COURSES

COURSES SECTION

ADMINISTRATION OF JUSTICE (AJ)

AJ 1 Basic Academy Modular Level One 16 units
This course includes fundamental principles, procedures and techniques of law enforcement, including; criminal law, patrol procedures, cultural diversity, investigative procedures, report writing, defensive tactics, firearms, community relations, police vehicle operations, traffic enforcement and accident investigation. The course satisfies all minimum required training mandates for POST Entry Level I Peace Officer. Prerequisite: Successfully completed Basic Police Academy Modular Level Three and Basic Police Academy Modular Level Two, Passed the POST Reading/Writing Test (PELLETB), Passed the POST Physical Agility Work Sample Test Battery (WSTB) Test, Successfully completed Level Two End-of-course Proficiency Exam within 12 months of the start of the Level One course, Completed the Academy Application process, including medical clearance, proof of medical insurance, DMV history and DOJ Firearms Clearance. 180 hours lecture, 324 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

AJ 29 Independent Study, Administration of Justice 0.5 - 2 units
Supervised study in the area of Administration of Justice. Any student interested in registering for an Independent Studies course should contact a full/part-time instructor or dean in the appropriate area. 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

AJ 45 Policing America 2 units
An overview of the role of police in American society, including important historical facts shaping policing to the present. Students will examine the development of law enforcement in the United States and investigate trends in police organization, culture, and practice. The polarizing nature of policing in a democracy will be analyzed as the course explores the historical relationship between police and the preservation of social order. Prerequisite: Students must possess a Basic Certificate issued by the California Peace Officer Standards and Training Commission and be employed as a full-time peace officer.. 36 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

AJ 48 Police Supervisory Leadership 2 units
This course will explore the skills, knowledge, and abilities required to successfully perform as a law enforcement line supervisor. Topics include supervision, leadership, effective interpersonal communications, discipline and accountability. Emphasis on examination of ethical supervision, professionalism, occupational socialization, and transformational leadership. Designed for currently employed law enforcement personnel who desire to assume a supervisory position in a law enforcement agency. Prerequisite: Students must possess a Basic Certificate issued by the California Peace Officer Standards and Training Commission and be employed as a full-time peace officer.. 36 hours lecture.
- Grading Option: Letter or P/NP

AJ 50 Introduction to Administration of Justice 3 units
History and philosophy of administration of justice in America; recapitulation of the system; identifying the various subsystems, role expectations, and their interrelationships; theories of crime, punishment, and rehabilitation; ethics, education and training for professionalism in the system. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

AJ 54 Investigative Reporting 3 units
Investigative reports with emphasis upon accuracy and details necessary. Includes arrest reports, incident reports and miscellaneous field reports. Techniques and methods used to cover information; how to analyze and present information in a clear and concise report. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

AJ 55 Introduction to Correctional Science 3 units
Aspects of modern correctional process as utilized in rehabilitation of adult and juvenile offenders. Emphasis on custody, rehabilitation, and treatment programs as recognized by modern penology. Exploration of career opportunities. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

AJ 56 Fundamentals of Crime and Delinquency 3 units
Survey of the sociological and psychological theories pertaining to the causation of crime and delinquency. Includes ethnic considerations and their relationships. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

AJ 59 Child Abuse in the Community 3 units
Dynamics of battered child syndrome. Focus on the abusive caretaker, patterns of abuse and means necessary for effective intervention and treatment, including effective legal and social action to control child abuse in the community. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

AJ 60 Criminal Law 3 units
Historical development, philosophy of law and constitutional provisions; definitions, classification of crime and their application to the system of administration of justice; frequently used Penal and other code sections; case law, methodology and concepts of law as a social force. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

AJ 61 Evidence 3 units
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; judicial decisions interpreting individual rights and case studies. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

AJ 63 Criminal Investigation 3 units
This course addresses the techniques, procedures, and ethical issues in the investigation of crime, including organization of the investigative process, crime scene searches, interviewing and interrogating, surveillance, source of information, utility of evidence, scientific analysis of evidence and the role of the investigator in the trial process. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

AJ 64 Patrol Procedures 3 units
The responsibilities, techniques of observation, community relations and methods of police patrol. Emphasis on legal and practical aspects. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

AJ 66 Juvenile Procedures 3 units
This course is an examination of the origin, development, and organization of the juvenile justice system as it evolved in the U.S. justice system. The course explores the theories that focus on juvenile law, courts and processes, and the constitutional protections extended to juveniles in the U.S. justice system. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

AJ 68 Police Ethics and Leadership 3 units
This course will explore the ethical, legal and moral complexities of law enforcement in a democracy. From the initial application process and background investigation of a potential law enforcement recruit, to the working law enforcement officer, the course will examine society's need for organizational integrity and leadership in law enforcement agencies and the personal commitment to ethical behavior and individual leadership by

law enforcement officers, both on the job and in their private lives. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

AJ 70 Community Relations 3 units
This course examines the complex, dynamic relationship between communities and the justice system in addressing crime and conflict with an emphasis on the challenges and prospects of administering justice within a diverse multicultural population. Topics may include the consensus and conflicting values in Culture, Religion, and Law. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

AJ 74 Gangs and Drugs 3 units
Definition of a gang and gang activity. Historical, cultural and ethnic/racial aspects. Interrelationships among local, national, and international gangs, including prison gangs. Gang activity in relation to drug trafficking. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

AJ 78 Introduction to Probation and Parole 3 units
The history, evolution and current state of probation and parole in the United States, with an emphasis on the differences and similarities of both. Modern trends, such as the justice model, determinate sentencing, restorative justice, "broken windows" supervision, and intensive supervision in the adult and juvenile system are also examined. The course includes discussion of the community resources that can be brought to bear on the correctional task and the concept of shock probation. Designed for students interested in the field of law enforcement or probation/parole. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

AJ 79 Homicide Investigation 3 units
Process of analysis of all aspects of the death case in order to arrive at the true cause and manner of death, whether it is murder, suicide, accidental, or natural. Emphasis on the importance of the death scene related to the investigation of cause. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

AJ 87A PC 832 Arrest 1.5 units
Leadership, professionalism and ethics; laws of arrest; arrest and control; search and seizure; investigative report writing; methods of arrest; investigation and communications; use of force; evidence; cultural diversity/discrimination. Designed to satisfy the 2019 revised requirements of Penal Code 832. Prerequisite: Must demonstrate ability to lawfully possess a firearm and be able to pass DOJ firearms clearance.. 18 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

AJ 87B PC 832 Firearms 1 units
PC 832 Firearms Familiarization and Chemical Agents is a 24-hour course designed to cover the legal, moral and safety aspects of firearms use, range firing and qualification, weapon care and cleaning as well as expending and identification if Chemical agents. It complies with the requirements of Section 832 of the Penal Code. Because this course is designed to provide practical hands on training in police tactics and weapon usage, participants in this course will engage in physically demanding classroom training exercises that include a risk of injury to the participant. Prerequisite: Must demonstrate ability to lawfully possess a firearm and be able to pass DOJ firearms clearance.. 9 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

AJ 89 Family Violence 3 units
The nature and dynamics of family and relationship violence, including historical, legal, and cross-cultural views. Specific types of violent interactions and abuse among family members, including intimate partner abuse, sexual violence, child abuse and neglect, and elder abuse. Social influences that may cause or reinforce violent behavior in the home. Emphasis on techniques for use by law enforcement to effectively intervene and investigate, and understanding of the criminal justice response to victims, offenders, and family members affected by violence in the family. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

AJ 9954 Defensive Tactics Instructor 2.5 units
Students will develop knowledge in practices and philosophy of use of force, basic principles and concepts of Arrest & Control and legal issues. Students will develop skills in course development, class planning, instructional techniques, and instructor liability for a defensive tactics program. Students will develop a basic lesson plan and teach assigned blocks of instruction in defensive tactics to other class participants. Students will demonstrate proficiency in the physical techniques of defensive tactics. Completion of this Defensive Tactics Instructor Course satisfies Regulation 1070 in the POST Administrative Manual. This course also satisfies the Arrest and Control perishable skills mandate. 27 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

AJ 9965 Internal Affairs Investigations 1.5 units
Designed to teach the student the proper investigative techniques into alleged misconduct by California peace officers, correctional officers and others in the employ of any California agency that employs peace officers. The student will learn the legal, ethical, moral and technical standards by which these investigations shall be conducted under state law and the discipline that may result from the outcome. This class is designed for POST certified peace officers who hold a minimum of a basic POST certificate or civilian police employees who have been designated by their respective agency as an IA investigator. 27 hours lecture.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

AJ 9969 Firearms Instructor 2.5 units
Designed to train individuals to be firearms instructors. Covers basic firearms knowledge, teaching techniques and lesson planning, range preparation, combat shooting techniques and safety. A California Peace Officer Standards and Training (POST) certified course designed for full-time peace officers. 27 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

AJ 9979 Basic Police Cyclist 1.5 units
A course designed for those newly assigned to bicycle patrol work. Covers basic cycling principles and skills, including riding in traffic, bicycle fitness, gear selection, basic maintenance, health and nutrition, emergency handling skills, hazard evasion, night riding, patrol tactics, legal issues, traffic laws and scenarios. This is a California Peace Officer Standards and Training (POST) certified course regular or reserve peace officers in federal, state, or local law enforcement. 18 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

AJ 9980 Rifle Marksmanship and Sniper/Observer 2 units
A course designed to provide the necessary rifle and tactical skills for the Sniper/Observer to function in support of high-risk law enforcement operations. Course content includes team missions, organization, marksmanship skills, field craft, ballistics, information collection, reporting procedures and tactical command post. This is a California Peace Officers Standards and Training (POST) certified course designed for regular or reserve peace officers in federal, state, or local law enforcement and/or active duty military personnel. 27 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

AJ 9982 Patrol Rifle Instructor 1.5 units
Instruction and practical exercises focused on the specific needs of the rifle instructor. Includes the use and application of the rifle as it pertains to law enforcement and the skills to instruct others in its use and maintenance. A California Peace Officers Standards and Training (POST) certified course designed for full-time peace officers. 18 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

AJ 9987 Basic S.W.A.T. 2.5 units
Introduces officers to basic weapons and tactical skills associated with the responsibilities of a SWAT team member. Training includes member

selection and team make-up, keys to survival, introduction to tactical weapons and movement of fire, weapon retention and take away, tactical building searches, rappelling, incident management under SMEAC and liability issues. This is a California Peace Officer Standards and Training (POST) certified course designed for full-time peace officers approved for SWAT training for their agency. 27 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

AJ 9995 Firearms/Tactical Rifle for the First Responder 0.5 units

This course is designed to train individuals in the use of the patrol rifle or carbine. This course will enable the first responder an option now becoming the standard in Law Enforcement. Some of the topics covered are rifle safety, marksmanship, zeroing procedures, firing positions, ballistics, reloading drills, malfunction drills, proper use of the rifle sling, basic tactics, low light engagements, and cover. Each attendee will be required to demonstrate proper usage and safe handling of the rifle. This course is designed for full time sworn law enforcement and/or active duty military personnel and other Public Safety First Responders. 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

AJ 9997 Law Enforcement Academy 29 units

Basic concepts of law enforcement, covering investigation, procedures, records, laws, tactics, firearms, and public and human relations. The Law Enforcement Academy is certified by the Commission of Peace Officer Standards and Training (POST). Prerequisite: or employment as a peace officer.. 252 hours lecture, 810 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

AJ 9998 POST Basic Supervisory 4.5 units

This course will cover the basic theories of leadership as they apply to problem-solving. The principles of authority and command will also be explored; as will the concept of failure as it relates to organizational decision-making. Examples will be offered from various models of leadership, including historic leadership styles, command and control, and leadership roles. Problem-solving/decision-making and strategic planning are current themes to be covered in the context of leadership. Prerequisite: Possession of a Basic California POST Certificate. 81 hours lecture.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

ANTHROPOLOGY (ANTR)

ANTR 1 Biological Anthropology 3 units

This course introduces the concepts, methods of inquiry, and scientific explanations for biological evolution and their application to the human species. Issues and topics will include, but are not limited to, genetics, evolutionary theory, human variation and biocultural adaptations, comparative primate anatomy and behavior, and the fossil evidence for human evolution. The scientific method serves as the foundation of the course. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ANTR 12 Magic/Religion/Witchcraft/Healing 3 units

Cross-cultural perspectives on spirituality, religious practice, myth, ancestor beliefs, witchcraft and the variety of religious rituals and practitioners found in the cultures of the world. Examination of the cosmologies of different cultures through the anthropological perspective. Emphasis is placed on how knowledge of the religious practices and beliefs of others can help us to understand the multicultural world in which we live. Comparison of the ways in which diverse cultures confront the large and fundamental questions of existence: those dealing with the meaning life, birth and death, and with the relationship of humans to each other and to their universe. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ANTR 13 Introduction to Forensic Anthropology 3 units

Introductory course in the application of physical anthropology to the medico-legal process with an emphasis on the identification of human skeletal remains. Includes basic human osteoology and odontology, assessment of age at time of death, sex, ancestry, trauma analysis, pathology, and general physical characteristics including height and weight based upon minimal skeletal remains. Estimation of time since death, crime scene analysis, animal scavenging, and identification procedures. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ANTR 1L Biological Anthropology Lab 1 units

This laboratory course is offered as a supplement to Introduction to Biological Anthropology either taken concurrently or in a subsequent term. Laboratory exercises are designed to introduce students to the scientific method and explore genetics, human variation, human and non-human primate anatomy and behavior, the primate/hominin fossil record and other resources to investigate processes that affect human evolution. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ANTR 2 Introduction to Archaeology 3 - 3 units

This course is an introduction to the study of concepts, theories, data and models of anthropological archaeology that contribute to our knowledge of the human past. The course includes a discussion of the nature of scientific inquiry; the history and interdisciplinary nature of archaeological research; dating techniques; methods of survey, excavation, analysis, and interpretation; cultural resource management; professional ethics; and selected cultural sequences. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ANTR 29A Independent Study, Cultural Anthropology 0.5 - 2 units

Students choose a topic to research within the field of cultural anthropology and, with the guidance of the instructor, produce a final product to deliver the results of their findings. 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ANTR 29B Independent Study, Biological Anthropology 0.5 - 2 units

Students choose a topic to research within the field of biological anthropology and, with the guidance of the instructor, produce a final product to deliver the results of their findings. 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ANTR 29C Independent Study, Archaeology/Prehistory 0.5 - 2 units

Students choose a topic to research in the field of archaeology or human prehistory and, with the guidance of the instructor, produce a final product to deliver the results of their findings. 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ANTR 29D Independent Study, Linguistic Anthropology 0.5 - 2 units

Students choose a topic to research within the field of linguistic anthropology and, with the guidance of the instructor, produce a final product to deliver the results of their findings. 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ANTR 2L Archaeology Field Laboratory 1 units

This Archaeology Field Lab course offers hands-on field experience and artifact analysis. Students practice scientific archaeological recovery methods and techniques, including site planning, excavation, typology, cataloging, artifact recognition and reconstruction. In addition to gaining expertise in field research, students will examine and discuss techniques, tools and processes in cultural resource management. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ANTR 3 Cultural Anthropology 3 units

This course explores how anthropologists study and compare human cultures. Cultural anthropologists seek to understand the broad arc of human experience focusing on a set of central issues: how people around the world make their living (subsistence patterns); how they organize themselves socially, politically and economically; how they communicate;

how they relate to each other through family and kinship ties; what they believe about the world (belief systems); how they express themselves creatively (expressive culture); how they make distinctions among themselves such as through applying gender, racial and ethnic identity labels; how they have shaped and been shaped by social inequalities such as colonialism; and how they navigate culture change and processes of globalization that affect us all. Ethnographic case studies highlight these similarities and differences, and introduce students to how anthropologists do their work, employ professional anthropological research ethics and apply their perspectives and skills to understand humans around the globe. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ANTR 4 Language and Culture 3 - 3 units

This introductory course serves as a foundation for understanding language from an anthropological perspective, addressing such core questions as how, what, when, where, why and with whom we communicate. This course surveys three core areas in linguistic anthropology--structural linguistics: phonetics, phonology, morphology and syntax, as well as the biocultural basis of language; historical linguistics: origins and evolution/change, dialects, and language families; and sociocultural linguistics: language acquisition in cultural context, emphasizing the relationship between language and culture, and issues of language conservation and loss. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ANTR 5 Cultures of the U.S. in a Global Perspective 3 units

Issues relevant to understanding race, class, gender and ethnicity within the American setting. Historical as well as contemporary situation of the following groups: 1) African Americans; 2) Native Americans; 3) Hispanic Americans; 4) European Americans; and, 5) Asian Americans, among other groups. Emphasis on analyzing the way that public understandings of culture and biology are translated into social policy. Contemporary social issues such as race relations, multiculturalism, affirmative action, bilingual education, and the use and abuse of I.Q. testing. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ANTR 6 Anthropology of Sex and Gender 3 units

Using research and theory from the fields of biology, cultural anthropology, linguistics, and archaeology, this course takes an anthropological approach to the study of sex and gender across cultures and throughout time. Topics include the cultural construction of gender, sex, and sexuality; the biological foundations of sex; and how gender difference relates to cultural practice. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ANTR 7 Native American Cultures of North America 3 units

Survey of ways of life of traditional North American Indian cultures in different geographical areas throughout North America prior to European contact and continuing today. Topics include prehistory of Native American cultures, cultural change in response to European contact, current Native American socio-economic conditions, recent legislation including NAGPRA, social movements and cultural renewal. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ANTR 8 World Prehistory in an Archaeological Perspective 3 units

Survey of world prehistory as reconstructed through archaeological evidence. Topics include Paleolithic cultural practices from early tool use and mobile communities through settled living in complex agricultural societies to the establishment, rise and collapse of the first major civilizations in Africa, Asia, Europe, the Middle East, the Americas and Oceania. Subsistence, economic networks, social systems, power distributions, symbols and ideology will be discussed, as well as ecological effects of urbanization in the past. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

APPRENTICESHIP ACCOUNTING TECHNICIAN (APAT)

APAT 51 Financial Accounting 4 units

A study of accounting as an information system; examining why it's important, and how it's used by investors and creditors to make decisions. Includes the recording and reporting of business transactions with a focus on the accounting cycle, the application of generally accepted accounting principles and comparing it to international financial reporting standards, preparation and analysis of the classified financial statements for merchandising and service companies. Also includes issues related to recording and valuation of assets, liabilities, equities and cashflow, recognition of revenues, expenses using effective internal controls and ethical standards. Students who have completed or are enrolled in BUSN 1A may not receive credit. Prerequisite: Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Students must first be accepted into a registered Robert Half Workforce and Innovation Program: Accounting Technician apprenticeship.. 72 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

APAT 52 Managerial Accounting 4 units

A study of the use of accounting data for managerial purposes including; planning, directing, and controlling activities. Includes broad coverage of concepts, structures, classifications, and behaviors of costs. Topics include; job costing, process costing, activity based costing, relationship between cost, volume and profitability, relevant range, standard costing, profit planning and budgeting, static and flexible budgeting, responsibility accounting and segment reporting, absorption and variable costing and capital expenditure decisions. Students who have completed or are enrolled in BUSN 1B may not receive credit. Prerequisite: Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Students must first be accepted into a registered Robert Half Workforce and Innovation Program: Accounting Technician apprenticeship.. 72 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

APAT 53 Excel: Introduction to Spreadsheets 4 units

This is a comprehensive spreadsheet class using Microsoft Excel to create a variety of spreadsheets with emphasis on business applications. Introductory, intermediate, and advanced topics are covered. Introductory topics include entering, editing, and formatting data, creating basic formulas using arithmetic operator and functions, creating charts, saving and printing worksheets. Intermediate topics include using Excel's Table features for sorting filtering and summarizing data, creating PivotTables, working with multiple worksheets and workbooks, naming cells, data validation, recording macros, and protecting worksheets. Advanced topics include using financial functions such as PMT, RATE, FV, creating nested IFs, using VLOOKUP and HLOOKUP functions, using What-If analysis tools such as Goal Seek, one and two variable Data Tables, and Scenario Manager, sharing workbooks, and integrating Excel with other Office applications. Students who have completed or are enrolled in CIS 54 may not receive credit. Prerequisite: Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Students must first be accepted into a registered Robert Half Workforce and Innovation Program: Accounting Technician apprenticeship.. 54 hours lecture, 54 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

APAT 54 Business Mathematics 3 units

This course focuses on learning computations for typical business transactions including; simple interest, compound interest, installment sales, trade and cash discounts, mark-on percents, pricing, discounting notes and drafts, depreciation, taxes, insurance, statistics, stocks and bonds, and distribution of ownership and profits. Students who have completed or are enrolled in BUSN 55 may not receive credit. Prerequisite: Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Students must first be accepted into a registered Robert Half Workforce and Innovation Program: Accounting Technician apprenticeship.. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

APAT 55 Quickbooks Accounting 2 units
Introduction to the use of QuickBooks accounting software to process transactions related to a service and merchandising company. Specific topics include using company files, sales and receivables, payables and purchases, bank and credit card reconciliations, end of period transactions and payroll. Transactions include journalizing, adjusting entries, closing entries, bank reconciliation and preparing financial statements. Students who have completed or are enrolled in BUSN 61 may not receive credit. Prerequisite: Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Students must first be accepted into a registered Robert Half Workforce and Innovation Program: Accounting Technician apprenticeship.. 18 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

APAT 56 Federal Income Tax Accounting 3 units
A study and analysis of the principles of federal income tax applied to employees, self-employed individuals and rental income. Includes an overview of taxes related to partnerships, informational returns and corporate tax returns. Analysis of the Internal Revenue Code with examination of court rulings and regulations. Review of new legislation that alters existing tax law. Introduction to tax preparation software is included. Students who have completed or are enrolled in BUSN 65 may not receive credit. Prerequisite: Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Students must first be accepted into a registered Robert Half Workforce and Innovation Program: Accounting Technician apprenticeship.. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

APAT 94 Occupational Work Experience - Accounting Technician Apprenticeship 1 - 8 units
College supervised on-the-job training. Apprenticeship work experience in an occupation related to student's apprenticeship program. Cooperative effort of the work supervisor, student, Joint Apprenticeship Training Council (JATC) or Program Sponsor, and instructor to achieve work-based learning objectives. Student must be enrolled in an apprenticeship program. Each Unit of Credit requires 75 hours of paid work experience. Students can earn 1 to 8 units per semester for a maximum of 16 units of Cooperative Work Experience, which includes General Work Experience and Occupational Work Experience/Internship. May be taken any number of times for a maximum of 16 units of Cooperative Work Experience. Prerequisite: Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Students must first be accepted into a registered Robert Half Workforce and Innovation Program: Accounting Technician apprenticeship...
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

APPRENTICESHIP INFORMATION SECURITY ANALYST (APIS)

APIS 51 CompTIA's A+ Certification Computer Technician 4 units
This course provides an introduction to the computer hardware and software skills needed to help meet the industry demand for entry-level PC Technicians. This course covers PC hardware, software, security, networking, laptops, printers, operational procedures, operating systems, security, troubleshooting, and mobile devices. The students will study the topics needed to become certified PC technicians. Preparation for the CompTIA A + certification, which verifies knowledge equivalent to that of an entry-level ICT (Information and Communications Technology) technician with about 12 months of hands-on experience. The responsibilities of an ICT professional will be introduced. Students who have completed or are enrolled in CNT 51 may not receive credit. Prerequisite: Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Students must first be accepted into a registered Robert Half Workforce and Innovation Program: Information Security Analyst apprenticeship.. 54 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

APIS 52 Networking Fundamentals 3 units
This course provides an introduction to computer networking fundamentals skills needed to meet the industry demand for entry-level Network Technicians. Topics include: Ethernet network fundamentals, Local Area Networks (LANs), and Wide Area Networks (WAN) technologies, the Open Systems Interconnection (OSI) model, wiring implementations, network adapters and connectivity devices, IPv4/IPv6 addressing, Voice over IP (VoIP), and wireless standards. Tools to help prevent cyber attacks with IDS (Intrusion Detection Systems), authentication, and encryption are demonstrated. Student labs include: configuration of a SOHO (Small Office/Home Office), a firewall, a virtual private network (VPN), a switch, and a router and documenting a networking using professional drawing software. The responsibilities of an ICT (Information and Communications Technology) professional will be introduced. This course prepares students for the CompTIA Network+ Certification Exam. This professional certification verifies the student has the knowledge equivalent to that of an ICT technician with about 12 months of hands-on experience. Students who have completed or are enrolled in CIS 66 or CNT 52 may not receive credit. Prerequisite: Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Students must first be accepted into a registered Robert Half Workforce and Innovation Program: Information Security Analyst apprenticeship.. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

APIS 53 Network Security; CompTIA Security + Certification 3 units
The CompTIA Security+ exam will certify the successful candidate has the knowledge and skills required to install and configure systems to secure applications, networks, and devices; perform threat analysis and respond with appropriate mitigation techniques; participate in risk mitigation activities; and operate with an awareness of applicable policies, laws, and regulations. The successful candidate will perform these tasks to support the principles of confidentiality, integrity, and availability. This course provides an introduction to the concepts and practices of secure network design and management using desktop and network operating systems, router and switch operating systems, hardware and software Firewall and VPN technology for wired and wireless systems. The program includes authentication methods and devices, protocol analysis and IP network troubleshooting, strategies for identifying and countering vulnerabilities, network media and topologies in a secure network, intrusion detection and forensic incident response. CompTIA Security+ meets the ISO 17024 standard and is approved by U.S. Department of Defense. Security+ is also compliant with government regulations under the Federal Information Security Management Act (FISMA). Students who have completed or are enrolled in CNT 69 may not receive credit. Prerequisite: Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Students must first be accepted into a registered Robert Half Workforce and Innovation Program: Information Security Analyst apprenticeship.. 45 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

APIS 54 Red Hat Linux Administration I 3 units
This course provides hands-on training covering basic installation, management, configuration, documentation and hardware topics for the Linux/UNIX operating system on workstations in a network environment. The course includes comprehensive coverage of topics related to Linux distributions, installation, administration, X-Windows, and networking. This course prepares students for the CompTIA Linux+ Certification Exam. Students who have completed or are enrolled in CS 41 or CNT 7401 may not receive credit. Prerequisite: Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Students must first be accepted into a registered Robert Half Workforce and Innovation Program: Information Security Analyst apprenticeship.. 45 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

APIS 55 Digital Forensics Fundamentals 3 units
A practical course in Digital Forensics; the detection, and investigation of incidents involving computers, networks, the Internet, and digital information. Case oriented, following the objectives for the CFE Computer Forensics Examiner certification exam and the International Association of Computer Investigative Specialists (IACIS), the class includes understanding and practice in basic computer forensics, methods of investigation, analysis of storage media, logs, and tracking persons and data, using court-approved evidence collection tools. Also covered, computer forensics as a profession, the computer investigation process, and technical writing. Students

who have completed or are enrolled in CNT 68 may not receive credit. Prerequisite: Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Students must first be accepted into a registered Robert Half Workforce and Innovation Program: Information Security Analyst apprenticeship.. 45 hours lecture, 27 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

APIS 56 Cisco CCNA2/3 Switching, Routing, and Wireless Essentials (SRWE) 3 units

This is course 2 of 3 of the Cisco CCNA Routing and Switching Certification Objectives. The concepts covered in this course include Switching: how Layer 2 switches forward data; how STP enables redundancy in a Layer 2 network; the operation of dynamic address allocation in IPv6 networks by using SLAAC and DHCPv6; how FHRPs provide default gateway services in a redundant network; how vulnerabilities compromise LAN security; how Wireless LANs enable network connectivity; how routers use information in packets to make forwarding decisions; and troubleshooting static and default route configurations. The hands-on labs include Basic Configuration of devices by using security best practices; Implementing VLANs and trunking in a switched network; Troubleshooting inter-VLAN routing on Layer 3 devices; Troubleshooting EtherChannel on switched links; Implementing DHCPv4 to operate across multiple LANs; Configuring switch security to mitigate LAN attacks; Implementing a WLAN using a wireless router and WLC; configuring and troubleshooting IPv4 and IPv6 floating static routes. Students who have completed or are enrolled in CNT 8002 may not receive credit. Prerequisite: Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Students must first be accepted into a registered Robert Half Workforce and Innovation Program: Information Security Analyst apprenticeship.. 45 hours lecture, 27 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

APIS 94 Occupational Work Experience - Information Security Analyst Apprenticeship 1 - 8 units

College supervised on-the-job training. Apprenticeship work experience in an occupation related to student's apprenticeship program. Cooperative effort of the work supervisor, student, Joint Apprenticeship Training Council (JATC) or Program Sponsor, and instructor to achieve work-based learning objectives. Student must be enrolled in an apprenticeship program. Each Unit of Credit requires 75 hours of paid work experience. Students can earn 1 to 8 units per semester for a maximum of 16 units of Cooperative Work Experience, which includes General Work Experience and Occupational Work Experience/Internship. May be taken any number of times for a maximum of 16 units of Cooperative Work Experience. Prerequisite: Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Students must first be accepted into a registered Robert Half Workforce and Innovation Program: Information Security Analyst apprenticeship...

