0
Limitations on Enrollment: Enrollment in the Diagnostic Medical Sonography Program.

A continuation of basic physics and instrumentation including continuous and pulsed wave Doppler. Basic principles of color flow imaging. Advanced principles in medical ultrasound instrumentation, hemodynamics, bioeffects, artifacts, and sonographic quality assurance/control procedures. (5/17)

SONO-44B: Clinical Experience II

Unit(s): 4.5
Lecture Hours: 0
Lab Hours: 252 Total TBA
One-way Corequisite: None. Two-way corequisite: SONO 44C.
Limitations on Enrollment: Enrollment in the Diagnostic Medical Sonography program.

This course provides clinical experience for application of theoretical principles and concepts covered in previous and current didactic course work. Clinical experience in patient care and handling, scanning techniques, instrumentation, work efficiency, and image evaluation for superficial structure is provided. Clinical experience in abdominal, obstetric and gynecological imaging is also provided. (5/17)

SONO-44C: Superficial Structures

Unit(s): 1
Lecture Hours: 9 Total
Lab Hours: 27 Total
Two-way corequisite: SONO 44B.
Limitations on Enrollment: Enrollment in the Diagnostic Medical Sonography program.

This course covers basic positioning and scanning protocol of the superficial structures; related anatomy and physiology to include the neck, breast, and testes; pathology and clinical symptomology and how they relate to the sonographic appearance of these structures. Interpretation and critique of normal and abnormal anatomy with correlation of clinical didactic and image information will be presented. The laboratory component of this course will include demonstration and scanning exercises. (2/15)

SONO-45A: Integrative Study in Sonography

Unit(s): 2
Lecture Hours: 2
Lab Hours: 0

Limitations on Enrollment: Enrollment in the Diagnostic Medical Sonography program.

This course covers a comprehensive analysis and assessment of all previous diagnostic medical sonography instructional course work in preparation for writing the national registry examination. Job market readiness skills will also be presented. (4/13)

SONO-45B: Clinical Experience IV

Unit(s): 9

Lecture Hours: 0

Lab Hours: 28 TBA

One-way Corequisite: None. Two-way corequisite: SONO 45C.

Limitations on Enrollment: Enrollment in the Diagnostic Medical Sonography program.

This course provides clinical experience for application of theoretical principles and concepts covered in previous and current didactic coursework. Clinical experience in patient care and handling, scanning techniques, instrumentation, work efficiency and image evaluation of basic vascular sonography is provided. Clinical experience in abdominal, obstetric and gynecological, and superficial structures imaging is also provided. (5/17)

SONO-45C: Basics of Vascular Sonography

Unit(s): 2

Lecture Hours: 1.5

Lab Hours: 1.5

One-way Corequisite: None. Two-way corequisite: SONO 45B.

Limitations on Enrollment: Enrollment in the Diagnostic Medical Sonography program.

This course covers basic positioning and scanning protocol of the vascular system. Vascular terminology specific to the hemodynamics of the arterial venous and cerebrovascular application will be presented. Normal, abnormal, and pathological states of the human vascular system with emphasis on the external carotid system and the venous systems of the lower extremities will be included. The laboratory component of this course will include demonstration and scanning exercises to provide a "live lab" experience in conducting basic vascular procedures. (4/13)

SONO-49A-ZZ: Special Topics in Diagnostic Medical Sonography

Unit(s): 0.5 - 3

Lecture Hours: 0.5-3

Lab Hours: 0-9

Limitations on Enrollment: Current student or graduate of a diagnostic medical imaging program or six months of experience in a diagnostic medical sonography career track.

This course is designed to address special topics in diagnostic medical sonography to meet the current needs of students. It will provide students access to instruction that will assist them in acquiring the most up-to-date information possible in order to cope with the rapidly changing health care environment. (4/05)

SPANISH

SPAN-01: Elementary Spanish I

Designations: (C-ID SPAN 100) (CSU breadth area C2) (IGETC area 6)

Unit(s): 5

Lecture Hours: 5

Lab Hours: 0

Advisories: ENGL 84A.

This course will focus on the development of listening, speaking, reading, and writing in a cultural context, with primary emphasis on communicative competency. Students will learn how to express in Spanish the most basic functions of everyday life. This course is not recommended for native speakers - native speakers should enroll in SPAN 10. (10/15)

SPAN-02: Elementary Spanish II

Designations: (SPAN 110) (CSU breadth area C2) (IGETC area 3B/6)

Unit(s): 5

Lecture Hours: 5

Lab Hours: 0

Prerequisites: SPAN 01 or two years of high school Spanish.