- Credit - Degree Applicable
- Grading Option: Pass/No Pass

APPRENTICESHIP MARINE TECHNOLOGY (APMT)

APMT 51 Boatworks 101 Yacht Electrical Systems 4 units

This course is an introduction to yacht electrical systems, including the theory of electricity, routine service, and maintenance. Prerequisite: Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Students must first be accepted into a registered Boatworks 101 apprenticeship.. 63 hours lecture, 27 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

APMT 52 Boatworks 101 Yacht Propulsion Systems 4 units

This course is an introduction to yacht propulsion systems, including theory, routine service, and maintenance. Prerequisite: Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Students must first be accepted into a registered Boatworks 101 apprenticeship.. 63 hours lecture, 27 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

APMT 53 Boatworks 101 Yacht Craftsmanship Lab 0.5 units

This course is a lab-only class that will allow the student to showcase and be evaluated on their craftsmanship skills. Prerequisite: Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Students must first be accepted into a registered Boatworks 101 apprenticeship.. 27 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

APMT 94 Occupational Work Experience - Marine Technology Apprenticeship 1 - 8 units

College supervised on-the-job training. Apprenticeship work experience in an occupation related to student's apprenticeship program. Cooperative effort of the work supervisor, student, Joint Apprenticeship Training Council (JATC) or Program Sponsor, and instructor to achieve work-based learning objectives. Student must be enrolled in an apprenticeship program. Each Unit of Credit requires 75 hours of paid work experience. Students can earn 1 to 8 units per semester for a maximum of 16 units of Cooperative Work Experience, which includes General Work Experience and Occupational Work Experience/Internship. May be taken any number of times for a maximum of 16 units of Cooperative Work Experience. Prerequisite: Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Students must first be accepted into a registered Boatworks 101 apprenticeship...

- Credit - Degree Applicable
- Grading Option: Pass/No Pass

APPRENTICESHIP REDDAWAY HEAVY TRUCK DRIVING (APRT)

APRT 51 Reddaway Heavy Truck Driving Academy 9 units

This course includes classroom instruction, range and road driving, and practical application of skills used in the operation of a tractor/trailer. Students completing the program will have a hazmat endorsement and be eligible to sit for the Class A Commercial Driver's License. Students will also receive training in the Smith Safety System by certified instructors and forklift operation. Prerequisite: Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Students must first be accepted into a registered Reddaway Heavy Truck Driving apprenticeship and have Class A Permit and DOT Medical card.. 153 hours lecture, 27 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

APRT 52 Reddaway Heavy Truck Driving Test Preparation 0.5 units

This course includes range and road driving, and practical application of skills used in the operation of a tractor/trailer. Students enrolled in this class will be able to hone their skills for the behind the wheel test. Prerequisite: Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Students must first be accepted into a registered Reddaway Heavy Truck Driving apprenticeship and have Class A Permit and DOT Medical card.. 27 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

APRT 94 Occupational Work Experience - Reddaway Heavy Truck Driving Apprenticeship 1 - 8 units

College supervised on-the-job training. Apprenticeship work experience in an occupation related to student's apprenticeship program. Cooperative effort of the work supervisor, student, Joint Apprenticeship Training Council (JATC) or Program Sponsor, and instructor to achieve work-based learning objectives. Student must be enrolled in an apprenticeship program. Each Unit of Credit requires 75 hours of paid work experience. Students can earn 1 to 8 units per semester for a maximum of 16 units of Cooperative Work Experience, which includes General Work Experience and Occupational Work Experience/Internship. May be taken any number of times for a maximum of 16 units of Cooperative Work Experience. Prerequisite: Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Students must first be accepted into a registered Reddaway Heavy Truck Driving apprenticeship and have Class A Permit and DOT Medical card...

- Credit - Degree Applicable
- Grading Option: Pass/No Pass

ART HISTORY (ARHS)

ARHS 1 Introduction to Art History 3 units
Architecture, sculpture, painting, photography and design in relation to human inventiveness in providing for material and aesthetic needs. This course provides a general introduction to art that offers a look at works of art through the study of theory, terminology, themes, design principles, media, techniques, with an introduction to the visual arts across time and diverse cultures. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ARHS 2 Art of the Ancient Americas 3 units
Survey of visual culture within the historical context of select ancient civilizations in Mexico, Central American, and South America up to European contact. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ARHS 3 Arts of Africa, Oceania, and Indigenous North Americas 3 units
This course is an introduction to the visual arts produced by selected people of Africa, Oceania, and the Americas from the prehistoric to contemporary periods. The topics covered in the course are representative of the art and architecture produced by groups from Africa, Oceania and the Americas emphasizing how art is representative of the cultural, religious, social, or political orientation of each region. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ARHS 4 Western Art History - Ancient to Medieval 3 units
History of Western art from prehistoric times through Egyptian, Mesopotamian, Aegean, Greek, Etruscan, Roman, Early Christian, Byzantine, Medieval, Romanesque, and Gothic civilizations. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ARHS 5 Western Art History - Renaissance to Contemporary 3 units
History of Western art from Early Renaissance, High Renaissance, Mannerism, Baroque, Neoclassicism, Romanticism, Realism, Impressionism, Post-Impressionism, 20th Century developments of American art 21st century Globalism. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ARHS 6 Museum & Gallery Techniques 3 units
An examination of the methodology and technique of displaying visual art within a museum/gallery space. Opportunities to meet artists from the Bay Area and beyond, learn the meaning behind their artwork, and gain hands-on practice in a range of activities covering the presentation, handling, and security of original artwork in the LPC Center for the Arts Gallery. 36 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ARHS 7 Modern Art History 3 units
Presents an overview of the art movements, artists and issues of Modernism to Contemporary art. This includes art from the mid-nineteenth century, through the twentieth century and contemporary art. Incorporates the social, political, and aesthetic context of the time. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ARHS 8 Asian Art History 3 units
Asian art history surveys the arts of India, China, Korea, and Japan. The architecture, painting, sculpture, and other arts are examined within their religious and social contexts. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ART (ARTS)

ARTS 12A Oil/Acrylic Painting: Beginning I 3 units
Introduction to painting using oil or acrylic paints. Students will apply the principles and elements of design, in addition to color theory, to their own paintings. Students will make studies from observation, study works by the masters, and learn to express their own ideas through painting. 27 hours lecture, 81 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ARTS 12B Oil/Acrylic Painting: Beginning II 3 units
Second level course in painting using oil or acrylic paints. With the skills and knowledge gained in ARTS 12A, students will apply the principles and elements of design, in addition to color theory, to their own paintings. Students will make intermediate level studies from observation, study works by the masters, and learn to express their own ideas through painting. 27 hours lecture, 81 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ARTS 12C Oil/Acrylic Painting: Advanced I 3 units
Advanced projects in oil or acrylic painting with an emphasis on individual creative work and development of personal ideas and style. 27 hours lecture, 81 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ARTS 12D Oil/Acrylic Painting: Advanced II 3 units
Advanced projects in oil or acrylic painting with emphasis on developing ideas, skills, and knowledge. Students hone their painting through practice and critique; this course requires self direction. 27 hours lecture, 81 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ARTS 23 2-D Design 3 units
Introduction to the concepts, applications, and historical references related to 2-dimensional art and composition. Topics include the basic principles and elements of design. In this course, students will develop their visual vocabulary for creative visual expression through lectures and problem solving studio projects. Students explore aspects of 2-D Design through visual art assignments. 27 hours lecture, 81 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ARTS 24 3-D Design 3 units
Introduction to the concepts, applications, and historical references related to 3-dimensional design and spatial composition, including the study of the elements and organizing principles of design as they apply to 3-dimensional space and form. Development of a visual vocabulary for creative expression through lecture presentations and use of appropriate materials for 3-dimensional studio projects. 27 hours lecture, 81 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ARTS 26 Color Theory 3 units
A basic-level course highlighting color as an element for communication and expression in all visual fields. Covers key color systems and their relevance to graphic and other visual arts and creative and technical aspects of color. Students who have completed, or are enrolled in, GDDM 51 may not receive credit. 27 hours lecture, 81 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ARTS 29 Independent Study, Studio Arts 0.5 - 2 units
Supervised study in the area of Studio Arts. Any student interested in registering for an Independent Studies course should contact a full/part-time instructor or dean in the appropriate area. 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ARTS 2A Introduction to Drawing 3 units
Introduction to principles, elements, and practices of drawing, employing a wide range of subject matter and drawing media. Focus on perceptually based drawing, observational skills, technical abilities, and creative

responses to materials and subject matter. 27 hours lecture, 81 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ARTS 2B Drawing and Composition 3 units
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. 27 hours lecture, 81 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ARTS 3A Figure and Composition I 3 units
Introduction to drawing the human figure from observation using a wide variety of drawing media and techniques. Topics include an intoduction 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. 27 hours lecture, 81 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ARTS 3B Figure and Composition II 3 units
Development of knowledge and skills introduced in Arts 3A, with an emphasis on composition, color, and drawing the human figure from observation using a wide variety of drawing media and techniques. Topics include 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. 27 hours lecture, 81 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ARTS 3C Figure and Composition III 3 units
Advanced application of knowledge and skills introduced in Arts 3B, with emphasis on composition and drawing the human figure from observation using a wide variety of drawing media and techniques. Topics include human anatomy and the historical and contemporary roles of figure drawing in the visual arts. Students in this course will start to utilize personal approaches and media to drawing the figure. 27 hours lecture, 81 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ARTS 3D Figure and Composition IV 3 units
Advanced application of knowledge and skills introduced in Arts 3C with further development of personal style. Topics include human anatomy and the historical and contemporary roles of figure drawing n the visual arts. Students in this course will learn both descriptive and interpretive approaches to drawing the figure. 27 hours lecture, 81 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ARTS 4A Introduction to Ceramics 3 units
Introduction to ceramics materials, concepts, and processes including basic design 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 cultures. 27 hours lecture, 81 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ARTS 4B Intermediate Ceramics 3 units
Further investigation into ceramics materials, concepts, and processes including basic design 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 cultures. 27 hours lecture, 81 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ARTS 7A Introduction to Watercolor Painting 3 units
Introduction to principles, elements, and practices of watercolor painting. 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. 27 hours lecture, 81 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ARTS 7B Watercolor Painting 3 units
Development of knowledge and skills introduced in Arts 7A with an emphasis on experimenting with the watercolor medium, perceptual skills and color theory, paint mixing and technique, as well as creative responses to materials and subject matter. 27 hours lecture, 81 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ARTS 7C Advanced Watercolor Painting I 3 units
Development of knowledge and skills introduced in 7B directed towards individual needs with an emphasis on individual expression. 27 hours lecture, 81 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ARTS 7D Advanced Watercolor Painting II 3 units
Advanced projects in watercolor painting with emphasis on demonstrating functional competence and an intellectual understanding of personal ideas. Further development of knowledge and skills introduced in 7C directed towards individualized needs. 27 hours lecture, 81 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

AMERICAN SIGN LANGUAGE (ASL)

ASL 1A American Sign Language I 3 units
Introduction to American Sign Language (ASL) including expressive and receptive skills, the manual alphabet, facial expression, and body gestures. Emphasis on conversational skills in functional situations, knowledge of Deaf culture and the Deaf community. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ASL 1B American Sign Language II 3 units
Continued development of American Sign Language (ASL) receptive/expressive skills and knowledge learned in ASL 1A. Emphasis on conversational skills in functional situations, continued vocabulary and sentence structure expansion, and knowledge of Deaf culture and the Deaf community. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ASL 2A American Sign Language III 3 units
Further development of American Sign Language (ASL) receptive/expressive skills and knowledge learned in ASL 1B. Emphasis on conversational skills in functional situations, continued vocabulary expansion and knowledge of deaf culture and the deaf community. Prerequisite: ASL 1B (completed with a grade of "C" or higher). 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ASL 2B American Sign Language IV 3 units
Further development of American Sign Language (ASL) receptive/expressive skills and knowledge learned in American Sign Language 2A. Emphasis on conversational skills in functional situations, continued expansion of vocabulary and knowledge of deaf culture and the deaf community. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ASTRONOMY (ASTR)

ASTR 29 Independent Study, Astronomy 0.5 - 2 units
For course information, see "Independent Studies". 27-108 hours lab. 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ASTR 30L Introduction to Astronomy Laboratory 1 units
Introduction to laboratory principles and techniques in astronomy. Includes: observational techniques such as naked eye, binocular, and telescopic identification of stars, planets, constellations, and deep sky objects; telescope operation and imaging; spectroscopy, motions of the sun, moon and planets. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ASTR 31 Introduction to Astronomy: The Solar System 3 units
Introduction to history and physical principles of astronomy, focusing on our Solar System. Includes: constellations; distance scales; historical development of astronomy; gravitation; motion of the Earth, Moon, and Planets; astronomical tools; formation and evolution of the solar system; physical properties, atmosphere, and evolution of the Earth, Moon, and planets within the solar system; asteroids, comets, and other small bodies; discovery of extra-solar planets; possibilities for life beyond Earth. Designed for non-majors in mathematics or a physical science. A companion science lab, Astronomy 30L, is also available. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ASTR 32 Introduction to Astronomy: Stars and the Universe 3 units
Introduction to the study of stars, galaxies, and cosmology. Includes the nature of light and matter, telescopes, spectroscopy, stellar formation and evolution, galaxies, quasars, and cosmology. Designed for non-majors in mathematics or a physical science. A companion science lab, Astronomy 30L, is also available. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

AUTOMOTIVE TECHNOLOGY (AUTO)

AUTO A1 Engine Repair 4 units
An in depth study of engines: mechanical, measurement, and assembly. A study of the above mentioned components including theory, teardown, evaluate, qualifying, and rebuilding. This class' emphasis is on engines. Students are encouraged to enroll in Automotive Lab concurrently. 36 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

AUTO A2 Automatic Transmission/Transaxle 4 units
An in depth study of engine, transmission, transaxles: mechanical, measurement, and assembly. An in-depth study of the above mentioned components including theory, teardown, evaluate, qualifying, and rebuilding. Students are encouraged to enroll in Automotive Lab concurrently. 36 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

AUTO A3 Manual Drive Train and Axles 4 units
An in-depth study of rear axle, front axle, and transfer cases: mechanical, measurement, and assembly. Including theory, teardown, qualifying, and rebuilding. Students are encouraged to enroll in Automotive Lab concurrently. 36 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

AUTO A4 Suspension and Steering 4 units
Diagnosis, evaluation, testing, adjustment, alignment and repair of steering and suspension systems. Including all common automotive steering and suspension systems both car and truck. Future systems will also be covered. Students are strongly recommended to enroll in Automotive Lab concurrently. 36 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

AUTO A5 Brakes 4 units
Diagnosis, evaluation, inspection, adjustment, and repair of braking, antilock braking systems, traction control and related devices. Class will involve California State law regarding brake and safety inspections. Includes the material on the California Brake Adjuster's Licensing Examination. Students are strongly recommended to enroll in Automotive Lab concurrently. 36 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

AUTO A6 Electrical/Electronic Systems 5 units
Automotive electrical/electronic systems, including electrical circuits, Ohm's Law, battery, starting, charging, ignition, fuel, accessories, brakes, chassis, suspension, steering, HVAC, and wiring systems. Emphasis on diagnosis of electrical troubles, assembly, repair of components, and diagnostic equipment usage. Students are strongly recommended to enroll in Automotive Lab concurrently. 54 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

AUTO A7 Automotive Heating and Air Conditioning 4 units
Diagnosing, evaluation, testing, adjustment, and repair of heating, ventilation and air conditioning (HVAC). Includes heat and energy, psychometrics, air flow, refrigerant recycling, equipment and controls. Student will be prepared to pass a nationally recognized HVAC certificate program, required by all California HVAC repair shops. Students are strongly recommended to enroll in Automotive Lab concurrently. 36 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

AUTO A8 Engine Performance 5 units
Principals of automotive fuel induction, ignition and emission control systems, including inspection, diagnosis and repair of fuel and emission control systems/components governed by federal and state laws and standards. Electrical diagnosis of emission control systems. Relation of chassis and body systems to emissions. Students are strongly recommended to enroll in Automotive Lab concurrently. 54 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

AUTO A9 Light Vehicle Diesel Engines 4 units
An in depth study of diesel engines: mechanical, measurement, and assembly. A study of the above mentioned components including theory, teardown, evaluate, qualifying, and rebuilding. Diesel engine performance including emissions, turbos, exhaust and intake systems. This class's emphasis is on diesel engines and diesel engine performance/emissions. Students are encouraged to enroll in Automotive Lab concurrently. 36 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

AUTO C1 Automobile Service Consultant 3 units
Automotive Service Consultant fundamentals including: Communications, customer service, legal documents, business interactions, billing, parts and labor guides, shop management applications, shop operations, sales, vehicle identification and systems operations. Course content is aligned with tasks identified by Automotive Service Excellence (ASE) certification. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

AUTO INTL Automotive Service and Introduction Hands-On Lab 2 units
This is the Lab section that can only be taken if you are also taking INTZ. Bumper-to-Bumper Automotive Knowledge. Starting with hazardous waste handling, tool identification, maintenance and lubrication, moving into engine mechanical, emissions controls, suspension systems, air conditioning, airbags and safety, transmissions, axles, and finishing off with the future of the automotive industry. This is an introductory class for people who want to know more about their vehicle or who are planning an automotive career. 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

AUTO INTR Automotive Service and Introduction 4 units
Bumper-to-Bumper Automotive Knowledge. Starting with hazardous waste handling, tool identification, maintenance and lubrication, moving into engine mechanical, emissions controls, suspension systems, air conditioning, airbags and safety, transmissions, axles, and finishing off

with the future of the automotive industry. This is an introductory class for people who want to know more about their vehicle or who are planning an automotive career. 36 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

AUTO INTZ Automotive Service and Introduction Lecture 2 units

This class is lecture only, AUTO INTL must also be taken concurrently. Bumper-to-Bumper Automotive Knowledge. Starting with hazardous waste handling, tool identification, maintenance, and lubrication, moving into engine mechanical, emissions controls, suspension systems, air conditioning, airbags and safety, transmissions, axles, and finishing off with the future of the automotive industry. This is an introductory class for people who want to know more about their vehicle or who are planning an automotive career. 36 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

AUTO L1 Advanced Engine Performance 5 units

Continuation of Automotive Technology A6 and A8 with an emphasis on diagnosis of electronic problems including computer controlled circuits/ systems using schematics, diagnostic procedures and equipment. Students are strongly recommended to enroll in Automotive Lab concurrently. 54 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

AUTO L1L2 Smog Level One and Level Two 5.5 units

This course includes classes/modules the State of California's requires for a student/automotive technician to be prepared to take their Smog License Test. This class will include Level One and Level Two smog training only. At the end of the class students may or may not qualify for either EI or EO smog license. See www.smogcheck.ca.gov for more information. 90 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

AUTO L3 Light Duty Hybrid/Electric Vehicles 4 units

A study in the history, current and future of alternative fuels, hybrids and electric vehicles in the automotive industry. Emphasis in shop safety, hazardous waste handling, high voltage electrical precautions, basic engine construction of hybrids, battery storage systems, fuel storage systems, compressed natural gas, liquid propane gas, bio-diesel and hydrogen cell technology. Students are strongly recommended to enroll in Automotive Lab concurrently. 36 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

AUTO LABA Automotive Lab 2 units

Automotive Lab is an open laboratory class for basic automotive students. This class is for students desiring to expand their hands-on experience using their own vehicle. Instructor will provide technical and supervisory support to guide students in completion of their self initiated projects. Service information via computer service manuals will be available for students to use for vehicle information and research. 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

AUTO LABB Automotive Lab Advanced 2 units

Automotive Lab Advanced is an open laboratory class for advanced automotive students. This class is for students desiring to expand their hands-on experience using their own vehicle. Instructor will provide technical and supervisory support to guide students in completion of their self initiated projects. Students are expected to help others in class and be able to work without guidance. Service information via computer service manuals will be available for students to use for vehicle information and research. Class is recommended for second year students only. 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

AUTO LABC Automotive Lab Specialized Bench Work 2 units

Automotive Lab Specialized Bench Work is an open laboratory class for automotive students. This class is for students desiring to expand their hands-on experience using shop equipment. This class specializes in rebuilding automotive parts. The instructor will provide technical and supervisory support to guide students in the completion of their self-initiated projects. Service information via computer service manuals will be available for students to use for vehicle information and research. Class is recommended for second year students only. 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

AUTO LABD Automotive Lab Specialized Electronic Work 2 units

Automotive Lab Specialized Electronic Work is an open laboratory class for automotive students. This class is for students desiring to expand their hands-on experience using shop equipment. This class specializes in electronics work. This includes accessories, EV, hybrid, and aftermarket electrical. The instructor will provide technical and supervisory support to guide students in the completion of their self-initiated projects. Service information via computer service manuals will be available for students to use for vehicle information and research. 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

AUTO P1 Powertrains: Modifications for Performance 4 units

An in-depth study of engine and transmission modifications made in order to improve performance. This class will explain the differences in laws governing vehicles in all fifty states including those registered in California; how to improve performance legally; and the penalties of breaking the law. Students will learn to calculate the benefit versus cost of bolt-on performance products and major engine or transmission modifications. NOTE: Some modifications are intended for off-road applications only. Students are encouraged to enroll in Automotive Lab concurrently. 54 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

AUTO SDR Specified Diagnostic and Repair 5 units

This is a Bureau of Automotive Repair approved alternative to the ASE A6, A8 and L1 certification required for obtaining and maintaining smog technician licenses. This course will follow BAR guidelines for smog license prep. Student may or may not qualify for license exam after taking this class. For more information see www.smogcheck.ca.gov. 72 hours lecture, 54 hours laboratory.
- Credit - Not Degree Applicable
- Grading Option: Letter or P/NP

BIOLOGICAL SCIENCES (BIO)

BIO 10 Introduction to the Science of Biology 4 units

This course focuses on basic principles of biology, including scientific investigation and the study of the nature of living things. Focus is on student understanding of evolution and the unity and diversity of life from the molecular level to ecosystems and biosphere. Designed for non-majors in biology and biomedical sciences. 54 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

BIO 1A General Botany 5 units

Diversity, structure and function of plant, fungal, and protistan phyla. Topics include development, morphology, physiology and systematics. Principles of population and community ecology and ecosystem interactions. Prerequisite: Intermediate Algebra or a higher level of mathematics., . 54 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

BIO 1B General Zoology 5 units

Major groups of animal phyla and heterotrophic unicellular eukaryotes. Topics include comparative structure and function, development, ecology, taxonomy, phylogeny, evolution, and behavior. Designed for majors in biological sciences and related fields. Prerequisite: Intermediate Algebra or a higher level of mathematics., . 54 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

BIO 1C Cell and Molecular Biology 5 units

Principles of cell and molecular biology. Includes biochemistry, cell structure and function, cell homeostasis, cell metabolism, cell reproduction, cell

communication, genetics, molecular biology, biotechnology, and evolution. Emphasis on scientific inquiry and experimental design. Prerequisite: BIO 1B with a minimum grade or BIO 1A with a minimum grade of C, CHEM 1A with a minimum grade of C, Intermediate Algebra or a higher level of mathematics, eligibility for college-level composition (ENG 1A, ENG 1AEX, or ESL 1A) as determined by college assessment or other appropriate method.. 54 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

BIO 20 Contemporary Human Biology 3 units
A study of the Human organism, beginning at the cellular level, emphasizing organ systems, and also including topics of genetics and biotechnology. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

BIO 29B Independent Study, Biology 0.5 - 2 units
Supervised study in the area of Biology. Any student interested in registering for an Independent Studies course should contact a full/part-time instructor or dean in the appropriate area. 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

BIO 29T Independent Study, Botany 0.5 - 2 units
Supervised study in the area of Botany. Any student interested in registering for an Independent Studies course should contact a full/part-time instructor or dean in the appropriate area. 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

BIO 29Z Independent Study, Zoology 0.5 - 2 units
Supervised study in the area of Zoology. Any student interested in registering for an Independent Studies course should contact a full/part-time instructor or dean in the appropriate area. 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

BIO 2A Bioinformatics 4 units
Principles of Bioinformatics. Project-based course which will analyze complex biological data. The course introduces students to the tools used for computational exercises relevant to current biotechnologies and computational biology. Although BIO 30 can be taken as a prerequisite for BIO 2A, BIO 1C is required for the Computational Biology degree or certificate. 54 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

BIO 30 Introduction to College Biology 4 units
Basic principles of biology. Cell structure and function, cell division, cell metabolism, reproduction, genetics, taxonomy, origin of life, and evolution. Laboratory emphasis on developing various laboratory skills, using the metric system, collecting data, graphing, interpreting data, and preparing for and taking laboratory exams. Designed to prepare the necessary concepts and laboratory skills and experience that are needed to succeed in more advanced courses in biology. Prerequisite: Eligibility for college-level composition (ENG 1A, ENG 1AEX, or ESL 1A) as determined by college assessment or other appropriate method., Elementary Algebra or a higher level of mathematics.. 54 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

BIO 40 Humans and the Environment 3 units
Introduction to environmental issues from a scientific perspective, focusing on physical, chemical, and biological processes within the Earth system, the interaction between humans and these processes, and the role of science in finding sustainable solutions. Topics include ecological principles, biodiversity, climate change, sustainability, renewable and non-renewable energy, water resources, air and water pollution, and solid waste management. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

BIO 50 Anatomy and Physiology 4 units
Structure and function of the human body is studied. Emphasis on human anatomy and physiological principles at the cellular and systemic level. Designed primarily for majors in paramedic and medical assisting programs and pre-medical students who wish to explore the realm of anatomy and physiology. 54 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

BIO 55 Orientation to Health Care 2 units
Examine physiological, psychological, ethical, social, and public health issues. Introduce the workings of the human body and mind and explore the relationship between health and larger cultural and societal issues. Introduce medical terminology. Review diseases, including causes, symptoms, how they affect the body systems, and treatment options available. Investigate, analyze, and evaluate professional opportunities, educational requirements and personal characteristics with the intent to acquire insight into careers in the allied health field, with specific focus on transfer science, clinical programs (pre-nursing, EMT, surgical technology, medical assisting), and health administrative support. Gain the academic framework and perspective necessary to pursue a career in health sciences, as well as benefit anyone confronting health care issues in today's complex world. 36 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

BIO 60 Marine Biology 4 units
Ocean as a habitat, the organisms that inhabit marine waters, their ecology, adaptations and evolution, and the role of the ocean in the ecology of the biosphere. 54 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

BIO 70 Field Biology 3 units
A hands-on course in field biology. Students will learn basic concepts about ecology and environmental science through outdoor activities and exploration of a variety of ecosystems. The goals are to gain experience and develop skills in the following areas: identification of plants and animals, first-hand knowledge of a wide array of organism life histories, quantitative field research techniques and procedures applicable to plants and animals, and methods of recording data and observations. Field trips to local and regional habitats focus on seasonally relevant events, processes, and appropriate methodologies to study these communities. 36 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

BIO 7A Human Anatomy 5 units
Structural organization of the human body: gross and microscopic structure of the integumentary, skeletal, muscular, nervous, sensory, endocrine, cardiovascular, lymphatic, respiratory, digestive, excretory, and reproductive systems, from cellular to organ system levels of organization. This course is primarily intended for nursing, allied health, kinesiology, and other health related majors. Prerequisite: Eligibility for college-level composition (ENG 1A, ENG 1AEX, or ESL 1A) as determined by college assessment or other appropriate method., Eligibility for college-level mathematics (MATH 1, 2, 3, 5, 7, 10, 27, 30, 33, 34, 39, 40, 47) as determined by college assessment or other appropriate method.. 54 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

BIO 7B Human Physiology 5 units
Function and regulation of the human body. This course examines general, cellular, and molecular interactions that integrate the organ systems to maintain homeostasis. Human responses and computer simulations are used to collect and analyze data. Designed for nursing, physical and occupational therapy, and other health sciences majors. Prerequisite: Eligibility for college-level composition (ENG 1A, ENG 1AEX, or ESL 1A) as determined by college assessment or other appropriate method., Eligibility for college-level mathematics (MATH 1, 2, 3, 5, 7, 10, 27, 30, 33, 34, 39, 40, 47) as determined by college assessment or other appropriate method.. 54 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

BIO 7C Microbiology 5 units
This course focuses on viruses, bacteria, fungi, protozoans, and helminths, with an emphasis on their relationship to humans. Cultivation, control, metabolism, body's defense against disease, microbial genetics, laboratory tests, and contemporary diseases are discussed. Methods used in the laboratory include standard bacteriological techniques (culturing, staining,

biochemical testing, sensitivity testing etc.) as well as some molecular and immunological techniques, such as PCR and ELISA. Laboratory work also includes identification of unknowns, and/or independent research projects. Prerequisite: Eligibility for college-level composition (ENG 1A, ENG 1AEX, or ESL 1A) as determined by college assessment or other appropriate method., Eligibility for college-level mathematics (MATH 1, 2, 3, 5, 7, 10, 27, 30, 33, 34, 39, 40, 47) as determined by college assessment or other appropriate method.. 54 hours lecture, 108 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter Grade

BUSINESS (BUSN)

BUSN 18 Business Law 4 units

A study of the legal environment of business. Covering laws and regulations impacting business transactions. Introduction to the legal process. Topics include sources of legal concepts and ethics, torts, contracts, Uniform Commercial Code (UCC), warranties, product liability, consumer financial transactions, environmental, competition, agency, employment and labor, business organizations, and judicial and administrative processes. 72 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

BUSN 1A Financial Accounting 4 units

A study of accounting as an information system; examining why it's important, and how it's used by investors and creditors to make decisions. Includes the recording and reporting of business transactions with a focus on the accounting cycle, the application of generally accepted accounting principles and comparing it to international financial reporting standards, preparation and analysis of the classified financial statements for merchandising and service companies. Also includes issues related to recording and valuation of assets, liabilities, equities and cashflow, recognition of revenues, expenses using effective internal controls and ethical standards. Students who have completed or are enrolled in APAT 51 may not receive credit. 72 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

BUSN 1B Managerial Accounting 4 units

A study of the use of accounting data for managerial purposes including; planning, directing, and controlling activities. Includes broad coverage of concepts, structures, classifications, and behaviors of costs. Topics include; job costing, process costing, activity based costing, relationship between cost, volume and profitability, relevant range, standard costing, profit planning and budgeting, static and flexible budgeting, responsibility accounting and segment reporting, absorption and variable costing and capital expenditure decisions. Students who have completed or are enrolled in APAT 52 may not receive credit. 72 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

BUSN 20 International Business 3 units

Exploration of major factors involved in international entrepreneurship. Includes an overview of economic, historical, technological, legal, environmental, and educational implications on entrepreneurship. Analyzes cultural differences, issues and trends, which influence entrepreneurship and business decision-making. Discuss options for emerging markets; international marketing; manufacturing, physical distribution, and foreign investment options are explored along with State and federal resources available to facilitate importing and exporting. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

BUSN 30 Business Ethics and Society 3 units

A survey of the past and current behavior of business in America society. Examines the ethical, political and social issues confronting organizations and the organizations' responsibilities and obligations in responding to them. Discusses the responsibility of business toward customers, employees, stockholders, competitors, suppliers, government, and the community at large. 54 hours lecture, 0 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter Grade

BUSN 33 Personal Financial Management and Planning 3 units

Designed to provide students with the practical, hands-on means of successfully managing their personal finances and of becoming financially empowered upon course completion. Among other topics, the course will cover the basics of credit management, assessing insurance needs, budgeting, personal financial statement preparation, investment and savings accounts, management of taxes, retirement accounts, will preparation and estate planning. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

BUSN 40 Introduction to Business 3 units

A multidisciplinary examination and introduction to business operations within the U.S. and internationally. Provides an overview of global economic systems, business formations, business ethics and laws, general accounting practices and financing, facility location and layout, production, organizational structures and management functions. Fundamentals of risk management, marketing, human resources, and employee motivation are covered. Demonstrates how culture, society, and external business environments impact a business' ability to achieve its organizational goals. Prerequisite: Eligibility for college-level composition (ENG 1A, ENG 1AEX, or ESL 1A) as determined by college assessment or other appropriate method. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

BUSN 45 Entrepreneurship 3 units

This course is designed for students who are interested in starting an entrepreneurial venture or new business. This course will cover the process of successfully launching, managing and growing their idea, emphasizing opportunity recognition and feasibility analysis. A practical study of the creation and essential skills required to start and grow an entrepreneur venture. It will also cover important topics such as developing a competitive advantage, protecting intellectual property and obtaining venture capital financing. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

BUSN 48 Human Relations in Organizations 3 units

An introduction to the interpersonal skills needed in today's workplace with a focus on effective communication, decision making, cross cultural relations, diversity, resolving conflict, managing change, group dynamics, and ethical behavior. 54 hours lecture, 0 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

BUSN 51 Accounting for Small Businesses 3 units

Basic accounting skills for managers and entrepreneurs that provide a foundation in financial reporting and analysis, payroll taxes, and internal controls. The course includes practical application of accounting theory to the accounting cycles for service and merchandising businesses, including bookkeeping practices, common debit and credit procedures, books of original entry, working papers, adjusting and closing entries, income statement, statement of owner's equity, balance sheet, cash, payroll, and special journals. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

BUSN 52 Business Communications 3 units

This practical course supports career success by covering principles, strategies, and applications of effective business communications. The course emphasizes critical thinking, problem solving, and ethical practices. Focus is placed on cultural dimensions of communication, listening skills, nonverbal communication, the writing process, social media, professionalism, teamwork, meeting management, presentation skills, and employment communication, including job interviewing and résumé writing. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

BUSN 55 Business Mathematics 3 units

This course focuses on learning computations for typical business transactions including; simple interest, compound interest, installment sales, trade and cash discounts, mark-on percents, pricing, discounting notes and drafts, depreciation, taxes, insurance, statistics, stocks and bonds,

and distribution of ownership and profits. Students who have completed or are enrolled in APAT 54 may not receive credit. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

BUSN 56 Introduction to Management 3 units
Introduction to the application of tools, principles and concepts in business management. Emphasis will be on planning, organizing, leading, and controlling. Additional topics will include decision-making, employee motivation, team work, and current trends. Prerequisite: Eligibility for college-level composition (ENG 1A, ENG 1AEX, or ESL 1A) as determined by college assessment or other appropriate method. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

BUSN 58 Small Business Management 3 units
Fundamentals for individuals starting, operating, and growing a successful small business enterprise. Emphasis on all endevaors: self-employment; freelancing; brick and mortar, pop-up and Internet retailing; technical and professional services; and franchising. Focus on achieving optimum benefits from limited resources; financing strategies; marketing options; legal, ethical, and regulatory issues encountered by all start-ups. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

BUSN 61 Quickbooks Accounting 2 units
Introduction to the use of QuickBooks accounting software to process transactions related to a service and merchandising company. Specific topics include using company files, sales and receivables, payables and purchases, bank and credit card reconciliations, end of period transactions and payroll. Transactions include journalizing, adjusting entries, closing entries, bank reconciliation and preparing financial statements. Students who have completed or are enrolled in APAT 55 may not receive credit. 18 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

BUSN 65 Federal Income Tax Accounting 3 units
A study and analysis of the principles of federal income tax applied to employees, self-employed individuals and rental income. Includes an overview of taxes related to partnerships, informational returns and corporate tax returns. Analysis of the Internal Revenue Code with examination of court rulings and regulations. Review of new legislation that alters existing tax law. Introduction to tax preparation software is included. Students who have completed or are enrolled in APAT 56 may not receive credit. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

BUSN 86 Management Strategies & Dilemmas 3 units
The course is designed to familiarize students with the accepted standards, procedures, and techniques employed by top, middle, and supervisory level managers. The course provides an understanding of the role of management and how to develop plans and execute strategies in pursuit of organizational goals. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

BUSN 87 Organizational Management and Leadership 3 units
This course examines the special case of detailed planning and implementation of management decisions in strategic business units. Attention is focused on three areas: developing action plans and implementation strategies, developing awareness of the contingencies to be considered in taking strategic actions, and investigating how different academic disciplines interpret the leadership phenomenon. This course highlights key criteria used in assessing the viability of an organizational action plan, and the role of leadership in managing constructive change processes. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

BUSN 88 Human Resources Management 3 units
Introduction to the field of human resources with an emphasis on understanding the impact decisions and activities involving employees have on an organization's overall success. Focus on best practices in recruitment and selection, performance management, compensation and benefits, employee relations, workplace health and safety, and risk management strategies. 54 hours lecture, 0 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CHEMISTRY (CHEM)

CHEM 12A Organic Chemistry I 5 units
Hydrocarbons, alkyl halides, alcohols, ethers, and an introduction to aromatic hydrocarbons. Structure, bonding, stereochemistry, conformational analysis, nomenclature, and physical properties in relation to these particular groups of compounds. Emphasis on reactivity and reaction mechanisms. Laboratory work includes microscale, macroscale, spectroscopic, and chromatographic techniques. Chemistry 12A is the first semester in a year long course in organic chemistry designed for students majoring in chemistry and related disciplines. 54 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

CHEM 12B Organic Chemistry II 5 units
Continuation of Chemistry 12A with an introduction to the chemistry of aromatics, amines, enols and enolate ions, carboxylic acids, aldehydes, ketones and biochemical topics focusing on structure, synthesis and mechanisms of reaction. Laboratory work in basic techniques, synthetic methods, qualitative, spectroscopic, and chromatographic analysis techniques designed for students whose interests require a full year in-depth study of organic chemistry. 54 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

CHEM 1A General College Chemistry I 5 units
Introduction to atomic structure, bonding, stoichiometry, thermochemistry, gases, matter and energy, oxidation-reduction, chemical equations, liquids and solids, solutions, chemical energetics and equilibrium concepts. Laboratory includes both quantitative and qualitative experiments. Prerequisite: The CHEM 31 prerequisite can be fulfilled by demonstrating the appropriate skill level in the Chemistry Placement Process., Intermediate Algebra or a higher level of mathematics.. 54 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

CHEM 1B General College Chemistry II 5 units
Continuation of Chemistry 1A. Includes chemical energetics and equilibria, solutions and ionic equilibria, acid-base chemistry, electrochemistry, coordination chemistry, kinetics, nuclear chemistry, organic chemistry, and the chemistry of family groups of the periodic table. Laboratory emphasizes quantitative techniques, including instrumentation, and qualitative analysis. 54 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

CHEM 29 Independent Study, Chemistry 0.5 - 2 units
For course information, see "Independent Studies". 27-108 hours lab. 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

CHEM 30A Introductory and Applied Chemistry I 4 units
Chemistry of inorganic compounds, atomic theory, bonding, equations, gas laws, solutions, acid-base theory and oxidation-reduction. Designed to meet the requirements of certain programs in allied health and technological fields and for general education. Prerequisite: Elementary Algebra or a higher level of mathematics.. 54 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

CHEM 30B Introductory and Applied Chemistry II 4 units
Continuation of Chemistry 30A with emphasis on organic and biochemical concepts related to human physiological systems. 54 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

CHEM 31 Introduction to College Chemistry 4 units
Elementary concepts of chemistry with emphasis on mathematical calculations; includes nomenclature, stoichiometry, atomic structure, gas laws, and acids and bases. Designed for majors in science and engineering. Prerequisite: Intermediate Algebra or a higher level of mathematics.. 54 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CHEM 6 Environmental Chemistry 4 units
This course presents the fundamentals of chemistry as applied to contemporary environmental topics concerning the atmosphere, water, solids, and green chemistry. The course is suitable for non-science majors with an interest in environmental issues. Prerequisite: Elementary Algebra or a higher level of mathematics., Reading proficiency in English. 54 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

COMPUTER INFORMATION SYSTEMS (CIS)

CIS 10 Business Data Analytics 3 units
Students explore data analytic practices and its applicability in the business world. Business Intelligence (BI) is a data analysis process which utilizes an integrated set of application systems, processes, and tools that transform raw data into meaningful and useful information for business analysis. Students will learn the fundamentals of business analysis and BI tools and processes that help businesses make strategic and tactical decisions based on data. The process of business decision-making will be applied with an emphasis on data mining. Careers and emerging trends in the field will be evaluated. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 11 Data Visualization Tools 3 units
Data visualization is the process of representing information graphically. This course provides a hands-on introduction to various data visualization tools such as Tableau, Excel, Power BI, R Studio. Students use repositories of data for preparation that includes: data formatting, filtering and cleaning. Design principles are applied to create meaningful displays of quantitative and qualitative data to facilitate managerial decision-making. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 41 CyberSecurity Camp 1 units
This course will introduce the novice to cybersecurity career opportunities, cyber ethics, online safety, and cyber threats. Students will be introduced to cybersecurity principles, virtual machines, basic Windows and Linux administration security policies, fundamental CISCO network routing and CISCO packet tracer. As a culminating activity students will compete by analyzing and fixing vulnerabilities on the provided Windows and Linux images. 9 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 42 Cybersecurity Competition Prep 0.5 units
This course prepares students to participate in cyber security competitions (CyberPatriot, National Cyber League, etc). Topics include an overview of cyber competitions, virtual machines, Linux operating systems and administration, Windows operating systems and administration, CISCO networking, and packet tracer. Through business scenarios, students will create checklists of potential vulnerabilities and work in teams to secure networks and sensitive data. 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 43 Professional Communications 3 units
This course applies the principles of ethical and effective communication to the creation of letters, memos, emails, and written and oral reports for a variety of business situations. The course emphasizes critical thinking and analysis, planning, organizing, composing, and revising business documents to create and deliver professional-level oral presentations in-person and virtually. Additional focus will be placed on developing interpersonal skills, team participation skills, and technical report writing skills. Students who have completed or are enrolled in CNT 43 or CS 43 may not receive credit. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 44 IT Fundamentals+ 2 units
Information Technology Fundamentals+ (ITF+) is the essential qualification for exploring a career in IT. This course will cover the topics of the CompTIA IT Fundamentals certification, which validates the knowledge and skills required to identify and explain the basics of computing hardware and software, IT infrastructure, applications and software, software development concepts, database fundamentals, and security. Technologies and trends of the IT industry and the exploration of IT careers. This course will prepare you to take the CompTIA certification exam. 36 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 50 Introduction to Computing Information Technology 3 units
A comprehensive introduction to the concepts of management and information systems used in business and similar organizations. Covers the role of information systems in business, the need for data and information, how computers are used in business and other organizations to provide information. Focus on information systems, database management system, networking, e-commerce, ethics and security, computer system hardware and software components. Students will interactively solve applied problems utilizing software productivity tools such as: word processors, spreadsheets, databases, presentation, WWW, and programming languages. Introduce the analytical, written and oral communication skills necessary to communicate effectively in a business computing environment. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 54 Excel: Introduction to Spreadsheets 4 units
This is a comprehensive spreadsheet class using Microsoft Excel to create a variety of spreadsheets with emphasis on business applications. Introductory, intermediate, and advanced topics are covered. Introductory topics include entering, editing, and formatting data, creating basic formulas using arithmetic operator and functions, creating charts, saving and printing worksheets. Intermediate topics include using Excel's Table features for sorting filtering and summarizing data, creating PivotTables, working with multiple worksheets and workbooks, naming cells, data validation, recording macros, and protecting worksheets. Advanced topics include using financial functions such as PMT, RATE, FV, creating nested IFs, using VLOOKUP and HLOOKUP functions, using What-If analysis tools such as Goal Seek, one and two variable Data Tables, and Scenario Manager, sharing workbooks, and integrating Excel with other Office applications. Students who have completed or are enrolled in APAT 53 may not receive credit. 54 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 55 Integrating Office Applications 4 units
Develop essential workplace application skills using current Microsoft Office including; Word, Excel, PowerPoint, Access, One Note, Outlook, cloud storage and cloud processing. Emphasis is to design, produce and integrate documents, worksheets, databases and professional presentations. The use of Object Linking and Embedding (OLE) to integrate, share, and collaborate data within and between applications,. 54 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 55B Advanced MS Office Skills 2 units
Using a project-based, problem-solving approach, this course focuses on advanced features and integration of the core applications in the Microsoft Office suite (Word, Excel, PowerPoint, and Access). 27 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 57 Database Concepts 3 units
Introduction to Database Concepts, a computer program that is used to organize, store, and retrieve information. Understanding of data, database structure, and database objects using Microsoft Access or similar programs with emphasis on business applications. Identify and evaluate client needs/requirements and translate those needs into a working database

application model. Integrate Microsoft Access data with other Microsoft applications, such as Word and Excel. 36 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 59 Web Dev: HTML/CSS/Javascript 3 units
This course will provide a fundamental understanding of the methods and techniques of developing a simple to moderately complex web site. Topics include: creating webpages with current standard webpage language (HTML), cascading style sheets (CSS), and Javascript. Exploration of incorporating images, audio/visual media, and interactive tools like forms and image maps. This course prepares apprentice Web developers to identify the information needs of a client, design appropriate WWW solutions, and implement them. 45 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 59C Web Programming - JavaScript 3 units
Develop client-side, interactive webpages using JavaScript and/or jQuery scripting languages. Write JavaScript scripts that manipulate with the JavaScript Document Object Model (DOM), control program flow, validate forms, animate images, target frames, and create cookies. 45 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 60 Systems Analysis and Design 3 units
The course presents a systematic methodology for analyzing a business problem or opportunity, determining the role which computer-based technologies can play in addressing the business need, articulating business requirements for the technology solution, specifying alternative approaches to acquiring the technology capabilities needed to address the business requirements, and specifying the requirements for the information systems solution in particular, in-house development, development from third-party providers, or purchased commercial-off-the-shelf packages. Provides the opportunity to compare the systems development life cycle (SDLC) processes like Waterfall, Agile. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 62 Project Management 3 units
Using the Project Management Institute's (PMI) Guide to the Project Management Body of Knowledge (PMBOK) and the Agile SCRUM framework, learn the basic characteristics of projects and project management, with emphasis on the five PMBOK project process groups of initiating, planning, executing, controlling, and closing and the nine knowledge areas of project integration. This introductory course covers the terminology you will need to know, how all the project management processes are linked together, the key areas of expertise you need to know to manage projects successfully. This course focuses on developing project management skills needed in typical technical and business environments. Objectives of project management industry certifications including Project+, CAPM, PMP will be reviewed. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 65 Introduction to Desktop Operating Systems 2 units
By performing numerous hands-on labs, students in this class will gain an understanding of the most widely used desktop operating systems (Windows, MAC OS, and Linux) using command line and GUI interfaces. Students will use cloud resources (e.g., Amazon Web Services) to create and launch machine images (Windows, MAC OS, Linux) in the cloud. Students may utilize virtualization software to install and configure operating systems on their home computer. Once the operating system is installed, students will explore several key operating system functions: interfaces (command line and GUI), file systems, file management, and security. 27 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 66 Networking Fundamentals 3 units
This course provides an introduction to computer networking fundamentals skills needed to meet the industry demand for entry-level Network Technicians. Topics include: Ethernet network fundamentals, Local Area Networks (LANs), and Wide Area Networks (WAN) technologies, the Open Systems Interconnection (OSI) model, wiring implementations, network adapters and connectivity devices, IPv4/IPv6 addressing, Voice over IP (VoIP), and wireless standards. Tools to help prevent cyber attacks with IDS (Intrusion Detection Systems), authentication, and encryption are demonstrated. Student labs include: configuration of a SOHO (Small Office/Home Office), a firewall, a virtual private network (VPN), a switch, and a router and documenting a networking using professional drawing software. The responsibilities of an ICT (Information and Communications Technology) professional will be introduced. This course prepares students for the CompTIA Network+ Certification Exam. This professional certification verifies the student has the knowledge equivalent to that of an ICT technician with about 12 months of hands-on experience. Students who have completed or are enrolled in CNT 52 or APIS 52 may not receive credit. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 7 Introduction to Programming Concepts and Methodologies 3 units
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 object-oriented programming language and development platform such as Python/Visual Basic.NET/R Studio. 45 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 71 Computer Typing 1 units
Individualized, hands-on courses in computer keyboarding. Upon individual assessment of keyboard skills, students are transferred into one of the following modules: CIS 71A Keyboarding (The Alphabet), CIS 71B Keyboard (Numbers & Symbols), or CIS 71C Skills Improvement. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 71A Keyboarding (The Alphabet) 1 units
Introduction to the alphabet letter keys on the computer keyboard for touch-typing. Learn basic keyboarding techniques for accuracy and speed. This course is the first in a series of sequential courses in keyboarding instruction. Students are advised to take these courses in sequence for best training results. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 71B Keyboard (Numbers and Symbols) 1 units
Introduction to the numbers and symbol keys on the computer keyboard for touch typing. Review of alphabetic keys and common punctuation marks. Speed building and accuracy improvement. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 71C Skills Improvement 1 units
Development of keyboarding skill for those students who have learned the location of the keys on the keyboard by touch and are ready to increase speed and accuracy. Practice keyboarding control of speed and accuracy on straight copy, rough draft copy, and copy with numbers, and symbols. Skill progress is measured by keying text within specified time limits. Students should know the location of the keys on the keyboard before attempting this course. This course is the third module in a sequential series of beginning keyboarding instruction. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 72A Data Management 1 units
Individualized instruction on the theory and practice of alphabetic, numeric, geographic, and subject filing. Basic principles of filing and effective records management for both paper and electronic filing systems. Introduction to database functions, such as enter, editing, finding, and deleting records, creating queries, and printing report. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 72B Basic Office Integration 1 units
Using a project-based approach, students will be introduced to features that enable data to be transferred between programs such as Microsoft Office applications or Google applications. Using the techniques introduced

in this course, students will be able to incorporate data and charts created in Excel or Google Sheets into Word or Google Docs documents and PowerPoint or Google Presentations, use worksheet data to create tables in an Access database, and use a Word or Google Docs documents to create presentations. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 73A Ten-Key Skill Development 1 units
Skill development on the computer numeric keypad, electronic calculator including use of memory functions, and data entry using spreadsheets. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 74 Office Procedures 3 units
Introduction to office principles, procedures, and technology. Topics include telephone skills, office equipment, working effectively in a team environment, records management, customer service, meeting/event planning, postal/shipping services, utilizing the internet for on-line services and resources, using appropriate software to complete common tasks, written and oral business communications, conflict resolution, and office etiquette. Prepares administrative professionals to work in a diversified workforce with emerging technologies. (Formerly BUSN 74.). 36 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 75 Office Technology/Communications 1 units
Overview of various technologies (such as video-conferencing, cloud services and storage, mobile devices) used for communicating internally and externally in the workplace. Hands-on practice with Outlook (email, contact management, calendaring), cloud-based applications and data storage, and telephone techniques. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 79 Medical Office Procedures 3 units
Medical office principles and procedures to include telecommunications, scheduling appointments, office equipment, medical documents and word processing, managing medical records, recordkeeping, expense reports, petty cash, billing, postal services, health insurance, coding, and utilizing the Internet for online resources. The importance of medical ethics in application of professional office behavior. Overview of medical law and careers in medical office environment. 36 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 8 Essential Computing Skills 2 units
Fundamental computer competency course designed to develop the basic computer skills and knowledge required in today's technological world. Basic computer competency is no longer a nicety, but a necessity in our personal and work lives. Topics include: basic computer hardware/software, networks and the Internet, effective web searches, file management skills, and cloud storage options. Hands-on experience with word processing, spreadsheet, presentation, and database software using Microsoft Office. No previous experience with computers is required. 27 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 81A Introduction to Cloud Computing 3 units
This course introduces cloud computing which shifts information systems from on premises computing infrastructure to highly scalable internet architectures using current cloud platforms such as AWS, AZURE. The course provides a basic understanding of cloud computing technologies and provides students with the understanding required to effectively evaluate and assess the business and technical benefits of cloud computing and cloud applications. Students analyze a variety of cloud services (storage, servers, software applications), then learn to configure, deploy, and manage cloud facilities. The course also demonstrates/makes available the AWS and/or AZURE platforms for educational, industry career path guidance and career opportunities. This course surveys cloud careers and explores industry demand for cloud skills. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 81B Database Essentials in the Cloud 3 units
This course addresses cloud database management which supports a number of different approaches for storing data. In the course, students define, operate and scale both SQL and noSQL data storage solutions. This course considers factors that should be balanced during the design of a storage solution. Principles are applied by performing exercises using Amazon RDS and SQL to create and fill tables, retrieve and manipulate data. Object-based APIs are used to serialize objects to Amazon DynamoDB for noSQL solutions. Topics include automated backups, transaction logs, restoration and retention. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 81C Compute Engines for Cloud Computing 3 units
In this course, students explore how cloud computing systems are built using a common set of core technologies, algorithms, and design principles centered around distributed systems. Students will use current cloud platforms such as AWS, AZURE to provision, load-balance and scale their applications. The course discusses, from a developer perspective, the most important reasons for using cloud computing and examines the underlying design principles of scalable cloud applications. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 81D Security Services in the Cloud 3 units
This course focuses on protecting the confidentiality, integrity and availability of computing systems and data. Students learn how Amazon Web Service (AWS) uses redundant and layered controls, continuous validation and testing, and a substantial amount of automation to ensure the underlying infrastructure is continuously monitored and protected. Students examine the AWS Shared Responsibility Model and access the AWS Management Console to learn more about security tools and features provided by the AWS platform. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 82A AWS Cloud Practitioner Certification Prep 2 units
This introductory course provides an overview of cloud concepts, Amazon Web Services (AWS) core services, basic security, architecture principles, pricing, and technical support. Students gain an overall understanding of the AWS Cloud, independent of specific technical roles. Review of core characteristics of deploying and operating in the AWS Cloud. This course prepares students to pursue becoming an AWS Certified Cloud Practitioner using official AWS Academy Cloud Foundations material. 36 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 82B AWS Academy Cloud Solutions Architecture Certification Prep 2 units
This course focuses on teaching technical expertise in cloud computing and the skills needed to pursue AWS Certified Solutions Architect - Associate certification. This course is delivered through lectures, hands-on labs, and project work. Students have access to course manuals, online knowledge assessments, hands-on labs, practice certification exam, and discount voucher for the certification exam. 36 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 84 Windows 1 units
Hands-on class introducing Microsoft Windows operations. Topics include: logging in, the Windows Desktop, launching applications, working with multiple applications windows, proper shutdown techniques, and using Microsoft Edge to browse the web. File and folder management are also covered including creating folders, copying and moving files and folders, searching for specific files, and navigating drives and folders. 9 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 88A Introduction to Microsoft Word 1.5 units
Develop the skills needed in the workplace to produce common business documents, such as letters, resumes, flyers, and reports. Topics include document creation and editing; use of Microsoft Word features to apply character and paragraph formatting; creating and formatting tables, enhancing visual appeal by incorporating graphics elements, using the

mail merge feature, and printing documents. 18 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 88B Adv Microsoft Word 1.5 units
Advanced word processing techniques used to produce complex business documents. Includes topics such as formatt multiple page reports, create tables of contents and indexes, insert footnotes/endnotes, using Word's collaboration features to share documents, create macros to automate tasks, and integrate data from Excel and other programs. 18 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 89A Desktop Presentation 1 units
Desktop presentation design techniques and enhancements. Application using current desktop presentation software. Hands-on experience creating, editing, saving, printing slide shows, incorporating graphics, charts, tables, SmartArt, sounds, and video, enhancing presentations using transitions and animations. 9 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 89B Desktop Publishing 1 units
Design professional-looking documents such as newsletters, flyers, and brochures quickly and easily using Microsoft Publisher. 9 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 9001 Database Design Methodology 3 units
This course provides students with a vendor-neutral introduction to and an overview of database systems; including database design, conceptual, logical and physical data modeling, Entity Relationship models. This course includes sections on relational databases, Structured Query Language (SQL) and optimizing databases through normalization. You will apply your knowledge with hands-on labs designed to apply the intricacies of database design methodology. 45 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 9002 Introduction to Database Management 3 units
This course provides the students with an introduction to the core concepts in data and information management. It is centered around the core skills of identifying organizational information requirements, modeling them using conceptual data modeling techniques, converting the conceptual data models into relational data models and verifying its structural characteristics with normalization techniques, and implementing and utilizing a relational database using an industrial-strength database management system. The course will also include coverage of basic database administration tasks and key concepts of data quality and data security. In addition to developing database applications, the course helps the students understand how large-scale packaged systems are highly dependent on the use of Database Management Systems (DBMSs). Building on the transactional database understanding, the course provides an introduction to data and information management technologies that provide decision support capabilities under the broad business intelligence umbrella. In database design, students learn to analyze business scenarios, create data models, and a conceptual representation of an organization's information. In database programming, students implement their database design by creating a physical database using Structured Query Language (SQL) to create, query, manipulate, and control access to the data in a relational database. Students learn to create and maintain database objects such as tables, indexes, views, constraints, and sequences. 45 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 9003 ORACLE: Database Programming with PL/SQL 3 units
This course introduces students to Procedural Language/Structured Query Language (PL/SQL) through a project-based approach. Learn procedural logic constructs such as variables, constants, conditional statements and iterative controls; then execute, and manage PL\SQL stored program units such as procedures, functions, packages, and database triggers. Learn the basic functionality of how to debug functions and procedures using the SQL Developer Debugger. Manage PL/SQL subprograms, triggers, declaring identifiers and trapping exceptions. 45 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 9005 Oracle: APEX Application Development 3 units
Introduction to the techniques and tools required to develop database driven web applications using Oracle Application Express (APEX). Using only a web browser and limited programming experience, you can develop and deploy professional applications. Students study how to design, develop and deploy responsive database-driven web applications using APEX. APEX integrated development environment is utilized to provide practical, hands-on activities. 45 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CIS 92 Web: PHP Programming, MySQL 3 - 3 units
This course showcases the popular and powerful PHP (Hypertext Preprocessor), an open source, server-side scripting language that can be easily integrated with HTML and SQL. For web developers who need to add dynamic content to their web sites, including form processing, database-driven content, password protection, cookie processing. You will learn how PHP can be combined with MySQL to integrate database functions into websites. 45 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

COMMUNICATION STUDIES (CMST)

CMST 1 Fundamentals of Public Speaking 3 units
Theory and techniques of public speaking. Discovery, development, and criticism of ideas in public discourse through research, reasoning, organization, composition, presentation, and evaluation of various types of speeches including informative and persuasive speeches; includes developing the faculties of critical listening and problem solving. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CMST 10 Interpersonal Communication 3 units
Exploration, discussion, and evaluation of the principles of the verbal and non-verbal communication process in relationships. Study of theory and research findings and their application to communication in interpersonal relationships in personal and professional contexts. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CMST 11 Intercultural Communication 3 units
Introduction to intercultural communication in domestic and/or global contexts. Influence of cultures, languages, and social patterns on how members of groups relate among themselves and with members of different ethnic and cultural groups. Theory, knowledge, appreciation, practical application and comparison of effective communication among diverse groups of people from different domestic and international cultures. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

CMST 2 Oral Interpretation of Literature 3 units
Critical analysis, appreciation, and application of theories and techniques used to perform various forms of literature, including poetry, prose, and drama. Students will learn to evaluate, analyze, edit, and creatively perform selections of literature for an audience. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CMST 3 Group Communication 3 units
Principles of communication in a variety of group contexts. Theory, application, and evaluation of group communication processes, including norms, roles, problem solving, conflict management, decision making, and leadership. Includes participation in simulation exercises and group activities. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CMST 4 Introduction to Communication Studies 3 units
Introduction to the breadth of the communication discipline with a focus on the foundations of interpersonal communication, small group communication, and public speaking. Examination and practice of basic human communication principles and theories to develop critical thinking and communication competencies in a variety of contexts. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CMST 46 Argumentation and Debate 3 units
Methods of critical inquiry and advocacy of contemporary moral, political, economic, and philosophical issues in a diverse multicultural society. Identifying fallacies in reasoning and language, testing evidence and evidence sources, advancing a reasoned position, and defending and refuting arguments. Analysis, presentation, and evaluation of oral and written arguments. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CMST 48 Activities in Forensics 1 - 4 units
Competition in the areas of public speaking and oral interpretation. Preparation, including research and writing; practice; and participation and performance in intercollegiate speech and debate tournaments. Number of times course may be taken for credit: 4. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CMST 5 Readers Theater 3 units
Introduction to the various principles and techniques used in readers theater, a style of theater that combines oral interpretation and conventional theater to make literature come alive for the audience. Using prose, poetry, and drama literature, students will create, compile, analyze, stage, and perform one or more readers theater productions. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