SPAN-02 is the continuation of SPAN 01. This course will focus on the further development of listening, speaking, reading, and writing in a cultural context, with primary emphasis on communicative competency. Students will learn how to express in Spanish the most basic functions of everyday life. This course is recommended for students who have completed two years of high school Spanish; it is not recommended for native speakers. Native speakers should enroll in SPAN 11. (9/13)

SPAN-03: Intermediate Spanish I

Designations: (C-ID SPAN 200) (CSU breadth area C2) (IGETC area 3B/6)

Unit(s): 5

Lecture Hours: 5

Lab Hours: 0

Prerequisites: SPAN 02.

Advisories: LRNR 30.

SPAN-03 is the continuation of SPAN 02 and SPAN 11. This course reviews and further develops grammatical concepts introduced in SPAN 02 and SPAN 11, as well as introduces the student to the remaining major linguistic concepts of the language. Through varied readings, composition, and discussion, the student will increase his or her vocabulary and cultural knowledge. (10/16)

SPAN-04: Intermediate Spanish

Designations: (C-ID SPAN 210) (CSU breadth area C2) (IGETC area 3B/6)

Unit(s): 5

Lecture Hours: 5

Lab Hours: 0

Prerequisites: SPAN 03.

Advisories: LRNR 30.

This course is a thorough review of the fundamentals of reading, writing, speaking, and understanding Spanish designed to aid the student in preparing for advanced studies in Spanish composition, grammar, and conversation, as well as literature in Spanish, history, and culture. (11/03)

SPAN-10: Spanish for Spanish Speakers I

Designations: (C-ID SPAN 220) (CSU breadth area C2) (IGETC area 3B/6)

Unit(s): 5

Lecture Hours: 5

Lab Hours: 0

Prerequisites: SPAN 02 or the equivalent.

Advisories: LRNR 30.

This course is designed for native and heritage speakers, as well as other linguistically qualified students, whose formal training in the language is not complete. The course will focus on extensive reading of all types of texts and their reworking in written form with the intention of expanding the vocabulary, creating an incipient awareness of linguistic registers, discussing items beyond the familial routine, improving written expression, and developing an appreciation for Hispanic culture as manifested in Spanish speaking countries and the U.S. This course is entirely conducted in Spanish. (4/13)

SPAN-11: Spanish for Spanish Speakers II

Designations: (CSU Breadth C2) (IGETC area 3B/6) (C-ID SPAN 230)

Unit(s): 5

Lecture Hours: 5

Lab Hours: 0

Prerequisites: SPAN 10 or two years of "Spanish for Spanish Speakers."

Advisories: LRNR 30.

This course represents the continuation of SPAN 10. It is designed for students who are fluent in Spanish and who are ready to develop literacy skills. This course continues to focus on extensive reading of all types of texts and their reworking in written form with the intention of expanding the vocabulary, increasing the awareness of linguistic registers, discussing items beyond the familial routine, improving written expression -- particularly accentuation and spelling -- and developing an appreciation

for Latino culture as manifested in any of the Spanish-speaking countries, including the USA. (11/11)

STUDENT GOVERNMENT

STGV-33A: Student Government I

Unit(s): 2
Lecture Hours: 1
Lab Hours: 3
Advisories: ENGL-85A or ENGL 85AC or ENGL-85E.

This course surveys the theory and practice of parliamentary law, committee techniques, and democratic organization. Students will study some of the factors of successful leadership and effective group membership. Participation in student organization events such as lectures, leadership workshops, and conferences, is required. Students may enroll without holding an office. (2/19)

STGV-33B: Student Government II

Unit(s): 2
Lecture Hours: 1
Lab Hours: 3
Prerequisites: STGV 33A.
Advisories: ENGL-85A or ENGL 85AC or ENGL-85E.

This course is a continuation of STGV 33A. The course is designed to introduce students to the ethical dimensions of an organization and to train them to identify social dilemmas, analyze them systematically and resolve them based on core values and codes of conduct found in a college setting. Students may enroll without holding an office. (2/19)

STGV-33C: Student Government III

Unit(s): 2
Lecture Hours: 1
Lab Hours: 3
Prerequisites: STGV 33B.
Advisories: ENGL-85A or ENGL 85AC or ENGL-85E.