COMPUTER NETWORKING TECHNOLOGY (CNT)

CNT 43 Professional Communications 3 units
This course applies the principles of ethical and effective communication to the creation of letters, memos, emails, and written and oral reports for a variety of business situations. The course emphasizes critical thinking and analysis, planning, organizing, composing, and revising business documents to create and deliver professional-level oral presentations in-person and virtually. Additional focus will be placed on developing interpersonal skills, team participation skills, and technical report writing skills. Students who have completed or are enrolled in CIS 43 or CS 43 may not receive credit. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CNT 51 CompTIA's A+ Certification Computer Technician 4 units
This course provides an introduction to the computer hardware and software skills needed to help meet the industry demand for entry-level PC Technicians. This course covers PC hardware, software, security, networking, laptops, printers, operational procedures, operating systems, security, troubleshooting, and mobile devices. The students will study the topics needed to become certified PC technicians. Preparation for the CompTIA A + certification, which verifies knowledge equivalent to that of an entry-level ICT (Information and Communications Technology) technician with about 12 months of hands-on experience. The responsibilities of an ICT professional will be introduced. Students who have completed or are enrolled in APIS 51 may not receive credit. 54 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CNT 52 Networking Fundamentals 3 units
This course provides an introduction to computer networking fundamentals skills needed to meet the industry demand for entry-level Network Technicians. Topics include: Ethernet network fundamentals, Local Area Networks (LANs), and Wide Area Networks (WAN) technologies, the Open Systems Interconnection (OSI) model, wiring implementations, network adapters and connectivity devices, IPv4/IPv6 addressing, Voice over IP (VoIP), and wireless standards. Tools to help prevent cyber attacks with IDS (Intrusion Detection Systems), authentication, and encryption are demonstrated. Student labs include: configuration of a SOHO (Small Office/Home Office), a firewall, a virtual private network (VPN), a switch, and a router and documenting a networking using professional drawing software. The responsibilities of an ICT (Information and Communications Technology) professional will be introduced. This course prepares students for the CompTIA Network+ Certification Exam. This professional certification verifies the student has the knowledge equivalent to that of an ICT technician with about 12 months of hands-on experience. Students who have completed or are enrolled in CIS 66 or APIS 52 may not receive credit. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CNT 55 MCSA I Windows Server Installation, Storage, and Compute 3 units
This course prepares students for the Microsoft's Examination: Installation, Storage and Compute with Windows Server, which is the first of three exams a student must pass to obtain a MCSA (Microsoft Certified Solutions Associate) Certification. By passing this exam, one become a Microsoft Certified Professional (MCP) and gains access to MCP benefits. The MCSA Windows Server certification qualifies its holder for a position as a network or computer systems administrator or as a computer network specialist. The topics include installation, storage, and compute features and functionality available in the current Windows Server, Nano Server, images for deployment, storage solutions, data deduplication, high availability, disaster recovery, storage spaces direct, and failover clustering solutions. Also covered: Hyper-V and containers.. 45 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CNT 56 MCSA II Networking with Windows Server 3 units
This course prepares students for the Microsoft's Examination: Networking with Windows Server, which is the second of three exams a student must pass to obtain a MCSA (Microsoft Certified Solutions Associate) Certification. By passing this exam, one become a Microsoft Certified Professional (MCP) and gains access to MCP benefits. Through many hands-on labs, students will install and configure DNS, DHCP, IPAM, VPN and RADIUS. Also covered: managing DFS and branch cache solutions, and implementing Software Defined Networking (SDN) solutions such as Hyper-V Network Virtualization (HNV) and Network Controller, Implement Network Connectivity and Remote Access Solutions, Implement Core and Distributed Network Solutions. 45 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CNT 57 MCSA III Identity with Windows Server 3 units
This course prepares students for the Microsoft's Examination: Identity with Windows Server, which is the second of three exams a student must pass to obtain a MCSA (Microsoft Certified Solutions Associate) Certification. By passing this exam, one become a Microsoft Certified Professional (MCP) and gains access to MCP benefits. In this course, students manage identities, install, configure, manage, and maintain Active Directory Domain Services (AD DS) as well as implement Group Policy Objects (GPOs). Students also install and manage Active Directory Certificate Services (AD CS), Active Directory Federations Services (AD FS), Active Directory Rights Management Services (AD RMS), and Web Application proxy. 45 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CNT 68 Digital Forensics Fundamentals 3 units
A practical course in Digital Forensics; the detection, and investigation of incidents involving computers, networks, the Internet, and digital information. Case oriented, following the objectives for the CFE Computer Forensics Examiner certification exam and the International Association of Computer Investigative Specialists (IACIS), the class includes understanding and practice in basic computer forensics, methods of investigation, analysis of storage media, logs, and tracking persons and data, using court-approved evidence collection tools. Also covered, computer forensics as a profession, the computer investigation process, and technical writing. Students who have completed or are enrolled in APIS 55 may not receive credit. 45 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CNT 69 Network Security; CompTIA Security + Certification 3 units

The CompTIA Security+ exam will certify the successful candidate has the knowledge and skills required to install and configure systems to secure applications, networks, and devices; perform threat analysis and respond with appropriate mitigation techniques; participate in risk mitigation activities; and operate with an awareness of applicable policies, laws, and regulations. The successful candidate will perform these tasks to support the principles of confidentiality, integrity, and availability. This course provides an introduction to the concepts and practices of secure network design and management using desktop and network operating systems, router and switch operating systems, hardware and software Firewall and VPN technology for wired and wireless systems. The program includes authentication methods and devices, protocol analysis and IP network troubleshooting, strategies for identifying and countering vulnerabilities, network media and topologies in a secure network, intrusion detection and forensic incident response. CompTIA Security+ meets the ISO 17024 standard and is approved by U.S. Department of Defense. Security+ is also compliant with government regulations under the Federal Information Security Management Act (FISMA). Students who have completed or are enrolled in APIS 53 may not receive credit. 45 hours lecture, 27 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CNT 7285 Cloud Infrastructure: CompTIA Cloud+ Certification 3 units

IT professionals need to understand the concepts and principles required to build cloud infrastructure. This course covers the objectives of the CompTIA Cloud+ and Dell/EMC Cloud Infrastructure and Services (CIS) certification exams. Topics include: Cloud Computing Concepts; Models; Disk Storage Systems; Storage Networking; Network Infrastructure; Virtualization Components; Virtualization and the Cloud; Network Management; Performance Tuning; Systems Management; Security in the Cloud and Best Practices; Business Continuity and Disaster Recovery; Testing; Automation; and Changes. The EMC cloud computing reference model includes five fundamental layers (physical, virtual, control, orchestration, and service) and three cross-layer functions (business continuity, security, and service management). Technologies, components, processes, and mechanisms for each layer and cross-layer function will be covered. The course follows the U.S. National Institute of Standards and Technology as a guide for all definitions of cloud computing. Upon completing this course, participants will have the knowledge to make informed decisions on technologies, processes, and mechanisms required to build cloud infrastructure. CompTIA certification is normally valid for three years. 45 hours lecture, 27 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CNT 7401 Red Hat Linux Administration I 3 units

This course provides hands-on training covering basic installation, management, configuration, documentation and hardware topics for the Linux/UNIX operating system on workstations in a network environment. The course includes comprehensive coverage of topics related to Linux distributions, installation, administration, X-Windows, and networking. This course prepares students for the CompTIA Linux+ Certification Exam. Students who have completed or are enrolled in CS 41 or APIS 54 may not receive credit. 45 hours lecture, 27 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CNT 7402 Red Hat Linux Administration II 3 units

This course focuses on the key tasks needed to become a full time Linux Administrator and to validate those skills via the Red Hat Certified System Administrator exam. This course goes deeper into Enterprise Linux administration including filesystems and partitioning, logical volumes, SELinux, fire-walling, BASH script development and troubleshooting. Students who have completed or are enrolled in CS 3 may not receive credit. 45 hours lecture, 27 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CNT 7501 Ethical Hacking 3 units

This course introduces the network security specialist to the various methodologies for attacking a network. Students will be introduced to the concepts, principles, and techniques, supplemented by hands-on exercises, for attacking and disabling a network. These methodologies are presented within the context of properly securing the network. The course will emphasize network attack methodologies with the emphasis on student use of network attack techniques and tools and appropriate defenses and countermeasures. Students will receive course content information through a variety of methods: lecture and demonstration of hacking tools will be used in addition to an virtual environment. Students will receive a hands-on practical approach in penetration testing measures and ethical hacking. 45 hours lecture, 27 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CNT 7701 IT Virtualization, Data Centers, VMware Certification 3 units

With VMware, students learn about virtualization, SDNs (Software Defined Networks), data center management, and remote operation of IT infrastructures in the Cloud. Increasingly, businesses are moving their IT services to data centers, and skilled VMware professionals are and will be in high demand for the foreseeable future. vSphere - the major VMware platform - includes features for configuration, backup, cloning, resizing, securing, and moving virtual machines. Upon completion of this course, students will have covered the topics required for taking the examination for the VMware Certified Professional (VCP). This hands-on training course will have students install, configure, and manage different VMware virtualization products. VMware certification is normally valid for two years. 45 hours lecture, 27 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CNT 8001 Cisco CCNA1/3 Introduction to Networks (ITN) 3 units

This is course 1 of 3 of the Cisco CCNA Routing and Switching Certification Objectives. The concepts covered in this course include advances in modern network technologies; Protocols and Models: how network protocols enable devices to access local and remote network resources; Physical Layer: how physical layer protocols, services, and network media support communications across networks; Data Link Layer: how media access control in the data link layer supports communication across networks; Ethernet Switching: how Ethernet operates in a switched network; Network Layer: how routers use network layer protocols and services to enable end-to-end connectivity; Address Resolution: Protocol (ARP) and Neighbor Discovery (ND) enable communication on a local area network; Transport Layer & Application Layer: Explain the operation of layers protocols in providing support to end-user applications. The hands-on labs include implementation of initial settings including passwords, IP addressing, and default gateway parameters on a network switch and end devices; Basic Switch and Device Configuration; Calculation of numbers between decimal and binary systems; IPv4 Addressing: IPv4 subnetting scheme to segment a network; Implementing an IPv6 addressing scheme; ICMP and various tools to test network connectivity; Network Security Fundamentals: Configure switches and routers with device hardening features to enhance security; Build a Small Network: Implement a network design for a small network to include a router, a switch, and end devices. 45 hours lecture, 27 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CNT 8002 Cisco CCNA2/3 Switching, Routing, and Wireless Essentials (SRWE) 3 units

This is course 2 of 3 of the Cisco CCNA Routing and Switching Certification Objectives. The concepts covered in this course include Switching: how Layer 2 switches forward data; how STP enables redundancy in a Layer 2 network; the operation of dynamic address allocation in IPv6 networks by using SLAAC and DHCPv6; how FHRPs provide default gateway services in a redundant network; how vulnerabilities compromise LAN security; how Wireless LANs enable network connectivity; how routers use information in packets to make forwarding decisions; and troubleshooting static and default route configurations. The hands-on labs include Basic Configuration of devices by using security best practices; Implementing VLANs and trunking in a switched network; Troubleshooting inter-VLAN routing on Layer 3 devices; Troubleshooting EtherChannel on switched links; Implementing DHCPv4 to operate across multiple LANs; Configuring switch security to mitigate LAN attacks; Implementing a WLAN using a wireless router and WLC; configuring and troubleshooting IPv4 and IPv6 floating static routes. Students who have completed or are enrolled in APIS 56 may not receive credit. 45 hours lecture, 27 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CNT 8003 Cisco CCNA3/3 Enterprise Networking, Security, and Automation v7.0 (ENSA) 3 units

This is course 3 of 3 of the Cisco CCNA Routing and Switching Certification Objectives. The concepts covered in this course include the operation of single-area OSPFv2 in both point-to-point and broadcast multi-access networks; vulnerabilities, threats, and exploits and how they can be mitigated to enhance network security; ACLs operation as part of a network security policy; WAN access technologies used to satisfy business requirements; VPNs and IPsec and their use to secure site-to-site and remote access connectivity; networking devices implementing QoS; Network Design and characteristics of scalable network architectures; network automation enabled through RESTful APIs and configuration management tools; purpose and characteristics of network virtualization. The hands-on labs include the implementation of single-area OSPFv2 in both point-to-point and broadcast multi-access networks; IPv4 ACLs to filter traffic and secure administrative access; NAT services on the edge router to provide IPv4 address scalability; network management protocols to monitor the network; and Troubleshooting LANs and enterprise networks. 45 hours lecture, 27 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

COMPUTER SCIENCE (CS)

CS 1 Computing Fundamentals I 4 units

Introduction to programming and problem-solving using C++. Problem solving techniques and algorithms; program design, development, style, testing and debugging. C++ syntax covered includes: variables; data types; operators and expressions; control structures; library and user-defined functions; basic file input/output; binary file input/output; arrays; vectors; abstract data types including user-defined data structures and enumerated data types. 54 hours lecture, 54 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CS 16 Mobile Application Development - IPhone 3 units

Object-oriented programming in Swift for the iPhone, iPad and related platforms at a beginning to intermediate level. Introduction to the iOS mobile platform. Introduction to Swift syntax and concepts and the iOS application programming interface (API), including: classes, objects, inheritance, protocols, optionals, arrays, dictionaries, and closures; creating user interfaces; using graphics and audio; responding to touch-based user interaction. 45 hours lecture, 27 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CS 17 Discrete Mathematical Structures 4 units

Designed for majors in mathematics and computer science, this course provides an introduction to discrete mathematical structures used in Computer Science and their applications. Course content includes: Propositional and predicate logic; rules of inference; quantifiers; elements of integer number theory; set theory; methods of proof; induction; combinatorics and discrete probability; functions and relations; recursive definitions and recurrence relations; elements of graph theory and trees. Applications include: analysis of algorithms, Boolean algebras and digital logic circuits. Students who have completed, or are enrolled in, MATH 10 may not receive credit. 72 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

CS 2 Computing Fundamentals II 4 units

Application of software engineering techniques to the design and development of large programs. Object-oriented programming methods and problem-solving strategies applied to intermediate-level problems using C++. Includes pointers and dynamic allocation; classes; encapsulation; inheritance and polymorphism; object and function overloading; recursive algorithms; data abstraction and structures. 54 hours lecture, 54 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CS 20 Advanced Programming with Data Structures/C++ 4 units

Design and implementation of complex programs in C++ using a variety of fundamental data structures and algorithms. Includes the design and implementation of recursive functions, abstract data types, linked lists, stacks, queues, binary trees, hash tables, search and sorting algorithms, graphs, heaps, and algorithm analysis. 54 hours lecture, 54 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CS 21 Computer Organization and Assembly Language Programming 4 units

Basics of machine architecture, cpu architecture and design, machine language, assembly language, operating system and higher level language interface. Data representation, instruction representation and execution, addressing techniques and use of macros. Space and time efficiency issues. Input/output including video modes. Procedures including parameter passing and linkage to higher level languages. 54 hours lecture, 54 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CS 3 Red Hat Linux Administration II 3 units

This course focuses on the key tasks needed to become a full time Linux Administrator and to validate those skills via the Red Hat Certified System Administrator exam. This course goes deeper into Enterprise Linux administration including filesystems and partitioning, logical volumes, SELinux, fire-walling, BASH script development and troubleshooting. Students who have completed or are enrolled in CNT 7402 may not receive credit. 45 hours lecture, 27 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CS 31 Java Programming 4 units

Applications programming using Java for students already familiar with the concepts of programming. Topics will include in Applets, GUI programming and design using Swing, presenting data files over the web, elementary data structures (queues, linked list, stacks) and vectors, searching (linear, binary), sorting algorithms, Database programming using JDBC (Java Data Base Connectivity), Remote Method Invocation (RMI), and Java Beans. The student shall also be exposed to and experience developing Java applications and applets in the Linux/Unix environment(s). 54 hours lecture, 54 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CS 4 Introduction to Artificial Intelligence 3 units

An introduction to artificial intelligence (AI) and modern AI programming libraries. Basic discrete mathematics and statistics. Problem solving using uninformed, informed, local, and adversarial search algorithms. Knowledge representation, inference, and reasoning using propositional and first-order logic. Quantifying and reasoning about uncertainty with Bayesian networks and Markov decision processes. Ethical considerations of artificial intelligence. 45 hours lecture, 27 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CS 41 Red Hat Linux Administration I 3 units

This course provides hands-on training covering basic installation, management, configuration, documentation and hardware topics for the Linux/UNIX operating system on workstations in a network environment. The course includes comprehensive coverage of topics related to Linux distributions, installation, administration, X-Windows, and networking. This course prepares students for the CompTIA Linux+ Certification Exam. Students who have completed or are enrolled in CNT 7401 or APIS 54 may not receive credit. 45 hours lecture, 27 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CS 43 Professional Communications 3 units

This course applies the principles of ethical and effective communication to the creation of letters, memos, emails, and written and oral reports for a variety of business situations. The course emphasizes critical thinking and analysis, planning, organizing, composing, and revising business documents to create and deliver professional-level oral presentations in-person and virtually. Additional focus will be placed on developing interpersonal skills, team participation skills, and technical report writing skills. Students who have completed or are enrolled in CNT 43 or CIS 43 may not receive credit. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CS 45 Database Programming 4 units
This is a programming course that goes beyond mere “desktop” database management. Participants will learn how to design and manage cloud based databases and explore dynamic applications that interact with databases using compiled and interpreted client/server programming languages. Learn databases concepts, relational database principles, database design/modeling techniques and Structured Query Language (SQL). 54 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CS 47 Capstone Project 3 units
This is intended as a culminating experience within a degree or certificate sequence. Working individually or in a small team, you will develop a large-scale work-like project, driven by client needs, and requiring planning, implementation, documentation and presentation of the solution. Based on client requirements, each student or student team will design and implement a solution in a systematic and organized manner, breaking the project into logical sub-components and/or steps. Each student or student team will also prepare relevant written materials and give an oral presentation of the final product. 18 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CS 5 Introduction to Machine Learning 3 units
An introduction to machine learning (ML), with an emphasis on programming ML applications and using modern ML libraries. Basic discrete mathematics, statistics, and linear algebra. An overview of various supervised learning classifiers. Unsupervised learning via clustering. Reinforcement learning with model-based and model-free approaches. Safety and ethical concerns of machine learning. 45 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

CS 7 Introduction to Computer Programming Concepts 3 units
An introductory course in computer programming concepts and fundamental coding skills using object-oriented languages like Python. Material includes problem-solving techniques, design of algorithms, and common programming constructs such as variables, expressions, input/output, decision-making, loops and arrays. 45 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

DANCE (DANC)

DANC 1 Introduction to Dance 1 units
Introduction to the dance technique specific to ballet, modern and jazz dance. Similarities and differences found in each dance form will be explored. The history of ballet, modern and jazz dance will be examined. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

DANC 29 Independent Study, Dance 0.5 - 2 units
For course information, see "Independent Studies". 27-108 hours laboratory. 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

DANC 2A Jazz Dance Fundamentals/Beginning 1 units
This course covers various movement forms with an emphasis on rhythm, style and proper techniques. Students will learn a variety of jazz phrases and will be expected to perform a jazz dance at the introductory level by the end of the semester. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

DANC 2B Jazz Dance Beginning/Intermediate 1 units
This course covers various movement forms with an emphasis on rhythm, style and proper techniques. Students will learn a variety of jazz phrases and will be expected to choreograph and perform a jazz dance at the advanced beginning/intermediate level by the end of the semester. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

DANC 3A Ballet Fundamentals/Beginning 1 units
Introduction to the fundamentals of ballet, including barre, center and across the floor technique. Proper body connectivity, alignment, strength and flexibility will be emphasized. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

DANC 4A Modern/Contemporary Dance A 1 units
Beginning level instruction in the Contemporary Modern Dance technique. Emphasis on proper body alignment and body connectivity will be addressed. Students will be introduced to the elements of dance and transfer these elements into their technical practice. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

DANC 4B Modern/Contemporary Dance B 1 units
Elementary to Intermediate level instruction in the Contemporary Modern Dance technique. Continued emphasis on proper body alignment and body connectivity will be addressed. Students will be expected to incorporate the elements of dance into their technical practice. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

DANC 6A Choreography for the Stage A 2 units
Exploration of choreographic principles along with stage presentation leading to a full-length concert. Participation in dance works either as a choreographer or performer. Minimal participation in technical and business aspects of production. 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

DANC 6B Choreography for the Stage B 2 units
Choreograph dance works specifically for a full length stage production. Involved participation in the technical, creative and business aspects of stage production. 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

EARLY CARE AND EDUCATION (ECE)

ECE 10 Introduction to Education 4 units
This course introduces students to the concepts and issues related to teaching diverse learners in today's contemporary schools, TK through the 12th grade. Topics include teaching as a profession and career, historical and philosophical foundations of the American education system, inequities in the field, actions to address inequities, contemporary education issues, California's content standards and frameworks, and teacher performance standards. In addition to class time, the course requires a minimum of 54 hours of structured fieldwork in public school elementary classrooms that represent California’s diverse student population, and includes cooperation with at least one carefully selected and campus-approved certificated classroom teacher. 54 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ECE 29 Independent Study, Early Care and Education 0.5 - 2 units
Supervised study in the area of Early Care and Education. Any student interested in registering for an Independent Studies course should contact a full/part-time instructor or dean in the appropriate area. 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ECE 40 Social and Emotional Foundations for Early Learning 3 units
This course will focus on the healthy social and emotional development of young children ages 0-8, as the foundation for early learning. Students will identify the role of the teacher in establishing learning environments that promote the healthy social and emotional development of young children, the underlying basis for quality teacher-child interactions. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ECE 42 Early Childhood Math and Science 3 units
An examination of the constructivist approach to teaching science, technology, engineering and mathematics (STEM) to young children; emphasizing application to everyday experiences of children. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ECE 50 Early Childhood Principles and Practices 3 units
Historical contexts and theoretical perspectives of developmentally appropriate practice in early care and education for children birth through age eight. Explores the typical roles and expectations of early childhood educators. Identifies professional ethics, career pathways, and professional standards. Introduces best practices for developmentally appropriate learning environments, curriculum, and effective pedagogy for young children, including how play contributes to children's learning, growth, and development. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ECE 54 Child Health, Safety and Nutrition 3 units
This course covers aspects of nutrition, health, and safety that promote and maintain the health and well-being of all children and adults who work with young children. Topics include health and nutritional guidelines; maintaining safe and healthy learning environments; state regulations, policies, and procedures; common childhood illnesses and infectious diseases; school-family collaboration; and emergency preparedness, first aid, and injury prevention. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ECE 56 Child Growth and Development 3 units
A study of 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. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ECE 60 Introduction to the Young Child with Exceptional Needs 3 units
Introduces the variations in development of infants and children with exceptional needs and the resulting impact on families. Includes an overview of historical and societal influences, laws relating to children with exceptional needs and the identification and referral process. Assessments, interventions and learning environments for infants and children with exceptional needs. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ECE 61 Literature for the Young Child 3 units
An introduction to young children's literature, the development of speech and language and the exploration of teaching techniques which promote language, literacy and literature for the young child. Selection, evaluation and use of fiction, non-fiction, prose and poetry from existing written and/or recorded children's literature in the early childhood classroom. Approaches to reading books, storytelling, story writing, and use of puppets, flannel boards and props to facilitate children's language and appreciation of literature. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ECE 62 Child, Family and Community 3 units
The processes of socialization and identity development, focusing on the interrelationship of family, school, and community. Examines the influence of multiple societal contexts. Explores the role of collaboration between family, community, and schools in supporting children's development. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ECE 63 Early Childhood Curriculum 4 units
This course offers students the opportunity for professional application of the principles of child growth and development in the study of play based, inclusive, emergent curriculum within the physical environment of the infant, toddler and preschool classrooms. Students will learn of a variety of program models used and explore how program models inform curriculum planning. The learning experiences will include program content pertaining to the use of materials, the facilitation and guidance of all children's experiences based on what is culturally and developmentally appropriate for children; utilizing best practices in meeting the children's physical, social, emotional, cognitive and creative needs. 54 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ECE 64 Play: Materials and Environments 3 units
Application of principles of human growth and development in the consideration of play materials and environments for children birth through early elementary. The selection and development of play materials and environments that are developmentally, culturally, and age-appropriate. 54 hours lecture, 0 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ECE 65 Administration I: Programs in Early Childhood Education 3 units
Introduction to the administration of early childhood programs. Covers program types, budget, management, regulations, laws, development and implementation of policies and procedures. Examines administrative tools, philosophies, and techniques needed to organize, open, and operate an early care and education program: Relationships with families, and community. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ECE 67 Infant and Toddler Development and Caregiving 3 units
A study of infants and toddlers from preconception to 36 months including physical, cognitive, language, social and emotional growth and development. Applies theoretical frameworks to interpret behavior and interactions between heredity and environment. Examination of best practices, responsive caregiving techniques, environments, infant/toddler learning foundations, health, safety, and licensing requirements. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ECE 68 Administration II: Personnel and Leadership in Early Childhood Education 3 units
Effective strategies for personnel management and leadership in early care and education settings. Includes legal and ethical responsibilities, supervision techniques, professional development, and reflective practices for a diverse and inclusive early care and education program. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ECE 69 Child Study: Observation and Assessment 3 units
This course focuses on the use of appropriate methods of assessment to document development, growth, play and learning in early childhood education settings. Students will utilize practical classroom experiences to apply a variety of methods to measure child progress, curriculum requirements, and program effectiveness. Methods include child portfolios, recording strategies, rating systems, and other tools that build on respecting and fostering all children's competence and meeting their individual needs. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ECE 74 Child Guidance 2 units
Appropriate for classroom teachers in various settings including Transitional Kindergarten, students will identify developmentally appropriate behaviors, challenging behaviors, and the various influences that affect 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. Upon completion of the course, students should be able to demonstrate strategies that encourage positive social interactions,

promote conflict resolution, and develop self-control, self-motivation, and self-esteem in children. 36 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ECE 78 Language Development 3 units
Review of language acquisition theories and emergent literacy in both monolingual and young English language learners. Includes oral and written language development, developmental stages of receptive and expressive language, print awareness, phonemic awareness and early reading and writing development. Examination of family patterns, cultural values, and environmental circumstances that affect language development and communication styles. Includes assessment and early identification of linguistic delays. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ECE 79 Teaching in a Diverse Society 3 units
Examines the impact of various societal influences such as privilege, oppression, bias, and discrimination on the development of children's social and personal identity. Self-examination and reflection on values, beliefs and attitudes related to social identity, stereotypes, conscious and unconscious bias will be emphasized. Recognize and confront barriers that interfere with one's ability to work effectively with diverse populations of children and families. Enhance teacher skills for educating children in a pluralistic society. The class will focus heavily on anti-bias approaches to teaching, curriculum and family partnerships. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ECE 80A CA Preschool Foundations: Health 1 units
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. 18 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ECE 80B CA Preschool Foundations: Social and Emotional 1 units
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 kindergarten, and early-primary teachers. 18 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ECE 80C CA Preschool Foundations: Language and Literacy 1 units
Introduction to the language and literacy development domain in the California Preschool Learning Foundations and Frameworks including the strands of listening and speaking, reading, and writing. Provides practical considerations 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. 18 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ECE 80D CA Preschool Foundations: English Language Development 1 units
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 kindergarten, and early-primary teachers. 18 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ECE 80E CA Preschool Foundations: History/Social Science 1 units
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. 18 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ECE 80F CA Preschool Foundations: Math 1 units
Introduction to the mathematics domain of the California Preschool Learning Foundations and Frameworks including the strands of number sense, algebra and functions, measurement, geometry, and mathematical reasoning. Provides 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. 18 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ECE 80G CA Preschool Foundations: Science 1 units
Introduces the science domain of the California Preschool Learning Foundations and Frameworks including the strands of scientific inquiry, physical, life, and earth sciences and 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. 18 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ECE 80H CA Preschool Foundations: Visual Arts 1 units
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. 18 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ECE 80I CA Preschool Foundations: Physical Development 1 units
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. 18 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ECE 80J CA Preschool Foundations: Performing Arts 1 units
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. 18 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ECE 83 Adult Mentoring and Supervision 2 units
Methods and principles of mentoring and supervising adults in early care and education settings. Emphasis on the role of experienced classroom teachers who function as mentors and leaders to new teachers and other adults while simultaneously addressing the needs of children, families and other staff. Also, a focus on self-reflection and "soft skills set obtainment" emphasized. 36 hours lecture.
- Credit - Degree Applicable

- Grading Option: Letter Grade

ECE 87 Quality Environments for Infants and Toddlers 3 units

Applies current theory and research to the care and education of infants and toddlers in group care. Examines essential policies, classroom environments, caregiving principles and practices that lead to quality care and developmentally appropriate curriculum for infants and toddlers which is culturally sensitive and supports families. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

ECE 90 Practicum-Supervised Experience 4 units

Practicum experience working with young children under the supervision of an ECE/CD faculty; Students will utilize practical classroom experiences to make connections between theory and practice, develop professional behaviors, and build 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. 36 hours lecture, 108 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter Grade

ECE 91 Adaptive Curriculum For Children With Exceptional Needs 3 units

Provides direct experience working with young children in special day classes or inclusive settings. Application of intervention strategies using best practices of early childhood development and special education in adapting curriculum to meet the individual needs of children. Observation of the assessment process by the special education team and assisting in the implementation of the educational plan. Includes the role of the teacher as a professional working in partnership with families, collaboration with interdisciplinary teams and cultural competence. Lab hours required in an inclusive setting. 36 hours lecture, 54 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter Grade

ECE 95 Work Experience 1 - 3 units

Cooperative effort between, student, supervisor and instructor to accomplish professional work objectives and broaden experiences. On-the-job work experience to build early childhood competencies..