This is the third of four sequential STGV courses. This course focuses on the development of leadership skills, provides an understanding of leadership and group dynamics theory and will assist the student in developing a personal philosophy of leadership and management skills. Topics include decision making, goal setting, building trust, empowering others, conflict resolution, managing change, and team building. Students may enroll without holding an office. (2/19)

STGV-33D: Student Government IV

Unit(s): 2
Lecture Hours: 1
Lab Hours: 3
Prerequisites: STGV 33C.
Advisories: ENGL-85A or ENGL 85AC or ENGL-85E.

This is the fourth of four sequential STGV courses. This course examines the role of power and influence in organizations. Topics of study include recognizing the role of the dominant and non-dominant groups in the decision making process and understanding individual factors that influence governance. The course examines American political culture, intergovernmental relations, public opinion, interest groups, and the media. Students may enroll without holding an office. (2/19)

TRAINING (NONCREDIT)

TRNG-768: Bus Driver Training/Recertification

Unit(s): 36 Total, Open Entry

This 36-hour course is designed to improve the bus driver's public relations ability and to provide basic and refresher course information on vehicle checkout procedures, first aid, and emergency procedures. This classroom instruction course also includes good driving fundamentals, assessing, and adjusting to road conditions, and techniques for safe downhill driving. Defensive driving skills and passenger discipline are addressed. A discussion of new state laws and requirements and analysis of bus accidents is provided. (12/13)

TRUCK DRIVING (NONCREDIT)

TRK-769: Class A CDL Permit Training

Unit(s): 80-90 Hours, Noncredit Managed Enrollment
Limitation on Enrollment: Provide proof of a current and valid D.O.T Medical Card; Pass a drug test; Must hold a California Drivers License.

In TRK-769, students will learn the material necessary to successfully pass the DMV Commercial Learners Permit test, which will include the option for multiple Class A endorsements. In addition, students will gain knowledge and develop additional skills necessary to become a professional truck driver. (5/19)

TRK-770: Class A CDL Behind-the-Wheel Training

Unit(s): 60-80 Hours, Noncredit Managed Enrollment
Prerequisites: TRK-769
Limitation on Enrollment: Provide proof of a current and valid D.O.T Medical Card; Pass a drug test; Provide proof of obtaining Commercial Learners Permit.

In TRK-770, students will learn safe operational and driving skills, for a Class A commercial driver's license (CDL), through behind-the-wheel operations. In addition, students will gain knowledge and develop skills necessary to become a professional truck driver.. (5/19)

TRK-771: Class A CDL Behind-the-Wheel Training

Unit(s): 30-40 Hours, Noncredit Managed Enrollment
Prerequisites: TRK-770
Limitation on Enrollment: Provide proof of a current and valid D.O.T Medical Card; Pass a drug test; Provide proof of obtaining a Class A CDL.

In TRK-771, students will participate in an internship of at least 30 behind-the-wheel hours to enhance their driving skills, which provides the driving experience necessary to gain employment.(5/19)

TUTORING (NONCREDIT)

TUT-106: Supervised Tutoring

Unit(s): ~~402~~ 180 Total, Open Entry

This ~~402~~ 180-hour course is designed to assist credit enrolled students who are experiencing difficulty in their college courses. The course provides tutoring from qualified tutors in either a one-to-one or small group setting. (5/19)

TUTORIAL

TUTR-35: Tutorial Seminar

Unit(s): 1
Lecture Hours: 0
Lab Hours: 3
Advisories: ENGL-85A or ENGL-85AC or ENGL-85E

This course is designed to provide tutors in the Merced College Tutorial program with an opportunity to explore their experiences in the program more fully. Tutors will receive instruction in the areas of tutorial technique, group organizations, relationships with faculty and peers, evaluation techniques, and content tutoring. (5/19)

VIRTUAL OFFICE

VIRT-50: Virtual Office

Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Advisories: BUS 10.

Learn how to become an independent contractor/freelancer in the virtual world. (12/18)

VIRT-51: Social Media

Unit(s): 3
Lecture Hours: 3
Lab Hours: 0

The student will learn how to use social media platforms effectively for a business setting. (5/19)

VIRT-55: Social Media Marketing and Strategy

Unit(s): 3
Lecture Hours: 3
Lab Hours: 0
Advisories: VIRT 51.

This course prepares the student for the role of a Social Media Strategist and for the National Institute for Social Media strategist certification examination. (10/15)

VIRT-56: Introduction to Search Engine Optimization

Unit(s): 1
Lecture Hours: 1
Lab Hours: 0

This course is an introduction to the basics of search engine optimization, including the formulation of appropriate keyword planning and the measurement of optimization. (1/15)

VOCATIONAL NURSING

VOCN-40: Foundations of Nursing

Unit(s): 11
Lecture Hours: 5
Lab Hours: 18 TBA
Prerequisites: ALLH 67; BIOL 16 or BIOL 50; NUTR 10; VOCN 46A.
Corequisites: VOCN 46B, VOCN 47A.

Limitations on Enrollment: Enrollment in the Vocational Nursing Program; current CPR Card; physical; immunizations; a negative TB skin test or negative chest x-ray within the last 6 months; background check and urine drug screen. Proof of completion of an educational course of study through the 12th grade or evidence of completion of equivalency thereof (C2530-VN Practice Act).

This course covers theory, principles, and practice of fundamental nursing skills needed to care for adult patients. Health and its preservation is stressed. Interpersonal relationships, community resources, and prevention and treatment of disease are studied. Clinical experience is integrated with classroom theory, and is provided at affiliating hospitals, under direct supervision of Merced College nursing instructors. This is the first semester of nursing theory of a three-semester sequence. Clinical experience is integrated. (2/16)

VOCN-42: Principles and Practices of Nursing Care I

Unit(s): 14
Lecture Hours: 8
Lab Hours: 18 TBA
Prerequisites: VOCN 40.
One-way Corequisite: None. Two-way corequisite: VOCN 47B.
Limitations on Enrollment: Enrollment in the Vocational Nursing Program; current CPR Card; a negative TB skin test or negative chest x-ray.

This course emphasizes theoretical principles and clinical experience in meeting Maslow's basic human needs of nutrition, oxygenation, elimination, and affiliation. It involves clinical experiences in meeting the basic human needs of individuals of all ages with commonly occurring health problems. This course is part of the second semester of a three-semester program. Clinical experience is integrated. (9/13)

VOCN-44: Principles and Practices of Nursing Care II

Unit(s): 14
Lecture Hours: 8
Lab Hours: 18 TBA
Prerequisites: VOCN 42.
One-way Corequisite: None. Two-way corequisite: VOCN 47C.
Limitations on Enrollment: Enrollment in the Vocational Nursing

Program; current CPR card; a negative TB skin test or negative chest x-ray.

This course emphasizes theoretical principles of Maslow's basic human needs of safety, hygiene, rest, activity, comfort, and self-actualization as it relates to common and complex health problems occurring in individuals of all age groups. Pathophysiologic and psychosocial assessment and management of medical-surgical disorders are stressed. General pharmacological and nutritional considerations are included. This course is part of the third semester of a three-semester program. Clinical experience is integrated. (9/13)

VOCN-46A: Applied Mathematics for Pharmacology

Unit(s): 1
Lecture Hours: 1
Lab Hours: 0
Prerequisites: ENGL 01A; MATH 84 80.

This is an introductory pharmacology course which includes an introduction to the professional context of drug administration, and study of the metric, apothecary, and household systems of measurement. Nursing responsibility to patient safety is included. Completion of this course requires accurate interpretation of doctors' order, reading medication bottles, calculating drug dosages, and the reason for their application. (1/19)

VOCN-46B: Pharmacology for Nurses

Unit(s): 2
Lecture Hours: 2
Lab Hours: 0
Prerequisites: VOCN 46A.
One-way Corequisite: None. Two-way corequisite: VOCN 40, VOCN 47A.
Limitations on Enrollment: Enrollment in the Vocational Nursing Program.

This is an introductory pharmacology course which uses effects and safe administration of medications. Common local and systemic drugs are studied. Nursing responsibilities and client safety are emphasized. (10/12)

VOCN-47A: Nursing Guidance I

Unit(s): 1
Lecture Hours: 1
Lab Hours: 0
One-way Corequisite: None. Two-way corequisites: VOCN 40, VOCN 46B.
Limitations on Enrollment: Enrollment in the Vocational Nursing program.

This course examines socialization and interpersonal communications related to vocational nursing. Course topics include verbal and non-verbal communication; communication problems in the nurse-patient relationship; the hospital as a working and learning environment; self-actualization relating to the elderly; and death and dying. (1/07)

VOCN-47B: Nursing Guidance II

Unit(s): 1
Lecture Hours: 1
Lab Hours: 0
Prerequisites: VOCN 40, VOCN 47A.
One-way Corequisite: None. Two-way corequisite: VOCN 42.
Limitations on Enrollment: Enrollment in the Vocational Nursing program.