- Credit - Degree Applicable
- Grading Option: Letter Grade

ECE 96 Work Experience Seminar 1 units

Discussion and analysis of typical problems often encountered by employees at the workplace. Application of National Association for the Education of Young Children (NAEYC) Code of Ethical Conduct to difficult situations that occur at the job site. Develop and complete measurable developmentally appropriate goals in early care and education settings. 18 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

ECONOMICS (ECON)

ECON 1 Principles of Microeconomics 3 units

Economic analysis of market systems, price theory, including supply and demand analysis, marginal utility, elasticity, cost and revenue concepts, perfect and imperfect competition, international trade theory, pricing of the factors of production, poverty and income inequalities. Prerequisite: Elementary Algebra or a higher level of mathematics., Intermediate Algebra or a higher level of mathematics.. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ECON 10 General Economics 3 units

Survey of the economic system of the United States, covering such macroeconomic and microeconomic topics as supply and demand, firms' output and pricing decisions, international trade, comparative economic systems, economic growth, business cycles, fiscal and monetary policy, labor, and money and banking. 3 hours lecture. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ECON 2 Principles of Macroeconomics 3 units

Economic analysis of the theory of income determination, including national income analysis, business cycles, the consumption function, the multiplier, fiscal policy, monetary policy, money and banking, the public debt, economic growth and development, comparative economic systems and international trade. Prerequisite: Elementary Algebra or a higher level of mathematics., Intermediate Algebra or a higher level of mathematics.. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ECON 5 Economic History of the United States 3 units

Origins and historical development of major economics forces, institutions and philosophies that have shaped the U.S. market economy. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

EMERGENCY MEDICAL SERVICES (EMS)

EMS 10 Paramedic Theory 1 6 units

General paramedic didactic education and training following the current Department of Transportation National Emergency Services Education Standards (NEMSES) and California Code of Regulations, Title 22. Includes cognitive content associated with: preparatory, anatomy and physiology, pharmacology, airway management, patient assessment, and trauma patient management. 108 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

EMS 11 Paramedic Theory 2 6 units

This course provides paramedic didactic education and training following the current Department of Transportation National Emergency Services Education Standards (NEMSES) and California Code of Regulations, Title 22. Includes cognitive content associated with: Medical emergencies, special patient populations, and EMS operations. 108 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

EMS 12 Paramedic Laboratory 1 4 units

Provides the skills portion of the current Department of Transportation National Emergency Services Education Standards (NEMSES) and California Code of Regulations, Title 22. Includes psychomotor skills associated with: preparatory, anatomy and physiology, pharmacology, airway management, patient assessment, and trauma patient management. 216 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Pass/No Pass

EMS 13 Paramedic Laboratory 2 4 units

Provides the skills portion of the current Department of Transportation National Emergency Services Education Standards (NEMSES) and California Code of Regulations, Title 22. Includes psychomotor skills associated with: medical patient management, cardiac patient management, special populations, EMS operations, and simulated patient encounters. 216 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Pass/No Pass

EMS 16 Paramedic Clinical Occupational Work Experience 3 - 4 units

Occupational work experience course that provides instruction to enhance student's knowledge of emergency care in a clinical setting. Students are provided access to adequate numbers of patients, proportionally distributed by illness, injury, gender, age, and common problems encountered in the delivery of emergency care appropriate to the level of the Emergency Medical Services Profession(s). Hospital/clinical experiences include the operating room, recovery room, intensive care unit, coronary care unit, labor and delivery room, pediatrics, and emergency department, and include exposure to an adequate number of pediatric, obstetric, psychiatric, and geriatric patients. May be taken any number of times for a maximum of 16 units of Cooperative Work Experience..

- Credit - Degree Applicable
- Grading Option: Pass/No Pass

EMS 17 Paramedic Capstone Occupational Work Experience 1 - 8 units

An occupational work experience course that provides practicum experience for paramedic students to observe and participate in emergency medical care supervised by a preceptor in an emergency response vehicle. Requires a minimum of 480 hours, and students must document at least 40 advanced life support (ALS) patient contacts. Student will provide the full continuum of care from initial contact to transfer of care at the receiving facility for half of all ALS contacts. Students must obtain minimum competency as a Team Leader. The field internship provides the student with an opportunity to serve as team leader in a variety of pre-hospital advanced life support emergency medical situations. May be taken any number of times for a maximum of 16 units of Cooperative Work Experience..

- Credit - Degree Applicable
- Grading Option: Pass/No Pass

EMS 20 Emergency Medical Technician 7 units

Provides training in the foundation skills and knowledge required of the EMT scope of practice. The EMT certification is the minimum requirement for ambulance attendants and most entry-level firefighter positions. EMT certification is also required for entry into paramedic training. This training program is accredited by the Alameda County Emergency Medical Services District. 90 hours lecture, 108 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter Grade

EMS 30 Emergency Medical Responder 3 units

Development of knowledge and skills necessary for recognizing and caring for victims in emergency situations, including patient assessment, cardiopulmonary resuscitation with the use of an automated external defibrillator, and prevention of disease transmission. Designed for emergency medical responders in the public safety field. Successful completion of the psycho-motor skills tests and successful completion of the course with a score of 80%, and achieving a score on the course summative final at (80%) qualifies the student for an Emergency Medical Responder (EMR) Certificate issued by the Emergency Care and Safety Institute (ECSI). 36 hours lecture, 54 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter Grade

EMS 62 Basic Medical Terminology 3 - 3 units

A basic course in medical terminology designed for students in studying for Allied Health careers such as Surgical Technologist, Paramedic, Pre-nursing, and Radiology Technician. Medical vocabulary with concentration on prefixes, suffixes, and root words. Emphasis on word dissection, definitions as applied to the body systems including the terminology used in surgical procedures. Concepts focus on comprehensive terminology, pronunciation and spelling core. 54 hours lecture, 0 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter Grade

EMS 70 CPR for Health Care Providers 0.5 units

Development of knowledge, skills and personal judgment necessary to initiate and perform basic life support techniques as a health care professional. Successful completion of the knowledge and skills tests qualifies for an American Heart Association Basic Life Support Certificate. 9 hours lecture.

- Credit - Degree Applicable
- Grading Option: Pass/No Pass

EMS 91 Emergency Medical Technician - Refresher 1 units

Provides a refresher in the foundation and knowledge required of the EMT – 1 scope of practice. The EMT – 1 certification is the minimum requirement for ambulance attendants and most entry-level firefighter positions. EMT-1 certification is also required for entry into paramedic training. This refresher program is accredited by the Alameda County Emergency Medical Services Agency. The course provides a minimum of 24 hours of continuing education units or a course completion certificate. Additionally, the course provides skills verification testing that EMTs must complete every two years. Prerequisite: Proof of California State EMSA or National Registration Certification as an "Emergency Medical Technician." Certification must be current, or expired less than 6 months. Student may also present documentation from the National Registry of Emergency Medical Technicians showing failure of initial three attempts at NREMT Certification Examination which now requires completion of EMS 91 for additional attempts to register for certification examination.. 9 hours lecture, 27 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ENGLISH (ENG)

ENG 11 Introduction to Creative Writing 3 units

Introduction to elements and craft of various genres of creative writing, including narrative, verse, and dialogue, using materials drawn from individual's own work and selected texts from established and peer writers. Practice in writing in various genres. Introduction to workshop method. Prerequisite: Eligibility for college-level composition as determined by college assessment or other appropriate method. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ENG 12A Craft of Writing Fiction 3 units

Practice in writing fiction. Developing internal and external sources for stories and novels; biographical sources, characterization, plot, points-of-view, narrative techniques; analysis and criticism of published writing and individual's own work. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ENG 12B Craft of Writing Fiction: Intermediate 3 units

Practice in writing fiction at an intermediate level. Builds on the skills developed in English 12A by requiring the use of vivid description, specific detail, dynamic and rounded character development, consistent point of view, and logical plotting that avoids cliche. Focus on developing themes that create intellectual or emotional resonance. Expectation of sentence structure, grammar, and format accuracy. Develop internal and external sources for stories and novels; analysis and criticism of published short fiction and a book-length work; analysis and criticism of peer work and individual's own work. Requires submission for publication at the end of the semester. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ENG 12C Craft of Writing Fiction: Advanced 3 units

Practice in writing fiction at an advanced level. Builds on the intermediate skills developed in English 12B by requiring a mastery of description, detail, character development, consistent point of view, and logical plotting that avoids cliche. Focus on achieving themes that create intellectual or emotional resonance. Expectation of sentence structure, grammar, and format accuracy. Develop internal and external sources for stories and novels; analysis and criticism of published short fiction and a presentation about the craft in a book-length work; analysis and criticism of peer work and individual's own work. Requires submission for publication at the end of the semester; analysis and criticism of peer work and individual's own work. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ENG 13A The Craft of Writing Poetry: Beginning 3 units

Practice in writing poetry, using materials drawn from published poetry and individual's own work for analysis and criticism, with a focus on techniques of revision. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ENG 13B The Craft of Writing Poetry: Intermediate 3 units

Continued practice in writing poetry, using materials drawn from published poetry and individual's own work for analysis and criticism, with a focus on techniques of revision and submission for publication. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ENG 19A Journal of Arts, Literature, and Academic Writing A 3 units

Creation of a literary-style student magazine. Practical training in the managing, editing, formatting, and printing of a literary magazine. Enrollment constitutes the staff of the magazine. Students who have completed, or are enrolled in, JAMS 19A may not receive credit. 36 hours lecture, 54 hours laboratory.

- Credit - Degree Applicable

- Grading Option: Letter or P/NP

ENG 19B Journal of Arts, Literature, and Academic Writing B 3 units

Creation of a literary-style student magazine. Practical intermediate-level training in the managing, editing, formatting, and printing of a literary supplement and/or magazine with a focus on the production process, including copy editing, design, layout, proofreading, working with the printer, and digital and print distribution. Enrollment constitutes the staff of the magazine. Students who have completed, or are enrolled in, JAMS 19B may not receive credit. 36 hours lecture, 54 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ENG 1A Critical Reading and Composition 3 units

Integrated approach to reading, writing, and critical thinking intended to develop ability to read and write complex, college-level prose. Examination of ideas in relation to individual's worldview and contexts from which these ideas arise. Some research required. Prerequisite: Eligibility for college-level composition as determined by college assessment or other appropriate method. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

ENG 1AEX Critical Reading and Composition Expanded 4 units

Integrated approach to reading, writing, and critical thinking intended to develop ability to read and write complex, college-level prose. Examination of ideas in relation to individual's worldview and contexts from which these ideas arise. Some research required. Integrated approach to reading, writing, and critical thinking intended to develop ability to read and write complex, college-level prose. English 1AEX provides students with an extra unit of lab to support students in reading and writing complex, college-level prose. Students who have completed, or are enrolled in, ENG 1A may not receive credit. Prerequisite: Eligibility for college-level composition as determined by college assessment or other appropriate method. 54 hours lecture, 54 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter Grade

ENG 20 Studies in Shakespeare 3 units

Readings of the sonnets and representative comedies, histories, tragedies, and romances of William Shakespeare, with attention to the early, middle and late phases of his art and to the Age of Elizabeth. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

ENG 29 Independent Study, English 0.5 - 2 units

Supervised study in the area of English. Students interested in registering for an Independent Studies course should contact a full/part-time instructor or dean associated with the English department. 27 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ENG 32 U.S. Women's Literature 3 units

Chronicles the expression of U.S. women authors through readings in a variety of genres such as fiction, poetry, drama, and the essay. Study of the works of at least three of the following groups: African Americans, Asian Americans, European Americans, Hispanic Americans, and Native Americans, with a particular focus on the 20th century. Prerequisite: Eligibility for college-level composition (ENG 1A, ENG 1AEX, or ESL 1A) as determined by college assessment or other appropriate method.. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

ENG 35 Modern American Literature 3 units

U.S. literature from the second half of the 19th century to the present, including poetry, drama, prose fiction, and essays. Emphasizes literary analysis and the exploration each work in relation to its social, cultural and historical contexts. Prerequisite: Eligibility for college-level composition (ENG 1A, ENG 1AEX, or ESL 1A) as determined by college assessment or other appropriate method.. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

ENG 4 Critical Thinking and Writing about Literature 3 units

Develops critical thinking, reading, and writing skills as they apply to the analysis of fiction, poetry and drama; literary criticism; and related non-fiction from diverse cultural sources and perspectives. Emphasis on the techniques and principles of effective written argument as they apply to literature. Some research required. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

ENG 41 Modern World Literature 3 units

This course is a comparative study of selected works, in translation and in English, of literature from various regions and cultures around the world, including Africa, Europe, the Middle East, Asia, the Americas, and other areas, from the mid- or late-seventeenth century to the present. Emphasis will be on literary analysis as well as providing historical, cultural, and comparative perspectives on the literature. Prerequisite: Eligibility for college-level composition (ENG 1A, ENG 1AEX, or ESL 1A) as determined by college assessment or other appropriate method.. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

ENG 42 Literature of the African Diaspora in America 3 units

Form, development, and cultural and historic insights of literature of the African diaspora in America and the United States, including some or all of the following: short fiction and novels, oral history and memoir, poetry, plays, songs, popular culture, and nonfiction; exploration of particular themes or periods as reflected in the literature of people of the African diaspora created in America. Prerequisite: Eligibility for college-level composition (ENG 1A, ENG 1AEX, or ESL 1A) as determined by college assessment or other appropriate method.. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ENG 44 Literature of the American West 3 units

Critical analysis of the cultural and historical experiences of diverse people of the American West as expressed in their literatures, including the novel, short story, poetry, autobiography, memoirs, as-told-to-narratives, and secondary works. Exploration of interrelationships among peoples and cultures of the West, considering place and community, gender, and ethnicity as given voice in literature. Study of the works of at least three of the following groups: African Americans, Asian Americans, European Americans, Hispanic Americans, Native Americans. Emphasis upon techniques of critical review of and response to literary works, including gaining understanding of one's identity as a Westerner and an American. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

ENG 45 Studies in Fiction 3 units

Form, development, and cultural insights of the novel and short story; exploration of particular themes or periods as reflected in works of fiction. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

ENG 7 Critical Thinking and Writing Across Disciplines 3 units

Develops critical thinking, reading and writing skills as they apply to the textual analysis of primary and secondary book-length works from a range of academic and cultural contexts. Emphasis on the techniques and principles of effective written argument in research-based writing across disciplines. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

ENGINEERING (ENGR)

ENGR 1 Introduction to Engineering 2 units

Introduction to careers, activities, and topics related to the field of engineering, including computer applications to design and problem solving. 36 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ENGR 23 Engineering Graphics 3 units
Introduction to the engineering-design process, and to technical graphic communications tools used by engineers. Conceptual design of products. Development of spatial reasoning skills. Orthographic and axonometric projection-drawing techniques. Tolerance analysis for fabrication. Documentation of designs through engineering working drawings. Use SolidWorks Computer-Assisted Drawing software as a design tool. Basic CAD 3-Dimensional solid-modeling. 36 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ENGR 26 Computational Methods for Engineers and Scientists 3 units
Methodology and techniques for solving engineering/science problems using numerical-analysis computer-application programs MATLAB and EXCEL. Technical computing and visualization using MATLAB software. Examples and applications from applied mathematics, physical mechanics, electrical circuits, biology, thermal systems, fluid systems, and other branches of science and engineering. 36 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ENGR 35 Statics 3 units
A first course in engineering mechanics: properties of forces, moments, couples and resultants; two- and three-dimensional force systems acting on engineering structures in equilibrium; analysis of trusses, and beams; distributed forces, shear and bending moment diagrams, center of gravity, centroids, friction, and area and mass moments of inertia. Optional additional topics include fluid statics and cables. 36 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ENGR 37 Applied Statics and Materials 3 units
Applied statics, mechanics of materials, and materials science. Topics include stress, strain, types of forces, moments, moment of inertia, friction, truss structures, centers of gravity, modulus of elasticity, fasteners, chemistry and atomic structure, crystalline structures, phase diagrams. This course is designed for Engineering Technology majors; it is not intended for students pursuing the Engineering Requirements (Transfer Preparation) path. 36 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ENGR 44 Introduction to Circuit Analysis 4 units
Introduction to analysis methods for electrical circuits. Topics include general techniques for circuit analysis, simple resistive circuits, inductors, capacitors, mutual coupling, operational amplifier circuits, transient and steady-state analysis of first-order and second-order circuits. Lab topics include introduction to the use of electronic test equipment, designing, assembling, testing and simulating various resistive, LC, RC and operational amplifier circuits. Simulations are done with available circuit simulations codes such as PSpice. 54 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ENGR 46 Materials of Engineering 4 units
Application of principles of chemistry and physics to the properties of engineering materials; the relation of microstructure to mechanical, electrical, thermal and corrosion properties of metals; ceramics and polymers. 54 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ENGR 50 Introduction to Electronic Systems and Measurements 4 units
Introduction to electrical and electronic systems and circuits. Overview of digital and analog electronics, semiconductor devices and software tools. Direct current and alternating current circuit analysis including Ohm's law and Kirchhoff's laws. Measurement and characterization of electronic systems, data collection, and reporting results. Comparing system and component performance to published specifications and developing troubleshooting techniques. Laboratory practice includes operation and proper use of standard test instruments. 36 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

ENGLISH AS A SECOND LANGUAGE (ESL)

ESL 100 Beginning Spelling for English Language Learners 1 units
This is a one semester beginning spelling class, designed to enable English language learners to recognize and use beginning sound/spelling patterns in English, develop an understanding of the sounds and symbols of English, including open/closed syllables, short and long vowel sounds, consonant and consonant cluster sounds, as well as the spelling of homophones and other problem words in everyday English. The course will also focus on basic dictionary skills to improve student autonomy. 18 hours lecture.
- Credit - Not Degree Applicable
- Grading Option: Pass/No Pass

ESL 110 Beginning Vocabulary Skills for English Language Learners 1 units
This is a beginning level vocabulary skills class, designed to enable English language learners to improve language proficiency by learning new vocabulary and developing vocabulary-building skills. The class will focus on the 0-1000 most common words in English, dictionary skills, and beginning morphology including prefixes, suffixes and roots. 18 hours lecture.
- Credit - Not Degree Applicable
- Grading Option: Pass/No Pass

ESL 115 Intermediate Vocabulary Skills for English Language Learners 1 units
This is an intermediate level vocabulary skills class, designed to enable English language learners to improve language proficiency by learning new vocabulary and developing vocabulary-building skills. The class will focus on the 1000-2000 most common words in English, dictionary skills, and intermediate morphology including prefixes, suffixes and roots. Prerequisite: Placement into intermediate ESL through the ESL assessment process.. 18 hours lecture.
- Credit - Not Degree Applicable
- Grading Option: Pass/No Pass

ESL 120A Intermediate Grammar for Reading and Writing 3 units
This is the first semester of a one-year course in intermediate grammar for academic writing and reading designed to enable students to identify, comprehend, and use linguistic forms accurately, meaningfully and appropriately in reading and writing. The course focuses on types of sentences, clauses, and phrases, word order, verb forms, verb tenses, and on the connection between vocabulary and grammar. Students are advised to enroll concurrently in ESL 120A and 121A, and 123 or 126. Prerequisite: or placement through the ESL assessment process. 54 hours lecture.
- Credit - Not Degree Applicable
- Grading Option: Pass/No Pass

ESL 120B High-Intermediate Grammar for Reading and Writing 3 units
This is the second semester of a one-year course in intermediate grammar for academic writing and reading designed to enable students to use linguistic forms accurately, meaningfully and appropriately in written expression. The course focuses on types of sentences, clauses, phrases, word order, verb forms, verb tenses, and on the connection between vocabulary and grammar. This course also emphasizes analyzing grammar and meaning and detecting and correcting grammatical errors. Students are advised to enroll concurrently in ESL 120B and 121B, and 123 or 126. Prerequisite: or placement through the ESL assessment process. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

ESL 121A Intermediate Reading and Writing 6 units
This is the first semester of a one-year course in intermediate academic writing and reading. Classes will focus on writing sentences, paragraphs and compositions, developing strategies for reading comprehension and flexibility, on interactive reading, and on academic vocabulary development. Students will develop cultural understanding, vocabulary, and fluency through a variety of academic writing and reading tasks. Students are advised to enroll concurrently in ESL 120A and 121A, and 123 or 126. Prerequisite: Placement through ESL assessment process. 108 hours lecture.
- Credit - Not Degree Applicable
- Grading Option: Pass/No Pass

ESL 121B High-Intermediate Reading and Writing 6 units
This is the second semester of a one-year course in intermediate academic writing and reading. Classes will focus on writing sentences, paragraphs and compositions, developing strategies for reading comprehension and flexibility, on interactive reading, and academic vocabulary development. Students will develop cultural understanding and fluency through a variety of academic writing and reading tasks. Students are advised to enroll concurrently in ESL 120B and 121B, and 123 or 126. Prerequisite: Placement through ESL assessment process. 108 hours lecture.
- Credit - Not Degree Applicable
- Grading Option: Pass/No Pass

ESL 123 Intermediate Oral Communication 2 units
This is an intermediate level oral communication course. This course will enable students to use linguistic forms accurately, meaningfully and appropriately, emphasizing academic listening and speaking skills: listening and speaking in small groups, listening to short lectures on academic topics, learning academic vocabulary and expressions, making presentations on new topics. Prerequisite: Placement through the ESL assessment process.. 36 hours lecture.
- Credit - Not Degree Applicable
- Grading Option: Pass/No Pass

ESL 126 Intermediate Pronunciation and Fluency 2 units
Focused practice on recognizing and producing individual speech sounds, stress patterns, rhythm and intonation patterns, and grammatical signals through activities such as oral presentations, role play, authentic dialogue, and reading presentations. Prerequisite: placement through ESL assessment process. 36 hours lecture.
- Credit - Not Degree Applicable
- Grading Option: Pass/No Pass

ESL 130A Beginning Grammar for Reading and Writing 3 units
This is the first semester of a one-year course in beginning grammar for academic purposes designed to enable students to understand and use English accurately, meaningfully and appropriately. The course focuses on the connection between vocabulary and grammar, simple and compound sentences, phrases, verb forms, and verb tenses, especially simple present, simple past, and present progressive. Students are advised to enroll concurrently in ESL 130A and 131A, and 133 or 136. Prerequisite: Placement through the ESL assessment process. 54 hours lecture.
- Credit - Not Degree Applicable
- Grading Option: Pass/No Pass

ESL 130B High-Beginning Grammar for Reading and Writing 3 units
This is the second semester of a one-year course in beginning grammar for academic purposes designed to enable students to identify and use linguistic forms accurately, meaningfully and appropriately in written expression. The course focuses on simple and compound sentences, word order, verb tenses: simple present, past, and future as well as present and past progressive, verb forms, modals, phrases, and vocabulary development. Students are advised to enroll concurrently in ESL 130B and 131B, and 133 or 136. Prerequisite: or placement through the ESL assessment process. 54 hours lecture.
- Credit - Not Degree Applicable
- Grading Option: Pass/No Pass

ESL 131A Beginning Reading and Writing 6 units
This is the first semester of a one-year course in beginning academic writing and reading. Classes will focus on writing simple and compound sentences in short paragraphs, on developing strategies for increasing reading comprehension and flexibility, on interactive reading, and on developing academic vocabulary. Students will develop cultural understanding and fluency through a variety of writing and reading tasks. Students are advised to enroll concurrently in ESL 131A and 130A, and 133 or 136. Prerequisite: Appropriate skill level demonstrated through the ESL assessment process. 108 hours lecture.
- Credit - Not Degree Applicable
- Grading Option: Pass/No Pass

ESL 131B High-Beginning Reading and Writing 6 units
This is the second semester of a one-year course in beginning academic writing and reading. Classes will focus on writing simple, compound, and complex sentences in structured paragraphs, on developing strategies for increasing reading comprehension and flexibility, on interactive reading, and on developing academic vocabulary. Students will develop cultural understanding and fluency through a variety of writing and reading tasks. Students are advised to enroll concurrently in ESL 131B and 130B, and ESL 133 or 136. Prerequisite: Placement through ESL assessment process. 108 hours lecture.
- Credit - Not Degree Applicable
- Grading Option: Pass/No Pass

ESL 133 Beginning Oral Communication 2 units
This is a beginning oral communication course. This course will enable students to use English accurately, meaningfully and appropriately, emphasizing conversational skills: listening and speaking in small groups, using new grammar structures orally, learning new words and expressions, comprehending and using idiomatic expressions. Prerequisite: Placement through the ESL assessment process.. 36 hours lecture.
- Credit - Not Degree Applicable
- Grading Option: Pass/No Pass

ESL 136 Pronunciation and Fluency 2 units
Focused practice on recognizing and producing individual speech sounds, stress patterns, rhythm and intonation patterns, and grammatical signals through activities such as oral presentations, role play, authentic dialogue, and presentations. Students will focus on developing listener friendly pronunciation. Course content includes individual as well as group work. Prerequisite: Placement through the ESL Assessment process.. 36 hours lecture.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

ESL 23 Advanced Grammar 3 units
This is a one semester advanced grammar course for academic purposes. The course focuses on sentences, clauses, and phrases, verb tenses and forms, auxiliary verbs and modals, and grammar analysis primarily to enhance reading comprehension. Students are advised to enroll concurrently in ESL 23 and ESL 24 or 25. Prerequisite: placement through the ESL assessment process. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ESL 24 Advanced Reading and Composition I 6 units
This is the first semester of a one-year advanced reading and writing course for academic purposes. Emphasis is on critical reading techniques and writing expository essays as well as on grammar and vocabulary development. Prerequisite: Placement through the ESL assessment process. 108 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ESL 25 Advanced Reading and Composition II 6 units
This is the second semester of a one-year reading and writing course for academic purposes. Emphasis is on critical reading and techniques of exposition, analysis, and argumentation. Prerequisite: Placement through the ESL assessment process. 108 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ESL 26 Advanced Editing 3 units
This course is designed to increase students' awareness of their own use of written language and give them practice in editing strategies which will enable them to use linguistic forms accurately, meaningfully and appropriately in written expression. Students are advised to enroll concurrently in ESL 26 and ESL 24 or 25. Prerequisite: placement through the ESL assessment process. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ETHNIC STUDIES (ETHS)

ETHS 1 Introduction to Ethnic Studies 3 units
This course introduces students to the interdisciplinary approach of Ethnic Studies and its major concepts and analyses. By relying on social justice and the anti-racist tradition, the course examines the histories, current issues, and unique lived experiences of major American racial and ethnic groups including African Americans, Asian and Pacific Islander Americans, Native Americans, and Chicanx/Latinx Americans along with the intersection of racial and ethnic identities with other forms of social identity such as class,

gender, sexuality, religion, indigeneity, and immigration status. 54 hours lecture.
- Credit - Not Degree Applicable
- Grading Option: Letter or P/NP

ETHS 10 Introduction to African American and Black Studies 3 units
This course introduces students to the interdisciplinary approach of African American and Black Studies and its major concepts and analyses. By relying on social justice and the anti-racist tradition, the course examines the histories, current issues, and unique lived experiences of African Americans along with the intersection of racial and ethnic identities with other forms of social identity such as class, gender, sexuality, religion, indigeneity, and immigration status. 54 hours lecture.
- Credit - Not Degree Applicable
- Grading Option: Letter or P/NP

ETHS 20 Introduction to Asian and Pacific Islander American Studies 3 units
This course introduces students to the interdisciplinary approach of Asian and Pacific Islander American Studies and its major concepts and analyses. By relying on social justice and the anti-racist tradition, the course examines the histories, current issues, and unique lived experiences of Asian and Pacific Islander Americans with the intersection of racial and ethnic identities with other forms of social identity such as class, gender, sexuality, religion, indigeneity, and immigration status. 54 hours lecture.
- Credit - Not Degree Applicable
- Grading Option: Letter or P/NP

ETHS 30 Introduction to Chicanx and Latinx Studies 3 units
This course introduces students to the interdisciplinary approach of Chicanx and Latinx Studies and its major concepts and analyses. By relying on social justice and anti-racist tradition, the course examines the histories, the current issues, and the unique lived experiences of Chicanx and Latinx Americans along with the intersection of racial and ethnic identities with other forms of social identity such as class, gender, sexuality, religion, indigeneity, and immigration status. 54 hours lecture.
- Credit - Not Degree Applicable
- Grading Option: Letter or P/NP

ETHS 40 Introduction to Native American and Indigenous Studies 3 units
This course introduces students to the interdisciplinary approach of Native American and Indigenous Studies and its major concepts and analyses. By relying on social justice and anti-racist tradition, the course examines the histories, the current issues, and the unique lived experiences of Native Americans and the intersection of racial and ethnic identities with other forms of social identity such as class, gender, sexuality, religion, indigeneity, and immigration status. 54 hours lecture.
- Credit - Not Degree Applicable
- Grading Option: Letter or P/NP