This course examines the nature of stress and its influences on coping and adapting. Related topics examine include crisis and crisis intervention, and psychophysiological and somatopsychic responses to stress and anxiety. (11/12)

VOCN-47C: Nursing Guidance III

Unit(s): 1
Lecture Hours: 1
Lab Hours: 0
Prerequisites: VOCN 42.
One-way Corequisite: None. Two-way corequisite: VOCN 44.
Limitations on Enrollment: Enrollment in the Vocational Nursing

program.

This course examines current and evolving patterns of mental health care and the shifts from inpatient custodial care to community-based treatment for the mentally ill. This course also examines the health-illness continuum, psychopathology, neuroses and psychoses, clinical disorders and maladaptations of behavior, and psychopharmacological approaches to treatment. (1/07)

VOCN-48: Intravenous Therapy/Blood Withdrawal

Unit(s): 2
Lecture Hours: 2
Lab Hours: 0

Limitations on Enrollment: Licensed as a Vocational Nurse (required by section 2860.5 of the Board of Vocational Nurses and Psychiatric Technicians) or Registered Nurse.

This short-term course is designed to prepare nurses to start and superimpose intravenous fluid and perform blood withdrawal as ordered by the physician. The course will cover psychological preparation of the patient, selection of equipment, aseptic technique, relevant anatomy and physiology, pharmacology of intravenous solutions, and administering blood components. Students will perform simulated and actual intravenous catheterization and blood withdrawals. (12/09)

WELDING TECHNOLOGY

WELD-06: Fundamentals of Oxy-Fuel Welding and Shielded Metal Arc Welding

Unit(s): 3
Lecture Hours: 2
Lab Hours: 3

Advisories: ENGL 84A; MATH 80.

This course emphasizes development of minimum skill standards in welding. The Shielded Metal Arc Welding (SMAW), Oxy-Fuel Welding (OFW) and Oxy-Fuel Cutting (OFC) processes are covered as prescribed in the (AWS) American Welding Training Qualification (QC 10) entry-level standards. (3/19)

WELD-07: Fundamentals of TIG and MIG Welding

Unit(s): 3
Lecture Hours: 2
Lab Hours: 3
One-way Corequisite: WELD 53.

Advisories: ENGL 84A; MATH 80 **or** MATH 85; READ 81A.

This course emphasizes the development of minimum skill standards in welding. The Gas Metal Arc Welding (GMAW)/(MIG), Gas Tungsten Arc Welding (GTAW)/(TIG) and Plasma Arc Cutting (PAC) processes are studied as prescribed in the American Welding Society (AWS) Training Qualification (QC 10) entry-level standards. (3/19)

WELD-40A: Introduction Welding Design and Construction

Unit(s): 3
Lecture Hours: 2
Lab Hours: 3
Prerequisites: WELD 07.

Advisories: ENGL 84A; READ 81A .

This course covers basic metal fabrication skills as well as the design and construction of special industrial and agricultural equipment. (1/17)

WELD-40B: Advanced Welding Design and Construction

Unit(s): 3
Lecture Hours: 2
Lab Hours: 3
Prerequisites: WELD 40A.
Advisories: ENGL 84A.

This course is a continuation of WELD 40A. It covers basic and advanced metal fabrication skills as well as the design and construction of special agricultural and industrial equipment. (2/13)

WELD-46: Advanced Arc Welding Procedures

Unit(s): 1

Lecture Hours: 0

Lab Hours: 3

Advisories: MATH 80 or MATH 85; WELD 06 or MECH 06, WELD 07.

This course is designed to emphasize the skills and techniques of Shielded Metal Arc Welding, Gas Metal Arc Welding, Gas Tungsten Arc Welding, Air Carbon Arc Cutting and Oxyacetylene flame cutting as related to pipe and structural members. Included will be welding assembly print interpretation, weld symbol interpretation, and weld joint preparation. Students will be prepared to take an AWS Welder Certification Test during this course. (2/13)

WELD-51: Introductory Pipe Welding

Unit(s): 2
Lecture Hours: 1
Lab Hours: 3

Prerequisites: MECH 06 or WELD 06; WELD 07.

Advisories: MATH 85; ENGL 84A.