ETHS 5 Psychology of Race and Identity 3 units
This course is an introduction to the impact of race and ethnicity on identity in the United States, which focuses on how these influence human behavior and shape one's understanding of the world around them. We will study a variety of topics related to race, ethnicity, social and cultural group developmental norms and the extent of influence these norms may have on an individual's worldview. This course seeks to strengthen diversity awareness and knowledge by engaging in difficult discussions surrounding race and identity. This course will review a broad range of theories and research findings regarding race and ethnicity's influence on human behavior and cognitive process. Topics covered include stereotypes, prejudice, discrimination, racism, the intersection between race, ethnicity and other forms of oppression, privilege, and identity development. Students who have completed, or are enrolled in, PSYC 21 may not receive credit. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ETHS 6 Introduction to Race and Ethnicity 3 units
Racial and ethnic relations in the United States. Examines the cultural, political, and economic practices and institutions that support or challenge racism, racial and ethnic inequalities, as well as patterns of interaction between various racial and ethnic groups. Students who have completed, or are enrolled in, SOC 3 may not receive credit. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

ENVIRONMENTAL STUDIES (EVST)

EVST 5 Energy and Sustainability 3 units
Introduction and exploration of Energy production, utilization, management, and the effects on society and the environment. This course will also compare and contrast current and future renewable and non renewable methods of energy generation, auditing, and conservation. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

EVST 5L Energy and Sustainability Laboratory 1 units
This course is designed to give students interested in environmental studies and sustainability a hands-on laboratory experience. Students will explore traditional and renewable energy sources and storage. They will learn about electricity, heat transfer, different kinds of radiation, home energy audits, and laboratory safety. The course is designed to accompany EVST 5 Energy and Sustainability. 54 hours laboratory.
- Credit - Not Degree Applicable
- Grading Option: Letter or P/NP

FRENCH (FREN)

FREN 1A Beginning French 5 units
This introductory level course will enable students to begin speaking, reading and writing elementary level French as well as understanding the spoken language. Students are introduced to concepts of grammar, vocabulary and verb tenses in a variety of auditory, visual and written contexts. 90 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

FREN 1B Elementary French 5 units
This is the second semester of the introductory level course and will enable students to continue learning to speak, read and write elementary level French as well as to understand the spoken language. Students are introduced to concepts of grammar, vocabulary and verb tenses in a variety of auditory, visual and written contexts. Prerequisite: appropriate skill level demonstrated through the assessment process.. 90 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

FIRE SERVICE TECHNOLOGY (FST)

FST 1 Fire Protection Organization 3 units
This course provides an overview to fire protection and emergency services, career opportunities in fire protection and related fields, culture and history of emergency services, 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, introduction to fire strategy and tactics, and life safety initiatives. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

FST 10 Fire Academy Preparation 1 units
This course provides an orientation to the Firefighter 1 and Firefighter 2 Academy. This course concentrates on the 10 Mandatory testable evolutions for the IFSAC and PRO Board testing for the Structural Module of a CSFM ARTP/ALA Fire Academy. This course can also be used as a bridge summer course for High School students and others wishing to learn more about the physical and psychological rigors of a Fire Academy. The intended audience is HS students looking for a summer program, or students who have completed FST 7 Fire Service Conditioning and wish to expand their knowledge of commonly used tools and equipment. 9 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

FST 11C Standalone Firefighter I Skills Practice and Testing 1.5 units

This course prepares students to meet the State Fire Training (SFT) requirements for Fire Fighter I (FFI) including the capstone knowledge and skills necessary to pass. Upon successful completion of the IFSAC and Pro-Board Certification Exams at the end of the course, students will receive a pass letter from the SFT. Prerequisite: Completion of a Fire Academy using the Firefighter 2013 curriculum as the described by California State Fire Training and a letter from a recognized fire agency attesting to the fact that the applicant has met the aforementioned requirement.. 9 hours lecture, 54 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Pass/No Pass

FST 12 LPC Regional FIRE Academy - Firefighter 1 and Firefighter 2 17 units

This course provides the skills and knowledge needed for the entry-level firefighter to perform structural suppression activities, wildland fire suppression activities and hazardous materials mitigation and containment activities. This course covers topics in both Firefighter 1 and Firefighter 2 in accordance with the California State Fire Marshall 2019 Curriculum. Prerequisite: A valid State of California EMT or PARAMEDIC license issued by the CA EMSA also meet this prerequisite., A valid CPAT (Candidate Physical Agility Test) or a BIDDLE (Firefighter Physical Agility) test also meet this prerequisite.. 180 hours lecture, 378 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter Grade

FST 13 LPC Regional Fire Academy-Firefighter 2 Module 2.5 units

This course provides the skills and knowledge needed for the fire fighter to take on increased leadership roles and responsibilities pertaining to fire department communications, rescue operations, and fire and life safety initiatives, preparedness and maintenance of power tools. Prerequisite: Completion of a state approved ALA or ARTP Firefighter 1 academy which includes IFSAC Proboard certification testing. This may be taken concurrently with the Firefighter 1 academy with instructor approval.. 27 hours lecture, 54 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

FST 2 Principles of Fire and Emergency Services Safety and Survival 3 units

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; assessing fire dangers and handling common fire situations; risk abatement and personal preparation for unforeseen fire emergencies; roles and responsibilities in educating the public on fire safety; development of a survival attitude using problem-solving techniques for increased situational awareness and self-reliance in an emergency. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

FST 20 CO 2A Human Resource Management for Company Officers 2.5 units

This course provides information on the use of human resources to accomplish assignments, evaluating member performance, supervising personnel, and integrating health and safety plans, policies, and procedures into daily activities as well as the emergency scene. This is a required course for any Firefighter within State Fire Training and certification track who is seeking promotion to the rank of Company Officer. This course follows all applicable mandates and content as identified by the CSFM State Fire Training description. Prerequisite: Must be a graduate from an ARTP fire fighter academy, or ALA fire fighter academy, or equivalent.. 45 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

FST 21 CO 2B General Administrative Functions for Company Officers 1.5 units

This course provides information on general administrative functions and the implementation of department policies and procedures and addresses conveying the fire department's role, image, and mission to the public. Prerequisite: Must be a graduate from an ARTP fire fighter academy, or ALA fire fighter academy, or equivalent.. 27 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

FST 22 CO 2C Fire Inspections and Investigation for Company Officers 2.5 units

This course provides information on conducting inspections, identifying hazards and addressing violations, performing a fire investigation to determine preliminary cause and securing the incident scene and preserving evidence. This course is a requirement for aspiring Firefighters seeking promotion as a company officer. Prerequisite: Must be a graduate from an ARTP fire fighter academy, or ALA fire fighter academy, or equivalent.. 45 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

FST 23 CO 2D All - Risk Command Operations for Company Officers 2.5 units

This course provides information on conducting incident size-up; developing and implementing an initial plan of action involving single and multi-unit operations for various types of emergency incidents to mitigate the situation following agency safety procedures; conducting pre-incident planning; and develop and conduct a post incident analysis. Prerequisite: Must be a graduate from an ARTP fire fighter academy, or ALA fire fighter academy, or equivalent.. 45 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

FST 24 CO 2E Wildland Incident Operations for Company Officers 2.5 units

This course provides information on evaluating and reporting incident conditions, analyzing incident needs, developing and implementing a plan of action to deploy incident resources completing all operations to suppress a wildland fire, establishing an incident command post, creating an incident action plan, and completing incident records and reports. Prerequisite: Must be a graduate from an ARTP fire fighter academy, or ALA fire fighter academy, or equivalent.. 45 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

FST 25 Instructor 1 2.5 units

Provides skills and knowledge needed for entry-level professional instructor to perform his or her duties safely, effectively, and competently. The curriculum is based on the 2012 edition of NFPA 1041 Standard for Fire Service Instructor Professional Qualifications. At the end of this course, candidates for Instructor I certification will be able to teach and deliver instruction from a prepared lesson plan utilizing instructional aids and evaluation instruments. The Instructor I will also be able to adapt a lesson plan and complete the reporting requirements to the local jurisdiction. Prerequisite: Must be a graduate from an ARTP fire fighter academy, or ALA fire fighter academy, or equivalent.. 45 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

FST 26 Ethical Leadership for Fire and Emergency Services Instructors 0.5 units

This course provides the knowledge and skills needed to identify the value of ethical behavior in instructional settings, describe how ethical norms influence individual ethics, identify a personal ethical perspective and core values and how they impact communication and ethical decision making, and make an ethical decision using an ethical decision-making model, in order to assist in making ethical decisions when faced with an ethical dilemma in an instructional setting and carry out the roles and responsibilities of an SFT instructor in an ethical manner. Prerequisite: Must be a graduate from an ARTP fire fighter academy, or ALA fire fighter academy, or equivalent.. 9 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

FST 3 Fire Behavior and Combustion 3 units

Theory and fundamentals of why fires start, spread, and are controlled. An in-depth study of fire chemistry and fire physics, characteristics of materials, extinguishing agents, and fire control techniques. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

FST 30 Basic Firefighter Skills and Update 2 units

This course is designed for currently employed and volunteer Firefighters and covers fire service topics in a classroom and manipulative setting that

includes required skills maintenance and updated tactical techniques. All subjects relate to the duties and responsibilities of the fire services in order to maintain a state of readiness. Course may be repeated to cover legally mandated training and new techniques. Prerequisite: Must be a graduate from an ARTP fire fighter academy, or ALA fire fighter academy, or equivalent.. 18 hours lecture, 54 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

FST 31 Intermediate Firefighter Skills and Update 2 units

This course is designed for currently employed and volunteer Firefighters and covers Intermediate fire service topics in a classroom and manipulative setting that includes required skills maintenance and updated tactical techniques. All Intermediate subjects relate to the duties and responsibilities of the fire services in order to maintain a state of readiness. Course may be repeated to cover legally mandated training and new techniques. Prerequisite: Must be a graduate from an ARTP fire fighter academy, or ALA fire fighter academy, or equivalent.. 18 hours lecture, 54 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

FST 32 Advanced Hazmat and Wildland Training for Firefighters 2 units

This course is designed for currently employed and volunteer firefighters and covers advanced Hazmat and Wildland topics, updates, and manipulative skills. All advanced subjects relate to the duties and responsibilities of the fire services in order to maintain a state of readiness. Course may be repeated to cover legally mandated training and new techniques. Prerequisite: Must be a graduate from an ARTP fire fighter academy, or ALA fire fighter academy, or equivalent.. 18 hours lecture, 54 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

FST 4 Fire Prevention 3 units

Provides fundamental knowledge relating to the field of fire prevention. Topics include history and philosophy of fire prevention and organization, organization and operation of a fire prevention bureau, use and applications fire codes and standards, plans review, fire inspections, identification and correction of fire hazards, fire and life safety education, and fire investigation. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

FST 5 Fire Protection Systems 3 units

This course provides information relating to the features of design, and operations of fire alarm systems, water-based suppression systems, special hazard fire suppression systems and water supply for fire protection, smoke and thermal detection systems. Installation, testing and maintenance of automatic or manual protection systems, water supply for sprinkler and standpipe systems, and portable fire extinguishers. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

FST 6 Building Construction for Fire Protection 3 units

This course provides the components of building construction related to fire and life safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at fire and collapse emergencies. Development and evolution of building and fire codes will be studied in their relationship to past fires and collapses in residential, commercial, and industrial occupancies. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

FST 7 Fire Service Conditioning & Physical Agility Development 1 units

This course is an introduction to the components of physical fitness development and conditioning, with an emphasis in preparing students for the physical agility performance and testing standards required of "Emergency First Responder" Candidates entering into Police or Fire Academies. Students will be presented instruction on proper warm-up and stretching techniques, how to maintain and develop the components of fitness through increased muscular strength and muscular endurance, cardiovascular endurance and recovery, and increased flexibility and balance. Students will be introduced to Circuit Training and will also receive skills instruction on various testing parameters of the Nationally approved and recognized Certified Physical Agility Test (CPAT). Students will additionally receive instruction on various "Tools of the Trade" (i.e., Ladders, Fire Hose, SCBA) for developing proper skills in handling, lifting and carrying techniques as well as developing cardio-respiratory control and aerobic conditioning while wearing a "Self Contained Breathing Apparatus" (SCBA) under conditions of physical exertion. 54 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter Grade

FST 8 Fire Strategy and Tactics 3 units

Fire Strategy and Tactics examines how a fire department responds to structure fires and other emergency incidents from the incident commander's viewpoint. The class examines strategies and tactics from the incident commander's viewpoint. Students are challenged with decision-making through a variety of occupancies as they utilize basic firefighting procedures and considerations. Principles of fire control, through utilization of manpower, equipment, extinguishing agents, and fire command and control procedures will be discussed and demonstrated. Using information on building construction types in fire control, pre-fire planning and the organized approach to decision making on the fire ground will be applied. The target audience for this course is second year FST students or working fire professionals who wish to promote to a supervisory role. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

GRAPHIC DESIGN & DIGITAL MEDIA (GDDM)

GDDM 2 Wordpress and Content Management Systems 3 units

Students will use WordPress to build dynamic websites that can be updated easily. Students are also introduced to PHP & MySQL, theme customization, and other CMS frameworks. 27 hours lecture, 81 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GDDM 29 Independent Study, Graphic Design & Digital Media 0.5 - 2 units

For course information, see "Independent Studies". 27-108 hours laboratory. 27 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GDDM 3 History of Graphic Design 3 units

This introductory survey course focuses on the history and development of graphic design as a discipline from the twentieth century to today. Students will develop an understanding of the evolution and role the graphic designer in shaping society and be introduced to outstanding historical and contemporary figures and their influence on contemporary culture. The course will also cover the advancements in technology and its influence in the design field. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GDDM 4 User Interface and User Experience Design 3 units

In this course students are introduced to the fields of User Experience Design and Interface Design. Key topics covered in this course are interaction design, mobile and desktop interface design, information architecture, user research, as well as UX planning documents such as wireframes and personas. Students learn many of the principles, processes, and techniques used to develop effective user interfaces. 27 hours lecture, 81 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GDDM 40 Design Shop: The Business of Design 3 units

The Design Shop business of the Visual Communications program creates work for clients on the Las Positas College campus. This course is designed for students who are ready to produce client-based work in print and/or for the web prior to seeking employment and/or applying for transfer to a 4-year institution. Students work one-on-one or in a team with the client while refining leadership skills and the full range of visual, oral and written techniques needed to produce industry standard client-based work. Students develop creative print and/or web solutions that meet the full

scope of the client's needs and that are of a quality that demonstrates the individual or team's work at industry-standard level. 27 hours lecture, 81 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GDDM 45A Digital Painting I 3 units

Students will be introduced to fundamental techniques of digital painting as well as hardware and software considerations. Students will create paintings from observation as well as from imagination. Course will focus on translating traditional painting principals into the digital realm. 27 hours lecture, 81 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GDDM 45B Digital Painting II 3 units

Students will build upon the fundamental techniques of digital painting. Students will create paintings from references as well as from imagination, paying close attention to lighting and color. Course will focus on development of style for commercial illustration. 27 hours lecture, 81 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GDDM 50 Graphic Design/Digital Media Fundamentals 3 units

Introduction to Digital Art and Design Media and their use in the vocations of Graphic Design, Web and Device Design, Information Design, and Digital Art and Photography. An exploration of the methods of conceptual development of visual content and the language of design to direct the use of these digital tools at basic technical level to bring this content to completion in print or on screen. 27 hours lecture, 81 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GDDM 51 Color Theory 3 units

A basic-level course highlighting color as an element for communication and expression in all visual fields. Covers key color systems and their relevance to graphic and other visual arts and creative and technical aspects of color. Students who have completed, or are enrolled in, ARTS 26 may not receive credit. 27 hours lecture, 81 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GDDM 52 Introduction to Typography 3 units

This course examines letterforms and fundamental typographic principles, with emphasis on the vocabulary of typographic form and its relationship to message/purpose in graphic design. Typography is the backbone of graphic design, and the ability to design effectively with type is essential for a graphic designer. Course includes applied history and theory highlighting type as an element for communication and expression. In-class focus on type legibility, readability, and visual appropriateness. 27 hours lecture, 81 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GDDM 53 Photoshop I 3 units

Technical and skill development course using the most recent version of Adobe Photoshop at the introductory to create and manipulate digital images, photographs and illustrations. Emphasis on basic to lower-intermediate level techniques and tools used to create image files suitable for print and screen. Design principles emphasized to create effective output through computer-based composition. 27 hours lecture, 81 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GDDM 54 Illustrator I 3 units

Technical and drawing skill development course using the latest version of Illustrator at the basic- to intermediate- level to render 2- and 3-D digital drawings and illustrations. Emphasis on basic- to intermediate-level techniques and tools used to create image files suitable for print and screen. Design principles emphasized to create effective output through computer-based composition. 27 hours lecture, 81 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GDDM 55 Web Design I 3 units

This introductory web design course takes a visual communications approach to the creation of web sites, and the fundamental techniques required to format text, illustrations, tables, and images for the web. Emphasis is placed on appropriate design for the web - beginning with a graphic user interface balanced with HTML5 code and CSS3 hand-coding that is functional, logical, and attractive, and bringing the concept to life using Dreamweaver. The course also includes detailed instructions on how to use Dreamweaver to create web content, as well as a introduction to Content Management Systems such as Wordpress, Joomla! and Drupal. 27 hours lecture, 81 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GDDM 56 Introduction to Graphic Design 3 units

Design and skills development course exploring the creative processes, methods, strategies and tools used in developing concepts and final designs in any visual field including the basic elements of design: line, texture, value, shape, color, light, and spatial concepts Emphasis is placed on experience applying design principles and conventions to create 2-dimensional work. Use of computers as digital design tool along with basic manual techniques relating to effective preparation, presentation, craftsmanship and professionalism in presentation. 27 hours lecture, 81 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GDDM 57 Branding and Identity Design 3 units

Students in this course will learn the process of brand development and implementation. From research and analysis through launch and governance, the course covers all aspects of the process and the best practices that build better brands. 27 hours lecture, 81 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GDDM 58 Photoshop II 3 units

Technical and design skill development course using Photoshop to create and manipulate images, illustrations, text and animations. Emphasis on intermediate- through advanced-level techniques and tools used to create photo-realistic composites, special effects, custom brushes, and Photoshop rendered imagery for print and screen. 27 hours lecture, 81 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GDDM 59 Illustrator II 3 units

Students in this course will use advanced features in Adobe Illustrator to create a number of illustrations with an emphasis on visual storytelling and development of personal style. Students will learn how to incorporate raster images, apply filters, explore the color guide, and utilize the perspective tool for developing stylistic effects. 27 hours lecture, 81 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GDDM 60 Creative Portfolio Development & Self Promotion 3 units

Student will develop strategies to promote oneself and one's work. Create and refine a design portfolio and resume to impress potential clients and employers. Practice effective techniques for oral and visual presentations, interviews, and client discussions. 27 hours lecture, 81 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GDDM 62 Web Design II 3 units

Develop technical and design skill needed to for the creation of of web sites including user interface considerations for desktop and mobile devices using Cascading Style Sheets. Emphasis placed on functional, logical, attractive, accessible and appropriate web site design for the client and end-user. Topics include techniques and tools required to format text, create animations and other content for the web. 27 hours lecture, 81 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GDDM 63 Website/Multimedia Production 3 units

Culminating class in study of technical and creative design techniques necessary to build industry-standard web site and interactive multimedia products. Students will learn how to create and deploy interactive and

motion design content to mobile, tablet, and desktop screens. 27 hours lecture, 81 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GDDM 64 InDesign I 3 units
This introductory level course in page layout and design uses Adobe InDesign software. Students assemble a variety of pieces such as booklets, brochures, magazines, newspapers, newsletters, and other communication materials. Emphasis is on learning techniques used by graphics professionals to create full-color pieces integrating text, photos, and illustrations. 27 hours lecture, 81 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GDDM 65 Elect Prepress/Print Prod 3 units
Culminating class in study of technical and creative design techniques necessary to produce accurate prepress files used to produce finished printed materials. Upon completion, students will show mastery of the creative process and technical skills necessary to produce individual- and team-based single- and multi-page print work to client and industry specifications. This course provides students with professional prepress and print work experience within Las Positas College and the surrounding community including participation in client briefing, Q & A, presentation, feedback and critique sessions. 27 hours lecture, 81 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GDDM 67 InDesign II 3 units
Students will learn to use InDesign to create press-ready layouts using industry standard techniques and best practices. Students create materials suitable for print-on-demand and traditional publishing, e-books, and digital publishing. Students will also learn to create interactive PDFs and fixed-layout EPUBs (PDFs, fixed-layout EPUBs) with slideshows, buttons, and videos. 27 hours lecture, 81 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GDDM 68 Creative Portfolio Preparation 3 units
Students in this class will revise and develop their existing body of work to be portfolio quality. Students will also create new works to fill gaps in their portfolio and to highlight an area of focus. The course will focus on skill-building, sharpening one's design sense, creative self-expression, and in-depth exploration of software and techniques. 27 hours lecture, 81 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GDDM 70 Photoshop and Lightroom for Photographers 3 units
Learn to use Lightroom and Photoshop in a workflow designed for digital photographers. Learn Best practices for digital workflows, database management, non-destructive parametric editing, color management, and output to print, web, slideshows, and photo book. Students who have completed, or are enrolled in, PHTO 70 may not receive credit. 27 hours lecture, 81 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GEOGRAPHY (GEOG)

GEOG 1 Introduction to Physical Geography 3 units
This course is a spatial study of the Earth's dynamic physical system and processes. Topics include: Earth-sun geometry, weather, climate, water, landforms, soil, and the biosphere with emphasis on spatial characteristics, change over time, interactions between environmental components, and human-environment interactions. Tools of geographic inquiry are also briefly covered; they include maps, remote sensing, Geographic Information Systems (GIS) and Global Positioning Systems (GPS). 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

GEOG 12 Geography of California 3 units
A thematic approach to the state's issues, processes and topics relevant to geography including climate, landforms, natural vegetation, water resources, cultural landscape, ethnic diversity, urban and agricultural regions, and the economy. This course explores the physical and human landscapes that have evolved as a result of the human-environment interface. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

GEOG 15 Introduction to GIS 3 units
Study of Geographic Information Systems (GIS) science and its applications to spatial data management. Identification and acquisition of GIS data. Assessment of vector and raster systems, scale, resolution, map projection, coordinate systems, georeferencing and Global Positioning Systems (GPS). Spatial analysis and modeling with GIS. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

GEOG 1L Introduction to Physical Geography Laboratory 1 units
This course is designed to provide supplemental exercises in topics covered in physical geography lecture. Lab experience will include map analysis and interpretation, weather prognostication, landform processes and evolution, tectonics, biogeography, and habitat analysis. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

GEOG 2 Cultural Geography 3 units
The course is a study of diverse human populations, their cultural origins, diffusion and contemporary spatial expressions. Topics include: demogrpahy, languages and religions, urbanization and landscape modification, political units and nationalism, and economic systems and development. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

GEOG 5 World Regional Geography 3 units
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. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

GEOG 8 Introduction to Atmospheric Science 3 units
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. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

GEOLOGY (GEOL)

GEOL 1 Physical Geology 3 units
The Earth, its materials, its internal and external processes, and its development through time. Emphasis is placed on a thorough global understanding of Plate Tectonics as a framework and foundation for subsequent geologic topics and concepts. Topics include volcanoes, earthquakes and seismology, the Geologic Time Scale and the formation of the earth, rocks and minerals, hydrology, erosion, beach systems, environmental geology, glaciation, groundwater, etc. Course content includes the historical development of key geologic concepts. This is the foundation course for almost all subsequent geology courses for both geology majors and non-majors. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GEOL 12 Introduction to Oceanography 3 units
Introduction to the oceans, the history of oceanic science, instrumentation and exploration; marine geology including plate tectonics and shoreline processes; physical and chemical properties of sea water; causes and effects of currents, tides, and waves; introduction to the basic types of marine life, the basic marine habitats and ecosystems; distribution of marine resources and the Law of the Sea. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GEOL 12L Introduction to Oceanography Laboratory 1 units

Laboratory course to supplement the oceanography lecture course. Introduction to the materials and techniques of oceanic science. Includes sea floor rocks, oceanic geography, bathymetric maps, seismic reflection, seawater physics and chemistry, beach sand, tides, waves, marine life and marine fossils, sea floor spreading rates, etc. 54 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GEOL 1L Physical Geology Laboratory 1 units

Laboratory course to supplement the physical geology lecture course. Introduction to the materials and techniques of geology. Includes minerals, rocks, topographic and geologic maps, structural geology, identification and interpretation of landforms, geologic time and relative age dating analysis, etc. 54 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GEOL 2 Historical Geology 4 units

An introduction to Earth's history and the life it supports with a laboratory. Subjects include geologic dating, plate tectonics, stratigraphy, fossils, biological evolution, the planet's origin and the processes that have influenced paleogeography during the past 4.6 billion years. 54 hours lecture, 54 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GEOL 20 Earth Science for Educators 4 units

An introduction to the essentials of Earth Science with a laboratory. Topics include 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. 54 hours lecture, 54 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GEOL 5 Environmental Geology: Hazards & Disasters 3 units

Understanding and planning for the effects of natural hazards and disasters on the earth, the ecosystem and human populations. Content covers the basic natural hazard processes, where and why they occur, as well as considerations for environmental land-use planning. Environmental hazards studied include earthquakes, volcanoes, river systems (including floods and dams), landslides, coastal erosion, tsunamis, sinkholes, etc. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GEOL 7 Environmental Geology: Resources, Use Impact & Pollution 3 units

Understanding how and where Earth's environmental resources are created and located, and then studying how the resources are accessed and utilized. Topics include rock and mineral resources, energy resources (including fossil fuel and non-fossil fuel resources), water (including rivers, reservoirs, groundwater, etc.), waste disposal (including water and air pollution), global climate changes (including the greenhouse effect), etc. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

GLOBAL STUDIES (GS)

GS 1 Introduction to Global Studies 3 units

This course looks at the economic and political forces that have led to rapid changes in global interaction and culture over the past century, with special emphasis on the last twenty years. It explores the issues of nationalism, global citizenry, state violence, terrorism, the global economy, migration, the threatened environment, technology, and the role of multinational media industries on culture. Students who have completed, or are enrolled in, SOC 5 may not receive credit. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

GS 2 Global Issues 3 units

This course introduces students to the origins, current status, and future trends of major transnational issues confronting the global community. Topics can include population trends, economic development and inequality, basic human needs (for food, water health care), human rights, international conflict and security concerns, and environmental problems. The course also focuses on global governance, including the study of collective global responsibilities. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

HEALTH (HEA)

HEA 1 Introduction to Personal Health 3 units

An exploration of major health issues and behaviors in the various dimensions of health (physical, emotional, intellectual/mental, social, spiritual, and environmental). Emphasis is placed on individual responsibility for personal health and the promotion of informed, positive health behaviors. Topics include psychological health, mental health, stress management, nutrition, exercise, weight management, chronic and infectious diseases, healthy relationships, sexual health, drug use and misuse, aging, and the health care system. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

HEA 11 Health and Social Justice 3 units

This course provides an introduction to the health inequities specifically within the United States that stem from the unequal distribution of power, wealth, education, and services. Students will explore the social determinants of health including socioeconomic status, poverty, racism, violence, and living conditions. Agency, advocacy, community organizing, and policy development will be included. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

HEA 29 Independent Study, Health 0.5 - 2 units

Supervised study in the area of Health. Any student interested in registering for an Independent Studies course should contact a full/part-time instructor or dean in the appropriate area. 27 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

HEA 3 Women's Health 3 units

Physiological, psychological, social, cultural, and political influences on women's health. Emphasis on diversity of women's health experiences and factors involved with both population level health outcomes and individual decision-making. Focus on empowerment for primary prevention. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

HEA 7 Introduction to Public Health 3 units

An introduction to the discipline of Public Health including basic concepts and terminologies of public health, as well as the history and accomplishments of public health professionals and agencies. An overview of the functions of various public health professions and institutions, and an in-depth examination of the core public health disciplines will be covered. Topics include epidemiology of infectious and chronic diseases; prevention and control of diseases in the community; analysis of the social determinants of health; health disparities among various populations; strategies for disease reduction; community organizing and health promotion programming; environmental health and safety; global health; and healthcare policy. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

HISTORY (HIST)

HIST 1 Western Civilization to 1600 3 units

This course traces the origins and development of Western civilization from its beginnings in the Ancient Near East, the Fertile Crescent, and the Middle East, through its expansion into Greece, Rome, and the rest of Europe. Topics include the rise and expansion of Christianity and Islam, the Middle Ages, the Renaissance, and the Protestant Reformation. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

HIST 14 History and American Cultures of California 3 units

The history of California from its pre-contact societies to the present, with particular attention to the following periods: Spanish exploration and colonization; the Mexican Revolution; American conquest and the Gold Rush; the Progressive Era; the Great Depression and World War II; and the social movements of the 1960's. In addition to exploring the major political, economic, technological, social, cultural, and environmental developments that have shaped California's history, this course will focus on the distinct and overlapping experiences of the state's Native American, Latino American, African American, Asian American, and European American populations. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

HIST 2 Western Civilization since 1600 3 units

This course traces the history of Western civilization from the 1600s to the present. Topics include the Scientific Revolution, the Enlightenment, and the Industrial Revolution; the American and French Revolutions; World Wars I and II; the Cold War and its end; and the challenges of the modern era. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

HIST 25 American Indian History 3 units

Historical survey of American Indians in the United States from earliest times to the present day. Emphasis on Indian societies and cultures, Indian relations with predominant cultures, Indian movement for self-preservation, and historical background necessary to understand contemporary problems of the Indians. Emphasis on the Indians of California and the West. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

HIST 28 History of American West 3 units

A history of the trans-Mississippi West of the United States. Emphasis will be placed on Native American history and cultures, European and Anglo-American frontiers, expansion of the United States in the 19th century, and the interaction of Native American, European American, Asian American, African American and Hispanic American peoples, and the significance of the West in American history. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

HIST 3 World History to 1500 3 units

Survey of the experience of all peoples with vastly different cultures inhabiting a single globe. Emphasizes the emergence of human communities, formation of complex societies, development of major belief systems and interaction with the environment based on experience, knowledge, and technology to c. 1500. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

HIST 32 U.S. Women's History 3 units

A survey of United States women’s history from its indigenous origins through the present. This course emphasizes the interaction and experiences of diverse racial/ethnic groups that include at least three of the following groups: African-Americans, Chicana/Latina Americans, Asian Americans, European Americans, and Native Americans. Special areas of focus include women’s role in the political, economic, social, and geographic development of the United States. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

HIST 4 World History since 1500 3 units

This course covers the experience of all the world’s people from the early modern era to the present. Emphasis is upon the interaction of people with the environment based on the development of technology and conflict between traditional systems and new(er) orders. Broader forces that affect civilizations such as borderlands, exploration and travel, gender and class will be studied. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

HIST 7 US History Through Reconstruction 3 units

A survey of United States history from its pre-colonial, indigenous origins through the end of Reconstruction. Emphasis on (1) distinctively American patterns of political, economic, social, intellectual, and geographic developments, (2) the interaction amongst and the experiences of diverse racial, ethnic and socioeconomic groups in American History, and (3) the evolution of American institutions and ideals including the U.S. Constitution, the operations of the U.S. government, and the rights and obligations of U.S. citizens under the Constitution. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

HIST 8 US History Post-Reconstruction 3 units

History of the United States from the post-Civil War period to the present. Emphasis on (1) distinctively American patterns of political, economic, social, intellectual and geographic developments, (2) the framework of California state and local government, and the relationship between state/local government and the federal government. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

HORTICULTURE --LPC (HORT)

HORT 50 Introduction to Horticulture 3 units

Botanical nomenclature, anatomy and physiology, plant growth and development are presented. Soils, media, fertilizers, and watering methods are discussed. Preliminary Landscape design, installation and maintenance is included. Current practices of plant propagation, plant disorders and pest management, and 21st Century horticulture trends will be explored. (8 hours of lab to be scheduled on Saturdays which may include one or more field trips). 45 hours lecture, 27 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

HORT 51 Fall Plant Material Identification 3 units

Identification of landscape and garden plants will be categorized. Growth habit, climatic adaptation, ornamental value, maintenance and care of trees, shrubs, vines will be studied, with the focus on deciduous trees and fall flowering plants. (8 hours of lab to be scheduled on Saturdays which may include one or more field trips). 45 hours lecture, 27 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

HORT 52 Spring Plant Material Identification 3 units

Identification of landscape and garden plants will be categorized. Growth habit, climatic adaptation, ornamental value, maintenance and care of trees, shrubs, vines will be studied, with the focus on evergreen and spring flowering plants. (8 hours of lab to be scheduled on Saturdays, which may include one or more field trips). 45 hours lecture, 27 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

HORT 53 Landscape and Vineyard Pest and Disease Management 3 units

This course covers concepts of plant pathology, entomology, and weed science which are studied in order to identify symptoms, diagnose problems, and determine methods of controlling plant diseases, insects, and weed pests. Also included is the study of the identification and biology of common vineyard, landscape and other horticultural crop pests and diseases. Materials and instruction is provided for techniques and strategies for sampling, monitoring and effective control measures, pest management strategies for insects, weeds and diseases, including bio-control, sustainable agriculture practices and integrated pest management. In addition to pesticide use, safety and compliance, there is a focus on preparation for the California State Qualified Applicators license. Students that take VWT 35 may not receive credit for HORT 53. 45 hours lecture, 27 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter Grade

HORT 54 Landscape and Vineyard Soils, Fertilizers, and Irrigation 3 units

This course is a study of the physical, chemical and biological properties of soil. Areas of study will include: soil classification, derivation, uses, function and management including erosion, moisture retention, structure, cultivation, organic matter and microbiology. There is a focus on vineyard and landscape planting media, soil substitutes, hydroponics, and amendments to improve and promote plant growth which includes plant and vine nutrition, essential nutrients required for plant growth and healthy development. There will be instruction covering materials used for fertilizers which includes material origins, use, and application; and irrigation systems

which will cover materials required for basic irrigation systems used in vineyard and landscape settings. Students that take VWT 12 may not receive credit for HORT 54. 45 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

HORT 55 Greenhouse, Nursery, and Garden Center Management 3 units
Explores many horticulture specializations including management and operations of retail and wholesale nurseries, greenhouse growers, specialized growers of trees, shrubs, flowers, hydroponics growers, vegetable growers. Emphasis on plant propagation, propagation structures, greenhouses, nursery and garden center management and operations. Employment opportunities are in the wholesale and retail horticulture industry. 45 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

HORT 56 Arboriculture/Urban Forestry 3 units
Care, maintenance, planting, and pruning of trees, shrubs, and vines are discussed. Specific pruning techniques for ornamental trees, fruit trees, shrubs, roses, and other woody plants are demonstrated. Principles of urban forestry, tree preservation, health, growth characteristics, plant selection, planting, irrigation, fertilization, and damage repair are studied. (8 hours of lab to be scheduled on Saturdays, which may include one or more field trips). 45 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

HORT 57 Landscape and Turfgrass Management 2 units
Principles and practices of landscape and turfgrass management as practiced by horticultural professionals, landscape contractors, and grounds keepers will be covered, including preparation, installation, maintenance, renovation, irrigation, fertilization, pruning, and pest control of landscape developments for residential, commercial, public grounds, golf courses, and gardens. 27 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

HORT 58 Landscape Construction 3 units
Design, engineering, construction techniques, and installation methods for landscape site development. Cost estimating, bidding, construction materials, methods, equipment, tools, and safety for landscape plan implementation. Contracts, specifications, and legal aspects regarding landscape installation and site development. 45 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

HORT 59 Landscape Design 2 units
Landscape site planning and landscape architectural design for residential properties, home gardens, and small-scale use areas. Procedures and methods required in the planning and design process; site inventory, site analysis, user group analysis, preparation of site study diagrams, preliminary designs, and master site plans. Theory and principles of design, site layout, landscape elements, and material selection. Sketching, drafting, delineation, reproduction, and coloring techniques for landscape architectural plans. Selection and use of drawing tools, materials, and equipment. 27 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

HORT 60 Landscape Irrigation Systems 3 units
Planning, design, engineering, construction, and maintenance of sprinkler and drip irrigation systems for landscape, garden, and turfgrass use. Principles of hydraulics, layout, and equipment application. Irrigation system equipment, components, methods of installation and repair. Principles and techniques of water conservation and plant-water-soil relations. 45 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

HORT 62 California Native and Dry Landscapes 2 units
This course examines the native plant communities of California and identifies native plants suitable for the design and installation of dry landscapes in Northern California. The focus of this course is the planning, design, installation, care, and maintenance of drought tolerant landscapes, with the goal of creating more sustainable landscapes. 27 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

HORT 63 Sustainable Landscape 2 units
This course examines the impact of constructed landscapes on the postindustrial society. Natural ecosystems are studied in order to learn concepts essential to create and maintain sustainable, environmentally sound landscapes. The focus of this course is on planning, designing, installing, and maintaining of landscapes, through the use of ecologically sound construction techniques, materials, and systems. 36 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

HORT 67 Interior Plantscapes 2 units
Identification, use, propagation, growth, environmental adaptation, ornamental value, and care of container, indoor, and house plants. 27 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

HORT 71 Fundamentals of Hydroponics and Aquaponics 2 units
The ecological design and operation of urban agriculture that covers the fundamental principles of raising fish and vegetable crops in soil-less media. 27 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

HORT 73 Computer Aided Design 3 units
Introduction to basic techniques in computer aided design for interior and exterior design, with emphasis on user terminology and hands-on learning. How to set up drawings, dimensioning systems appropriate to architecture. Floor plans, landscapes, details, drawings and other techniques using the computer. Students who have completed or are enrolled in INTD 40 may not receive credit. 36 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

HUMANITIES (HUMN)

HUMN 10 American Arts and Ideas 3 units
Humanities of the United States explored through major works of literature, painting, sculpture, architecture, film, music, philosophy, technology, religion, political and social institutions that reflect the values and meanings of the American cultural experience. Particular attention paid to the experience and contributions of various culture groups (African Americans, Asian-Americans, European-Americans, American Indians, and Latino Americans). 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

HUMN 11 Culture and the Arts I: Ancient World to the Renaissance 3 units
A survey of the artistic and intellectual accomplishments of human cultures from the Ancient to Early Renaissance Eras. Emphasis is on the study of ancient to medieval painting, sculpture, architecture, music, literature, theater, religion, and philosophy from both Western and non-Western cultures. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

HUMN 12 Culture and the Arts II: The Modern World 3 units
A survey of the artistic and intellectual accomplishments of human cultures from High Renaissance to Contemporary Eras, i.e. the Modern World. Emphasis is on the study of modern painting, sculpture, architecture, music, literature, theater, religion, and philosophy from around the globe. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

HUMN 2 Introduction to Film Studies 3 units
Introduction to film aesthetics, styles, and devices, as well as film theory and critical approaches to film analysis. Overview of film history, in addition

to film production, technology, and distribution. Emphasis on diverse responses to the art form of cinema and its impact on contemporary culture. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

HUMN 28 World Mythology 3 units
Introduction to world mythology, including classical mythology, and the mythic themes recurring in literature, the visual arts, and music. Introduction to the major theories used to evaluate mythology. Exploration of myths about creation, destruction, gods, humans, heroes, tricksters, as well as their origins, variation, historical development, and full expression in ancient times and continued presence in the arts. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

HUMN 29 Independent Study, Humanities 0.5 - 2 units
Supervised study in the area of Humanities. Any student interested in registering for an Independent Studies course should contact a full or part-time instructor or dean in the appropriate area. 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

HUMN 3 Introduction to Humanities 3 units
Introduction to the analysis and appreciation of theater, film, music, poetry, architecture, and the visual arts (e.g. painting and sculpture). 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

HUMN 4 Global Cinemas 4 units
Global cinema traditions analyzed through historical, political, cultural, commercial, and artistic perspectives. Screenings and interpretation of representative films from a variety of national and cultural film traditions from around the world, including films from Latin American, U.S., Asian, European, African, and Middle Eastern contexts. 72 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

HUMN 6 Nature and Culture 3 units
An examination of the aesthetic value of the natural environment leading to the development of an individual critical aesthetic of the natural world. Studies in visual art, including painting, photography, sculpture, land art, mixed media, film, literature, and music. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

INDEPENDENT STUDY (IND)

IND 21 Applied Enology 3 units
This is a fundamental course in the science and art of winemaking focusing on grape and wine chemistry, basic grape processing and wine production from vineyard to bottle. Lectures will build on the development of wine from the components in grapes through maturation, including ripeness parameters, pre and post fermentation management, alcoholic and malolactic fermentation. There will be a focus on wine health and integrity, the role and behavior of compounds found in musts and yeasts, and the relationship between wine and oak. There will be a strong emphasis on analytical methods and practical skills. Students under the age of 21 must have a declared major of either viticulture and/or enology to participate in any tasting activities as stated in the California State Assembly Bill 1989. 45 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

INTERIOR DESIGN (INTD)

INTD 10 Introduction to Textiles 3 - 3 units
The textile industry and its effects on the apparel and home furnishings markets. Fiber identification, yarn and fabric construction, and decoration. Emphasis on consumer information, fabric performance, care and labeling, and legal responsibilities of the industry. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

INTD 15 Drafting for Interior Design 3 units
Provides a working knowledge of tools and techniques for interior architectural drafting. emphasis on lettering, dimensioning floor plans, elevation and sections. Also, covers procedures for developing finished presentational drawings and boards. 36 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

INTD 20 History of Interiors/Furnishings 3 units
A survey of the history of interiors and furnishings from Egyptian period to the present. Emphasis on furniture styles and ornamentation. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

INTD 25 Materials and Resources 3 units
Survey of residential and commercial interior furnishings with attention to product knowledge of furniture, textiles, ceramics, glass, metals, plastics and composite materials. Skills needed to perform related activities. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

INTD 30 Fundamentals of Lighting 3 units
Residential and commercial lighting systems as they apply to what constitutes a well-lit interior space. Includes an investigation of current lighting types and lighting resources. 54 hours lecture, 0 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

INTD 35 Residential Space Planning 3 units
Basic techniques in planning space for interiors. Private and group living spaces, support systems, functional planning of interior space, and color in space planning. 36 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

INTD 40 Computer Aided Design 3 units
Introduction to basic techniques in computer aided design for interior and exterior design, with emphasis on user terminology and hands-on learning. How to set up drawings, dimensioning systems appropriate to architecture. Floor plans, landscapes, details, drawings and other techniques using the computer. Students who have completed or are enrolled in HORT 73 may not receive credit. 36 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

INTD 45 Basic Kitchen and Bathroom Design 3 units
Survey of the field of kitchen and bathroom designs. Includes resources, materials, trends, costs and needs, both functional and aesthetic. 36 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

INTD 47 Professional Practices 3 units
Interior design practices including business and marketing aspects, wholesale resource development, design presentation and career preparation, contractual obligations. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

INTD 5 Principles of Interior Design 3 units
Elements and principles of design as they apply to interior design. Emphasis on the use of color and texture in the selection of home furnishings. 36 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

JOURNALISM AND MEDIA STUDIES (JAMS)

JAMS 1 Introduction to Mass Communications 3 units
Survey of mass communication and the interrelationships of media with society, including history, structure, and trends in a digital age. Discussion of theories and effects, economics, technology, law and ethics, global media, media literacy, and social issues, including gender and cultural diversity. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

JAMS 11 Introduction to Reporting and Newswriting 3 units

An introduction to gathering, synthesizing/ organizing, and writing news in journalistic style across multiple platforms. Includes role of the journalist, analysis of exemplary journalistic models, and related legal and ethical issues. Students will report and write based on their original interviews and research to produce news content. Experiences may include covering speeches, meetings, and other events, writing under deadline and use of AP Style. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

JAMS 12 Introduction to Photojournalism 3 units

This course deals with the photographer as a journalist, focusing on theory and practice in press and publications photography, with emphasis on using the camera as a reporting and communications tool. Covered are news and feature photography and photographic essays, including composition, impact, and creativity, for newspapers, magazines, the Internet, and other mass communications media. Understanding and applying photojournalistic and basic technical and visual skills in the making of successful reportage photographs. Consideration of the work of major 20th and 21st century photojournalists. Students who have completed, or are enrolled in, PHTO 72 may not receive credit. 27 hours lecture, 81 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

JAMS 19A Journal of Arts, Literature, and Academic Writing A 3 units

Creation of a literary-style student magazine. Practical training in the managing, editing, formatting, and printing of a literary magazine. Enrollment constitutes the staff of the magazine. Students who have completed, or are enrolled in, ENG 19A may not receive credit. 36 hours lecture, 54 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

JAMS 19B Journal of Arts, Literature, and Academic Writing B 3 units

Creation of a literary-style student magazine. Practical intermediate-level training in the managing, editing, formatting, and printing of a literary supplement and/or magazine with a focus on the production process, including copy editing, design, layout, proofreading, working with the printer, and digital and print distribution. Enrollment constitutes the staff of the magazine. Students who have completed, or are enrolled in, ENG 19B may not receive credit. 36 hours lecture, 54 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

JAMS 2 Introduction to Media 3 units

A survey of radio, television, film, and multimedia and their impact on culture and society; includes economics, technological development, programming, ratings, legal aspects, and social control of broadcasting in America, and cross-cultural, international comparisons. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

JAMS 21A Express College Newspaper A 3 units

An applied course in which students practice and refine beginning journalism skills, including recognizing, acquiring, producing, and distributing content for the print and online editions of the student newspaper, the Express. The focus of study is on basic news, feature, and opinion stories. Students are introduced to concepts related to photojournalism, business management, graphic arts, design, social media, and leadership and editing skills. The course includes ethical, practical, and legal issues in journalism. 18 hours lecture, 108 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

JAMS 21B Express College Newspaper B 3 units

An applied course in which students practice and refine intermediate journalism skills, including recognizing, acquiring, producing, and distributing content for the print and online editions of the student newspaper, the Express. Focus is on in-depth news, feature and opinion stories. Students develop intermediate abilities in photojournalism, business management, graphic arts, design, social media, and leadership and editing skills. The course includes ethical, practical, and legal issues in journalism. 18 hours lecture, 108 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

JAMS 21C Express College Newspaper C 3 units

An applied course in which students practice and refine advanced journalism skills, including recognizing, acquiring, producing, and distributing content for the print and online editions of the student newspaper, the Express. Focus is on leadership, editing the work of others, improving writing and multimedia skills, and improving the Express. Enhanced leadership role includes outreach to the community and representation as journalist and leader at events. Students develop advanced abilities in writing, photojournalism, business management, graphic arts, design, social media, and leadership and editing skills. Students will produce newscasts, an infographics, and reader surveys. The course includes ethical, practical, and legal issues in journalism. Students should serve in a leadership role. 18 hours lecture, 108 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

JAMS 21D Express College Newspaper D 3 units

An applied capstone course in which students practice and refine advanced journalism skills, including recognizing, acquiring, producing, and distributing content for the print and online editions of the student newspaper, the Express. Focus is on completing a portfolio project, exploring career opportunities in the field, leading others, editing the work of others, improving writing and multimedia skills, and improving the Express. Students work to develop advanced abilities in writing, photojournalism, business management, graphic arts, design, social media, leadership, and editing skills. The course includes ethical, practical, and legal issues in journalism. Student assumes a leadership role and create workshops to benefit other staff members. 18 hours lecture, 108 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

JAMS 22 Express Editorial Board 1 units

The roles and responsibilities of leaders on the college newspaper, The Express. Practical experience participating in editorial board meetings, setting policy for the newspaper, and leading in the decision-making process for planning, budgeting, and the development of the newspaper. Enrollment is limited to student leaders on the Express. 18 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

JAMS 23 Multimedia Reporting 3 units

This course will provide an introduction to multimedia storytelling with a journalism emphasis. Techniques that will be explored include use of video, photos, audio, animation, and text to convey interactive news and feature stories through the Internet and other electronic media. It also will include techniques in digital research, critical thinking, and synthesis. It will introduce the legal and ethical issues in the recording of sources. Emphasis is placed upon the methods and techniques of multimedia reporting, including scripting, storyboarding, camera use, lighting, sound, and editing with video editing software such as Adobe Premiere Pro. 18 hours lecture, 108 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

JAMS 24A Naked Magazine: College Magazine A 3 units

Creation of a journalistic-style student magazine. Emphasis is placed on developing content, writing in-depth magazine articles, producing photographs and other visual elements, correlating copy and visuals, laying out pages in the production process, copy editing, promoting advertising, managing the business-side of the magazine, and exploring ethical issues. 36 hours lecture, 54 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

JAMS 24B Naked Magazine: College Magazine B 3 units

Leadership in the creation and promotion of a journalistic-style student magazine, including development of skills in areas of social media and multimedia. Emphasis is placed on practicing and refining intermediate-level journalism skills while developing content, writing in-depth magazine

articles, producing photographs and other visual elements, correlating copy and visuals, laying out pages in the production process, copy editing, promoting advertising, managing the business-side of the magazine, and exploring ethical issues. 36 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

JAMS 29 Independent Study, Journalism and Media Studies 0.5 - 2 units
Supervised study in the area of Mass Communications. Any student interested in registering for an Independent Studies course should contact a full/part-time instructor or dean in the appropriate area. 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

JAMS 3 Introduction to Public Relations 3 units
Introduction to the principles, history, development, and professional practice of modern public relations. Includes concepts of planning and executing effective communication strategies, including message design and distribution, for any organization. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KINESIOLOGY (KIN)

KIN 14 Responding to Emergencies: Comprehensive First Aid/CPR/AED 3 units
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, and AED certification(s) will be granted upon successful completion of requirements. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

KIN 15 First Aid & Safety 1.5 units
This course has been designed to help you acquire the knowledge and skills you will need to effectively respond to emergency situations. Topics Include: recognition and treatment for cardiac and respiratory emergencies, first aid for bleeding, shock, burns, poisoning, stroke, and various injuries. American Red Cross Standard First Aid and Community CPR/AED certificates issued upon successful completion of Red Cross requirements. 27 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

KIN 16 The Successful Student Athlete 1 units
This course is designed to assist the student-athlete in developing realistic expectations and goals of college, explore academic programs, and understand what is necessary to succeed in college while competing in an intercollegiate sport. This course will also discuss the probability of becoming a professional athlete and life after athletics. The rules and regulations of the California Community College Athletic Association (CCCAA), National Intercollegiate Athletic Association (NCAA), and the National Association of Intercollegiate Athletics (NAIA) will be defined and explored to bring awareness to the student-athlete regarding eligibility and transferring to a four-year institution. 18 hours lecture.
- Grading Option: Letter Grade

KIN 17 Intro to Athletic Training and Sports Medicine 4 units
Basic taping skills, introduction to modality usage, and basic rehabilitation principles of athletic training. Designed to be preparatory for further education and a career in Athletic Training and or other Sports Medicine related fields. May include work with intercollegiate sports programs. Legal and ethical issues, professionalism, organization and administration of a sports medicine facility. This course is focused on preparing those interested in becoming Athletic Trainers and Coaches. 54 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

KIN 18A Athletic Training Practicum 1 1 units
Designed to provide clinical experience for students interested in sports-related injury care and prevention. Organization of a clinical facility and management of game day operations. Experiences will include taping for prevention of injury, use of modalities for the treatment and/or rehabilitation of injuries, stretching techniques, identify and manage emergency situations. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

KIN 18B Athletic Training Practicum 2 1 units
This course will expose students to injury evaluation, methods of diagnosis and rehabilitation. The student will help make return to play decisions based on the knowledge they have learned in their coursework. The students will develop and administer conditioning programs to Las Positas College athletes with the guidance of the Certified Athletic Trainer. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN 19 Care and Prevention of Athletic Injuries 3 units
This course provides an introduction to the principles and scientific foundations of athletic training. Examination in the techniques used in the prevention of athletic injuries, including taping, bandaging, and strapping along with how to recognize and evaluate basic signs and symptoms associated with common injuries. Establishing a plan of care that includes rehabilitative exercise will also be studied. Legal and ethical issues, professionalism, organization and administration of a sports medicine facility. This course is focused on preparing those interested in becoming Athletic Trainers and Coaches. 36 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

KIN 22A Science of Soccer 1 3 units
An introduction to sociological, physiological, psychological, and performance aspects of soccer. This course will provide an analysis of the physiological demands of the game, as well as, the use of applied psychological techniques to enhance confidence and reduce anxiety. Socio-cultural influences on the development of the game and match performance will also be analyzed. 54 hours lecture, 0 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN 24 Sport Psychology 3 units
A formal introduction to the study of sport psychology focusing upon both the psychological factors that influence participation in sport and exercise and the psychological effects derived from that participation. Emphasis on understanding the psychological processes involved in human performance, models of intervention that can enhance and improve learning and performance conditions, and the strategies which can elicit and influence favorable psychological perceptions and outcomes. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN 26 Coaching Youth Soccer 3 units
This course is intended for those with an interest in coaching youth soccer. It will examine philosophies developed by US and European National Soccer Associations. The purpose is to explore best practices and age-appropriate activities, thereby enhancing the learning experience of the youth soccer participant. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN 29A Independent Study, Intercollegiate Athletics 0.5 - 2 units
Supervised study in the area of Intercollegiate Athletics. Any student interested in registering for an Independent Studies course should contact a full/part-time instructor or dean in the appropriate area. 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN 29K Independent Study, Kinesiology 0.5 - 2 units
Supervised study in the area of Kinesiology. Any student interested in registering for an Independent Studies course should contact a full/part-time instructor or dean in the appropriate area. 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN 29P Independent Study, Physical Education 0.5 - 2 units

Supervised study in the area of Physical Education. Any student interested in registering for an Independent Studies course should contact a full/part-time instructor or dean in the appropriate area. 27 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN 30 Introduction to Kinesiology 3 units

This class is designed to introduce the student to Kinesiology - the science of human movement (and of humans moving). Concepts in the various subfields of Kinesiology are examined and career opportunities in the field of Kinesiology are explored. Due to the interdisciplinary nature of Kinesiology, the field will be covered from a humanities, social science, and life science perspective. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN 32A Fall Intercollegiate Men's Basketball 3 units

Basketball training for intercollegiate competition. Daily practice for advanced skill development will occur. Fall semester. Number of times course may be taken for credit: 4. 162 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter Grade

KIN 32B Spring Intercollegiate Men's Basketball 1 - 2 units

Basketball training for intercollegiate competition. Daily practice for advanced skill learning will occur. Spring semester. Number of times course may be taken for credit: 4. 54 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter Grade

KIN 32C Off Season Intercollegiate Men's Basketball 1 - 2 units

Students will practice the skills of passing, dribbling, shooting, cutting, screening, and defensive fundamentals that are necessary for competitive basketball play. Students will learn the governing rules of basketball, the appropriate terminology used in basketball, and the safety procedures related to the game. Number of times course may be taken for credit: 4. 54 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter Grade

KIN 38A Pre-Season Intercollegiate Men's Soccer 1 - 2 units

Students will work on fundamental skills of soccer, such as, kicking, passing, trapping, heading and physical conditioning which are needed for controlled outdoor higher levels of soccer play, discuss and employ basic offensive and defensive strategies and tactics; use and apply the rules governing outdoor soccer play. Number of times course may be taken for credit: 4. 54 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter Grade

KIN 38B Intercollegiate Men's Soccer 3 units

Training for soccer competition at the collegiate level. Practice will take place which will include training students to perform at the college competitive level for the Coast Conference Soccer League of Northern California. Prepares the individual for intercollegiate competition in the sport of soccer using such skills as passing, receiving and heading as well as offensive and defensive strategies. Students must meet California Community College eligibility requirements as established by the California Commission on Athletics. Number of times course may be taken for credit: 4. 162 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter Grade

KIN 38C Post Season Intercollegiate Men's Soccer 1 - 2 units

Students will learn and develop fundamental to advanced outdoor soccer skills of kicking, passing and conditioning necessary for playing field soccer at an intercollegiate level. Students will learn the rules governing outdoor soccer play. Number of times course may be taken for credit: 4. 54 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter Grade

KIN 40A Pre-Season Intercollegiate Women's Volleyball 1 units

Preseason preparation for intercollegiate competition in the sport of women's volleyball. Number of times course may be taken for credit: 4. 54 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter Grade

KIN 40B In Season Intercollegiate Women's Volleyball 1 - 3 units

Intercollegiate competition in the sport of women's volleyball. Number of times course may be taken for credit: 4. Prerequisite: Ability to demonstrate the following skills: bump, set, spike, serve.. 54 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter Grade

KIN 40C Off Season Intercollegiate Women's Volleyball 1 - 2 units

Designed to provide a physical, mental, nutritional and instructional conditioning program for the student preparing for and/or interested in being evaluated for the intercollegiate sport of women's volleyball. Number of times course may be taken for credit: 4. 54 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter Grade

KIN 41A Pre-Season Intercollegiate Women's Basketball 1 - 2 units

This course is designed to provide the student with an opportunity to develop the skills and physical conditioning, along with the understanding of basketball at the advanced level in preparation for intercollegiate competition. Skills such as dribbling, passing, shooting, defensive and offensive strategies will be presented and practiced. Team play and sportsmanship are important priorities that are emphasized in this class. Fall semester. Number of times course may be taken for credit: 4. 54 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter Grade

KIN 41B Fall Intercollegiate Basketball - Women 1.5 units

Training for intercollegiate competition. Daily practice. Fall Semester. Number of times course may be taken for credit: 4. 81 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter Grade

KIN 41C Spring Intercollegiate Basketball - Women 1.5 units

Training for intercollegiate competition. Daily practice. Spring Semester. Number of times course may be taken for credit: 4. 81 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter Grade

KIN 41D Off Season Intercollegiate Women's Basketball 1 - 2 units

Students will practice the skills of dribbling, passing, shooting and defense necessary for competitive basketball play; put into practice the governing rules of basketball; learn about the appropriate terminology used in basketball and the safety procedures related to the game. Number of times course may be taken for credit: 4. 54 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter Grade

KIN 48A Pre-Season Intercollegiate Women's Soccer 1 - 2 units

Students will be taught to execute technical skills of soccer in game situations. For example, the techniques of long/short passing, receiving, crossing, shooting, individual and zonal defending. They will compare and contrast various offensive and defensive strategies and systems of play, and identify strengths and weaknesses of various formations. Number of times course may be taken for credit: 4. 54 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter Grade

KIN 48B Intercollegiate Athletics: Women's Soccer 3 units
Instruction and intercollegiate competition is offered in this sport to those students who are selected, based on tryouts, prior to the start of the sport season. Number of times course may be taken for credit: 4. 162 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

KIN 48C Off Season Intercollegiate Women's Soccer 1 - 2 units
Students will practice the skills of kicking, passing, trapping and heading necessary for controlled outdoor soccer play; put into practice the rules governing outdoor soccer play; learn about the appropriate terminology used in soccer and the safety procedures related to the soccer game. Number of times course may be taken for credit: 4. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