This course is an introduction to pipe and tube fitting and welding. Industry standards established by the American Welding Society (AWS) and the American Petroleum Institute (API) are used as the basis for instruction. This course meets the needs of the food processing and liquid/gas material handling industries. (2/15)

WELD-52: Advanced Pipe Welding and Fitting

Unit(s): 2
Lecture Hours: 1
Lab Hours: 3
Prerequisites: WELD 51.
Advisories: MATH 85; ENGL 84A.

This course covers advanced welding processes and welding positions as well as covering advanced skills in pipe and tube fitting. This course covers advanced food processing and liquid/gas material handling industry topics. (2/15)

WELD-53: Fabrication Equipment Operation and Safety

Unit(s): 2
Lecture Hours: 1
Lab Hours: 3
Advisories: ENGL 84A or ENGL 84E.

This course is an introduction to the welding program. It gives students the opportunity to familiarize themselves with commonly used equipment in industry. In addition to familiarizing themselves with industry standard equipment, they will be trained in lab procedure which will ensure students in more advanced classes can use the equipment without reserve. (12/16)

WORK EXPERIENCE

WORK-24: Work Experience in (Subject)

Also: ALLH 24, ANSC 24, AUTO 24, CLDV 24, **CRIM-24**, EMER 24, FIRE 24, HMSV 24, KINE 24, LAND 24, LBST 24, NUTR 24, RADT 24.

Units(s): 1-8

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course enables students to earn college credit for learning and/or improving skills or knowledge on-the-job. Occupational Work Experience is discipline specific and must connect to the student's major or occupational goal(s). Seventy-five (75) hours of documented paid work experience equals 1 unit of credit. Sixty (60) hours of documented volunteer experience equals 1 unit of credit. A student may enroll in up to 16 total units of work experience at Merced College. Students must have an established work site prior to enrolling in the course. (11/16)

WORK-40: General Work Experience

Unit(s): 1-6

Advisories: ENGL 85A or ENGL 85AC or ENGL 85E.

This course will enable students to earn college credit for learning or improving skills or knowledge while working. Any type of work is suitable, either paid or volunteer. This course will allow students to sample an experience in a career field that is not related to the student's major. A student may not enroll in any more than 16 units of any cooperative work

experience course at Merced College. Seventy-five hours of cooperative work experience (or 60 hours volunteer work) equals 1 unit of cooperative work experience credit. (11/16)

WATER/WASTEWATER TECHNOLOGY

WWT-60: Water Treatment Plant Operations

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 84A; MATH 80.

This course is an introduction to water treatment plant operations and processes. It will include the study of sources of water supply, water quality, treatment systems, and introduction to water treatment operations arithmetic. This course prepares the student to test for state certification for water treatment plant operator grade I and II. (3/17)

WWT-61: Introduction to Wastewater Treatment

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 84A; MATH 80; ENGL-01A.

This course is an introduction to wastewater treatment plant operations and processes. It will include the study of wastewater terminology; current methods of wastewater treatment - primary, secondary, and advanced; wastewater quality; and basic wastewater mathematics. This course prepares the student to test for state certification for wastewater treatment plant operation grade 1 and 2 (entry-level). (11/18)

WWT-62: Water/Wastewater Calculations

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Advisories: ENGL 84A; MATH 80; ENGL-01A.

This course provides for the mastery of mathematical calculations, specifically involving water and wastewater treatment plant operations and processes. It incorporates the use of handheld calculator, scientific notation, and the use of dimensional analysis as tools of problem solving. This course prepares the student to test for state certification for wastewater treatment plant operator, grade I and II (entry level). (11/18)

WWT-63: Advanced Water Treatment Plant Operations

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: WWT 60.

This course is a continuation of the study of water treatment plant operations and processes, with emphasis on the knowledge and skills needed by operators of conventional surface and ground treatment. Topics include control of metallic ions, trihalomethanes, disposal of wastes in the operation of water plants, instrumentation and advanced laboratory procedures, safety and drinking water regulations. Provides background to prepare students to take state certification exams. (11/18)

WWT-64: Advanced Wastewater Treatment

Unit(s): 3

Lecture Hours: 3

Lab Hours: 0

Prerequisites: WWT 61.

This course is a continuation of the study of wastewater treatment plant operations and processes. It will emphasize the details of the process that occur in a wastewater treatment plant, including aeration, maintenance of microbe populations, sludge digestions, and chemical removal. (3/17)