KIN 5 Sports Management 3 units
Course content includes how to organize, manage, plan, staff, direct, and control a sports program. Furthermore, areas such as Title IX, budget, facilities management, sports law, scheduling, officials, sports marketing, transportation, public relations, parent and booster clubs, purchase and care of athletic equipment, fund raising. This course will provide an overview of the many careers available in the sports management industry. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

KIN 50A Pre-Season Intercollegiate Swimming & Diving 1 - 2 units
This course is designed to give student-athletes participating in intercollegiate swimming and diving the opportunity to enhance fitness levels and skills prior to competition season. Course content will include technique, aerobic conditioning, race specific training, and dryland/weight training. Number of times course may be taken for credit: 4. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN 50B Intercollegiate Swimming & Diving 3 units
This course is for intercollegiate swimming and diving competition conducted through the NCAA and the CCCAA. Number of times course may be taken for credit: 4. 162 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

KIN 6 Personal Trainer 3.5 units
This course emphasizes the theoretical and hands on skills required of personal trainers, coaches and fitness professionals. This course will bridge the gap between exercise science, kinesiology and practical hands-on learning by integrating the latest in scientific and physiologically based research. This class will have lectures, labs, group work/discussions and assignments. 54 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN 60 Intercollegiate Water Polo -- Men's 3 units
This course is for Intercollegiate Men's Water Polo competition conducted through the NCAA and CCCAA. Defensive and offensive strategies, swimming mechanics, and water polo ball skills appropriate to intercollegiate athletic competition will be expected of the participants. Number of times course may be taken for credit: 4. 162 hours laboratory.
- Grading Option: Letter Grade

KIN 61A Pre-Season Intercollegiate Water Polo 0.5 - 2 units
This course is designed to provide the student with an opportunity to develop the skills and physical conditioning, along with the understanding of water polo at the advanced level in preparation for intercollegiate competition. Skills such as passing, shooting, defensive and offensive strategies will be presented and practiced. Team play and sportsmanship are important priorities that are emphasized in this class. Number of times course may be taken for credit: 4. 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN 61B Off Season Intercollegiate Water Polo 0.5 - 2 units
This course is designed to give students the opportunity to learn and apply specific conditioning skills relating to the game of Water Polo. Instruction will focus on speed, quickness, strength, and cardiovascular conditioning in the pool as they relate to the play of Water Polo. Concepts of dryland training and periodization will be discussed. Number of times course may be taken for credit: 4. 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN 65 Intercollegiate Water Polo -- Women's 3 units
This course is for Intercollegiate Women's Water Polo competition conducted through the NCAA and CCCAA. Defensive and offensive strategies, swimming mechanics, and water polo ball skills appropriate to intercollegiate athletic competition will be expected of the participants. Number of times course may be taken for credit: 4. 162 hours laboratory.
- Grading Option: Letter Grade

KIN AF1 Aerobic Fitness 1 1 units
This course will present and implement the fundamental principles of Cardio/Aerobic Fitness training. Methods of assessing and monitoring aerobic intensity will be discussed and documented in class. The health and fitness benefits of cardio/aerobic conditioning will be presented. A variety of aerobic gym equipment will be used to achieve cardiopulmonary fitness and healthy body composition. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN AF2 Aerobic Fitness 2 1 units
This is an intermediate conditioning class that emphasizes cardiovascular endurance activities through a variety of exercises that stimulate heart and lung activity. Interval calisthenics are used as a warm-up, and then activities that develop increased aerobic efficiency will be performed by the students. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN AR1 Archery 1 - Beginning Archery 1 units
Covers the fundamental techniques of archery, terminology, accessories, and history of the sport. Students will acquire knowledge in the safe use and proper care of equipment, along with range safety. Practice and class competitions are provided to enhance skill development. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN BC1 Boot Camp for Flexibility & Core Development 1 units
Improve flexibility and core development (thus providing stability to our movements) through a variety of drills and military style movements. Functional training delivered in an intense environment. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN BC2 Boot Camp for Aerobic Conditioning 1 units
Improve aerobic capacity, muscle endurance and cardiorespiratory fitness through a variety of drills and military style movements. Functional training delivered in an intense environment. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN BC3 Boot Camp for Power & Strength Training 1 units
Improve muscle strength & power through a variety of drills and military style movements. Functional training delivered in an intense environment. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN BD1 Badminton 1 1 units
Introduction to the fundamental techniques of badminton (for example, the forehand and backhand serve, service return, and lob shots). Course will also include grip, footwork, rules, equipment and court dimensions. 54 hours laboratory.
- Credit - Degree Applicable

- Grading Option: Letter or P/NP

KIN BD2 Badminton 2 1 units
The techniques of badminton for the intermediate player will be reviewed and performed. This course will also incorporate match analysis for singles and doubles play. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN BD3 Badminton 3 1 units
Badminton strategy for singles and doubles play. The body's physiological responses to singles and doubles play will be examined. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN BK1 Basketball 1 1 units
This multi-level course is designed to provide the student with an opportunity to development the basic skills and understanding of basketball. Skills such as dribbling, passing, shooting, defensive and offensive strategies will be presented and practiced. Team play and sportsmanship are important priorities that are emphasized in this class. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN BK2 Basketball 2 1 units
This course is designed to provide the student with an opportunity to develop the skills and understanding of basketball at the advanced level. Skills such as dribbling, passing, shooting, defensive and offensive strategies will be presented and practiced. Team play and sportsmanship are important priorities that are emphasized in this class. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN BK3 Basketball 3 1 units
Designed to teach advanced skills of basketball. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN BK4 Basketball 4 1 units
Designed to teach pre-competitive basketball. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN BL1 Bowling 1 1 units
This course is designed to give the student the opportunity to learn the basic skills, terminology, and etiquette of bowling and be able to participate in a league type bowling program using off-campus bowling centers. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN BL2 Bowling 2 1 units
This course teaches the fundamental skills of bowling with emphasis on form, terminology and scoring. The student will have the opportunity for class competition. The class will be conducted at an off campus bowling establishment. Facility use fee required. To be paid throughout the semester at the facility. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN BL3 Bowling 3 1 units
This course teaches intermediate skills of bowling with emphasis on etiquette, terminology and equipment. The student will have the opportunity for class competition. The class will be conducted at an off campus bowling establishment. Facility use fee required. To be paid throughout the semester at the facility. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN BL4 Bowling 4 1 units
This course teaches advanced skills of bowling with emphasis on form, rules , and etiquette. The student will have the opportunity for class competition. The class will be conducted at an off campus bowling establishment. Facility use fee required. To be paid throughout the semester at the facility. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN BX1 Box Aerobics 1 1 - 1 units
Course is designed to give the student an opportunity to experience a combination of martial arts and aerobic exercise for the benefit of physical fitness. Exercises will include jumping rope, push-ups, abdominal work, cardiovascular exercise, strength training and toning exercises, box aerobics drills and stretching. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN BX2 Box Aerobics 2 1 units
This course is for beg/intermediate students, who have an interest in the progressive development of the martial arts. The course is designed with beginning/intermediate martial arts movements and boxing drills to improve overall health and fitness. Sport Taekwondo footwork is applied with modern boxing skills to promote progression of personal physical capabilities. A component of strength training for upper body and core will be included. Traditional Korean philosophies & terminology will be utilized in class to focus on the mind, body, and spirit relationship. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN BX3 Box Aerobics 3 1 units
Advanced combinations of traditional martial arts kicks, Olympic sport Tae kwon do footwork, applied with modern boxing increases agility and flexibility; building on the foundations of balance and strength from KIN BX2. Students practice an understanding of proper Martial Arts etiquette and demonstrate the traditional philosophies employed in martial arts traditional Korean Terminology is practiced in class Focusing on the mind, body, and spirit. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN CR1 Cricket 1 1 units
An introduction to the sport of Cricket. This course will introduce the student to the fundamentals of cricket including; batting, bowling and fielding. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN CR2 Cricket 2 1 units
Cricket 2 will provide students with instruction in the art of batting, bowling and fielding at an intermediate level of play. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN CRT Cross Training 1 units
This kinesiology class will offer the student an opportunity to learn how to exercise safely in a Weight/Cardio gym. Circuit, Interval and Cross Training programs will be introduced. The topics of discussion will include: equipment orientation and safety, Principles of Resistance and Aerobic Training, energy systems used for various training regimens, and the benefits of exercise in establishing and maintaining a healthy lifestyle throughout life. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN CT1 Circuit Training 1 1 units
This course will increase muscular endurance/strength as well as cardiovascular conditioning through the use of strength and cardio circuits utilizing a wide variety of equipment such as treadmills, bosu balls, battling ropes, free weights and sandbags. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN CYCL1 Cycling 1 1 units
This course is an introduction to Physical Fitness through indoor cycling. The cycling program is an individually paced, noncompetitive, group training program designed for all riders and all fitness levels. Cycling is an exercise performed on a stationary bicycle and is performed to music. The course is open to anyone who is interested in developing muscular endurance,

improved cardio-respiratory endurance and body composition. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN CYCL2 Cycling 2 1 units
This course is the second in a series of Indoor Cycling courses. Emphasis is based on beginning to intermediate cycling techniques, heart rate calculations, fitness evaluations, and cardiovascular training and program design. Beginning level principles of physiology are explored including how to train to elicit a desired physiological response. Utilizing a variety of equipment student will develop core endurance and strength. This class is designed for students interested in aerobic fitness improvement through indoor cycling as well as Kinesiology majors. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN CYCL3 Cycling 3 1 units
This is an advanced course of fitness through indoor cycling. The cycling program is an individually paced, group training program. Cycling is an exercise performed on a stationary bicycle and is performed usually to music. This course is designed to build upon the base levels of fitness developed in Cycling 1 and Cycling 2 courses while increasing the development cardio-respiratory endurance and overall body strength. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN DA1 Dance Aerobics 1 1 - 1 units
A combination of aerobic dance and specific resistance training. Improves cardio-respiratory endurance and tones major muscle groups. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN DV1 Springboard Diving 1 units
This course is designed to give students an introduction into the sport of Springboard Diving. Instruction will include 1 meter and 3 meter springboards, and the 5 types of dives (forward, backward, reverse, inward, twisting). 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN ETD1 Eskrima - Tenio DeCuerdas 1 1 units
An introductory course of the Filipino martial art system of Tenio DeCuerdas Eskrima: a complete system incorporating the use of various weapons and empty-hand techniques. The course will focus on history of the system, basic movement and striking, beginning hand movements, beginning use of daga, and how to receive beginning techniques safely. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN ETD2 Eskrima - Tenio DeCuerdas 2 1 units
A second semester course of the Filipino martial art system of Tenio DeCuerdas Eskrima. The course will focus on the history of the head of the system, elementary striking, footwork, and daga techniques, and how to receive elementary techniques safely. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN ETD3 Eskrima - Tenio DeCuerdas 3 1 units
A third semester course of the Filipino martial art system of Tenio DeCuerdas Eskrima. The course will focus on intermediate footwork, open-hand , and daga techniques, and how to receive intermediate techniques safely. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN ETD4 Eskrima - Tenio DeCuerdas 4 1 units
A fourth semester course of the Filipino martial art system of Tenio DeCuerdas Eskrima. The course will focus on advanced striking, footwork, and daga techniques, and how to receive advanced techniques safely. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN FC Fitness Center 1 units
Students will be presented instruction on how to development and maintain the components of fitness: muscular strength, muscular endurance, cardiovascular endurance, flexibility and body composition. Students will learn how to design an individualized exercise program based on sound training principles and personal goals. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN FD Fitness Development 1 units
Introduction to the components of fitness development. Students will be presented instruction on how to maintain and development the components of fitness: muscular strength, muscular endurance, cardiovascular endurance, flexibility and balance. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN FG1 Footgolf 1 1 units
This is an introductory course to the sport of Footgolf. Footgolf is a combination of the popular sports of soccer and golf. On a shortened golf course, players kick a regulation size 5 soccer ball into a large hole in as few shots as possible. This course will focus on the history, rules, and the etiquette of the sport and how to apply putting techniques effectively. The course will be offered on campus and at a local golf course. Students will be charged a minimal fee each time they use the Footgolf course. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN FG2 Footgolf 2 1 units
A second semester course for the sport of Footgolf. Footgolf is a combination of the popular sports of soccer and golf. On a shortened golf course, players kick a regulation size 5 soccer ball into a large hole in as few shots as possible. This course will focus on the first shot of teeing off and the different techniques to drive a ball for distance and accuracy. The course will be offered on campus and at a local golf course. Students will be charged a minimal fee each time they use the Footgolf course. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN FG3 Footgolf 3 1 units
A third semester course for the sport of Footgolf. Footgolf is a combination of the popular sports of soccer and golf. On a shortened golf course, players kick a regulation size 5 soccer ball into a large hole in as few shots as possible. This course will focus on the ways to kick when on the fairway and when approaching the green. The course will be offered on campus and at a local golf course. Students will be charged a minimal fee each time they use the Footgolf course. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN FGS1 Footgolf Summer 1 0.5 units
This is an introductory summer course for the sport of Footgolf. Footgolf is a combination of the popular sports of soccer and golf. On a shortened golf course, players kick a regulation size 5 soccer ball into a large hole in as few shots as possible. This course will focus on the rules, the etiquette of the sport and the tactical approach to reading the green and determining how to address the putt. The course will be offered on campus and at a local golf course. Students will be charged a minimal fee each time they use the Footgolf course. 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN FGS2 Footgolf Summer 2 0.5 units
A second semester summer course for the sport of Footgolf. Footgolf is a combination of the popular sports of soccer and golf. On a shortened golf course, players kick a regulation size 5 soccer ball into a large hole in as few shots as possible. This course will focus on the tactical approach to reading the tee box, the distance to the fairway and determining which drive to use. The course will be offered on campus and at a local golf course. Students will be charged a minimal fee each time they use the Footgolf course. 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN FGS3 Footgolf Summer 3 0.5 units
A third semester summer course for the sport of Footgolf. Footgolf is a combination of the popular sports of soccer and golf. On a shortened golf course, players kick a regulation size 5 soccer ball into a large hole in as few shots as possible. This course will focus on the tactical approach to reading the fairway and the distance to the green. The course will be offered on campus and at a local golf course. Students will be charged a minimal fee each time they use the Footgolf course. 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN FJW1 Fitness Jog Walk 1 1 units
This course is an introduction to a cardiovascular activity that will benefit anyone, regardless of age or fitness level. Individualized walking programs are designed to promote general overall fitness. Jogging and walking capabilities will be enhanced as a result of the exercise undertaken and the cardiovascular training related assignments. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN FJW2 Fitness Jog Walk 2 1 units
This is a progressive continuation course to Fitness Jog Walk 1. Biomechanical analysis and fundamental principles of training for this activity will be reviewed. Basic exercise physiology will be discussed. The student will be given training regimens to increase their pace, speed, distance and endurance for middle distances (e.g. 5K - 10K). Nutritional requirements and dietary advice will be presented. Student training logs will be employed to document performance. Pre and post walk/jog assessments will be conducted to establish a baseline of conditioning and illustrate performance levels. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN FJW3 Fitness Jog Walk 3 1 units
This is a progressive continuation course to Fitness Jog Walk 2. The course will continue to enhance one's knowledge of using walking/jogging in competition, whether it be cross country events, local race events, fun runs or competitive recreational events. Emphasis will be on speed work, terrain training, endurance development and training for varying outdoor weather conditions. The physiological and psychological aspects of competitive activity is presented. Training regimens and performances will be documented in logs for assessment and training adjustments. Nutritional and treatment of typical chronic orthopedic injuries will be discussed. Extracurricular and off campus events will be encouraged. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN FJW4 Fitness Jog Walk 4 1 units
This is a progressive continuation course to Fitness Jog Walk 3. This course focuses on walking and/or jogging to enhance one's cardiovascular fitness, body composition, and overall general health. This course is ideal for the general population to begin or continue a lifetime of exercise. Walking/Jogging techniques, training intensity assessment, methods for improvement and personal programs will be provided during the course. With consistent practice and implementing sound fitness principles provided by this course, one will benefit from participation. Proper jog/walk technique, progressive training programs, nutrition, hydration, and injury prevention will be addressed. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN FL1 Flag Football 1 1 units
This is an introductory course designed to give the student an opportunity to review and practice the basic fundamental skills relative to the game of flag football. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN FL2 Flag Football 2 1 units
This is an intermediate course designed to teach students the principles of short-field flag football. Instruction will include: rules, regulations, and concepts of play for 4-on-4 and 5-on-5 flag football. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN FL3 Flag Football 3 1 units
This course is a continuation course for Flag Football 2. Review of the rules and regulations will be included. This level course will provide instruction on more complex offensive tactics, defensive strategies and concepts of play for 7 on 7 and 8 on 8 flag football. Students will receive instruction on the principles of long-field flag football. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN FL4 Flag Football 4 1 units
This is an advanced course designed to teach students competitive strategies for flag football. Advanced offensive and defensive strategies for 4v4, 5v5, 7v7, and 8v8 will be discussed. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN FNE1 Fencing - Epee 1 1 units
This course is an introduction to epee. Emphasis is on the technical and tactical skills unique to epee fencing. Basic skills include the development of correct footwork, precise blade action, and sound tactical decisions. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN FNE2 Fencing - Epee 2 1 units
This is a second semester course for epee. Emphasis is establishing consistent technical and tactical skills unique to epee fencing. There will be introduction to use of electrical equipment. Prerequisite: Footwork movements (advance, retreat, and lunge) must be correct and controlled.. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN FNF1 Fencing - Foil 1 1 units
This course is an introduction to foil. Emphasis is on the technical and tactical skills unique to foil fencing. Basic skills include the development of correct footwork, precise blade action, and sound tactical decisions. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN FNF2 Fencing - Foil 2 1 units
This is a second semester course for foil. Emphasis is establishing consistent technical and tactical skills unique to foil fencing. There will be introduction to use of electrical equipment. Prerequisite: Footwork movements (advance, retreat, and lunge) must be correct and controlled.. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN GBW1 Guts and Butts Workout 1 1 units
This course will focus on improving muscle strength and endurance of the abdominals, gluteals, quadriceps, and hamstrings. Functional exercises such as squats, lunges and planks will be utilized. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN GBW2 Guts and Butts Workout 2 1 units
This course will focus on strengthening the core and glute muscles. Students will learn how to use equipment such as steps, TRX, swiss balls, and dumbbells to increase exercise intensity. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN GF1 Golf 1 1 units
This is an introductory course to the sport of golf. The course will include the rules, regulations and etiquette of golf, the fundamental swing skills for the long and short game and appropriate club selection. Beg-Intermediate and Intermediate players can benefit from the basic instruction to improve their skill set through the art of practice on the range. The course will be offered at a local golf range and student will be charged a minimal fee for bucket of balls to be used. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN GF2 Golf 2 1 units
For students who possess the rudimentary skills of golf and aim to improve those abilities. Students will hone their putting, short game, mid-long iron play and driving capabilities. The course is offered at a local driving range who will charge a minimal fee for practice balls. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN GF3 Golf 3 1 units
Advanced technical aspects of golf match play will be included. Additionally, psychological skills for the elite golfer will be incorporated including visualization, pre-shot routines, relaxation methods and self-talk strategies. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN GF4 Golf 4 1 units
This course will provide elite golfers with a detailed technical appreciation of the game. Furthermore, a psychological analysis of self-efficacy, arousal regulation, concentration and focus will be applied to golf. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN HIT1 High-Intensity Interval Training (HIIT) 1 units
An introduction to resistance training using dumb bells, barbells, kettle bells, medicine balls, stability balls and step platforms. The model of high-intensity interval training (HIIT) will be used during this course to increase muscular strength and cardiovascular fitness. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN JDR1 Jujutsu - Danzan Ryu 1 1 units
An introductory course of the martial art system of Danzan Ryu Jujutsu: a hybrid of Japanese Jujitsu, Judo, and Kenpo, and the Hawaiian art of Lua. Techniques are not strength based and primarily involve the use of joint and nerve manipulation, precision striking, and throwing to subdue an attacker. This course will focus on history of the system and founder, basic movement, escapes, trip throws, strikes, and how to receive techniques safely. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN JDR2 Jujutsu - Danzan Ryu 2 1 units
A second semester course of the martial art system of Danzan Ryu Jujutsu. This course will focus on history of techniques and the successor, ukemi, holds, trip throws, sweep throws, and how to receive techniques safely. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN JDR3 Jujutsu - Danzan Ryu 3 1 units
A third semester course of the martial art system of Danzan Ryu Jujutsu. This course will focus on ukemi, escapes, locks, sweep throws, reap throws, hip throws, pins, striking combinations, and how to receive techniques safely. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN JDR4 Jujutsu - Danzan Ryu 4 1 units
A fourth semester course of the martial art system of Danzan Ryu Jujutsu. This course will focus on ukemi, escapes, locks, hip throws, drop throws, and how to receive techniques safely. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN LG Lifeguarding 1.5 units
Provides entry-level participants 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 EMS personnel take over. Participants who successfully complete the Lifeguarding course receive an American Red Cross certificate for Lifeguarding/First Aid/CPR/AED valid for 2 years. Prerequisite: Minimum age: 15 years; swim 300 yards continuously; tread water for 2 minutes using only the legs; complete a timed event within 1 minute: 40 seconds by starting in the water, swimming 20 yards, surface dive to a depth of 7 to 10 feet to retrieve a 10-pound object, return to the surface and swim 20 yards on the back to return to the starting point, exit the water without using steps or a ladder., . 27 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN OM1 Optimal Movement 1 1 units
This course is an introduction to the biomechanics of optimal movement. The program consists of exercises to teach and restore motor skill and optimal muscle length using objective alignment markers that serve as indicators to healthy muscle activity and overall health. Using the alignment principles of Restorative Exercise you will learn what optimal alignment is and how to apply it in your daily life. This biomechanical model is based on physics, physiology, anatomy, and engineering and simply states that all-over muscle use is a requirement of human health and is not optional. Pilates exercises and Yogic breathing will be included in the curriculum. This course is appropriate for all fitness levels and valuable to Kinesiology majors for its applied anatomy and biomechanics of optimal movement. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN PF Personal Fitness 1 units
An independent, self paced, personal activity program planned and implemented in conjunction with student goals. Based on goals and results of a fitness assessment and health risk appraisal, an individualized program is developed through personal counseling. Programs can include a physical assessment profile, a health risk appraisal, an individualized exercise/activity program, health/wellness education, and behavior modification. Students' fitness will be tested at the beginning and at the end of the semester to determine if the student achieved their goals. 9 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN PL1 Pilates 1 1 - 1 units
This course is an introduction to the Pilates Method of body conditioning. This course presents a system that helps build flexibility and long lean muscles as well as strength and endurance in the legs, abdominals, arms, hips and back. Strong emphasis is placed on spinal and pelvic alignment. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN PL2 Pilates 2 1 - 1 units
This Kinesiology course is continued study of the Pilates Method. The student will learn the principle of neutral spine, how to use Pilates props to provide variation and increased difficulty, and create level 2 exercise routines to enhance overall fitness. The concept of "complete coordination of the body, mind and spirit" will be experienced. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN SD1 Salsa Dance Aerobics 1 1 units
An introductory course in salsa music and the basics of salsa dance. Various patterns will be introduced, allowing students to improve their technique and develop a strong awareness of the rhythm of the dance. No partner required. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN SI1 Soccer - Indoor 1 1 units
Students will practice the skills of kicking, passing, trapping and heading necessary for controlled indoor soccer play. Students will discuss and employ basic offensive and defensive strategies and tactics; and put into practice the rules governing soccer. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN SI2 Soccer - Indoor 2 1 units
A second semester course for outdoor soccer. This course will focus on the defensive and offensive tactics of the sport. Students will use the skills covered in Indoor Soccer 1 (SI1) while participating in both small sided and full sided play. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN SO1 Soccer - Outdoor 1 1 units
This course will teach students the rules of soccer and the fundamental skills of soccer including passing, receiving, shooting, and dribbling. Students will participate in both small-sided and full-sided play. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN SO2 Soccer - Outdoor 2 1 units
A second semester course for outdoor soccer. This course will focus on the defensive and offensive tactics of the sport. Students will use the skills covered in Soccer - Outdoor 1 (SO1) while participating in both small sided and full sided play. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN SW1 Swimming 1 1 units
An introductory course designed to teach basic swimming skills and is designed for non-swimmers who cannot complete one length of the pool (25 yards). Emphasis will be on the physical and psychological adjustment to the water as well as basic swimming stroke technique. Students will also learn aquatics safety methods. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN SW2 Swimming 2 1 units
This is a beginning level course designed to teach fundamental swimming skills. Emphasis will be on developing basic swimming techniques for the freestyle and backstroke, and include an introduction to breaststroke, butterfly, and sidestroke. Students will also learn aquatic safety methods. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN SW3 Swimming 3 1 units
This is an Intermediate Swimming course. Instruction includes refining the competitive strokes (freestyle, backstroke, butterfly, breaststroke), the introduction of the individual medley, and competitive turns for each stroke. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN SW4 Swimming 4 1 units
This is an advanced course designed to enhance the overall knowledge and technique for the aspiring swimmer. Instruction will include an in depth analysis of stroke, turn, and start techniques used in competition (Intercollegiate, High School, Open Water, Triathlon, USA Swimming, and Recreational League). 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN SWF1 Swimming for Fitness 1 1 units
This course is designed to introduce students to conditioning for swimming. This is a broad level course that will utilize a variety of strokes to increase cardiovascular fitness, as well as introduce the students to different training methodologies. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN SWF2 Swimming for Fitness 2 1 units
This is an intermediate level swim fitness course with an emphasis in sprint training. This course will teach the student about the different aspects of sprint training as they relate to different distances (50 and 100 yards/meters). Instruction will also include sprint training for each of the competitive strokes (backstroke, breaststroke, and butterfly). 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN SWF3 Swimming for Fitness 3 1 units
This is an intermediate level swim fitness course with an emphasis in middle distance training. This course will teach the student about the different aspects of middle distance training for freestyle as they relate to specific race distances: 200, 400, and 500. Instruction will also focus on the 200 & 400 Individual Medley and the 200's of the strokes (backstroke, breaststroke, and butterfly). 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN SWF4 Swimming for Fitness 4 1 units
This is an intermediate level swim fitness course with an emphasis in distance training. This course will teach the student about the different aspects of distance training for freestyle as they relate to specific race distances: 800/1500 meters and 1000/1650 yards. Instruction will also include an introduction to open water swimming techniques and strategies. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN TK1 Tae Kwon Do 1 1 units
A beginning level self-defense course designed to teach fundamental techniques of Taekwondo. Developing basic techniques in kicking, punching and sparring, the course will introduce concepts of fitness and cardio-respiratory conditioning achieved through participating in Taekwondo. This course is structured as a martial arts class. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN TK2 Tae Kwon Do 2 1 units
This martial arts course is structured as a continuation from Level 1 Taekwondo. The intermediate techniques of kicking, punching and sparring will reinforce concepts of fitness and cardio-respiratory conditioning achieved through participating in Taekwondo. Students will learn intermediate self-defense techniques from Taekwondo skills. Attending and observing local tournaments will be assigned as an off campus activity. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN TK3 Tae Kwon Do 3 1 units
This martial arts course is structured as a continuation from Level 2 Taekwondo. The advanced techniques of blocks, kicks and stances will reinforce concepts of fitness, cardio-respiratory conditioning, strength and balance achieved through participating in Taekwondo. Students will learn advanced self-defense techniques and advanced required forms in Accordance with World Taekwondo Federation Regulations. Attending and observing local tournaments will be assigned as an off campus activity. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN UF1 Ultimate Frisbee 1 1 units
This is an introductory course designed to teach students basic skills of ultimate frisbee and "spirit of the game". Instruction will include learning basic throws, catches, offensive and defensive strategies, and rules of the game. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN UF2 Ultimate Frisbee 2 1 units
This is a beginning/intermediate level course designed to enhance skills that pertain to the sport of Ultimate Frisbee. Instruction will include throwing, catching, pivoting and marking skills. Offensive and defensive strategies will be introduced. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN UF3 Ultimate Frisbee 3 1 units
This is an advanced level course designed to master the skills necessary to compete in the sport of ultimate frisbee. Instruction will include increasing throwing distance and accuracy, offensive and defensive strategies, and aerobic conditioning. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN UF4 Ultimate Frisbee 4 1 units
This is a progressive competitive level course designed to prepare students for tournament play in the sport of ultimate frisbee. Instruction will provide a strong emphasis on high levels physical conditioning required for competitive play such as agility, speed, and endurance. Instruction will discuss successful game management and coaching philosophy. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN VB1 Volleyball Beginning 1 units
Provides instruction on the individual and team skills and strategies of volleyball. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN VB2 Volleyball Intermediate 1 units
This is a course designed and developed for the intermediate level volleyball player. It is a continuation of beginning volleyball with an emphasis in executing the fundamental skills and techniques of power volleyball at a higher level. This course differs from beginning volleyball in that set patterns and systems of offense and defense are used in a team strategy. Before enrolling student should have proficiency in the skills of passing and setting. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN VB3 Volleyball Advanced 1 units
Advanced techniques of volleyball with emphasis on competitive play. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN WP1 Water Polo 1 1 units
This course is an introduction to the sport of Water Polo. Instruction will include individual skills relating to the play of water polo. Instruction will also include rules, regulations, and basic team play. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN WP2 Water Polo 2 1 units
This is an intermediate course designed to give the student the opportunity to learn and enhance personal and team skills relating to the game of Water Polo. Instruction will focus on advancing individual skills, team strategies, and an appreciation for competition. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN WP3 Water Polo 3 1 units
This course is designed to give students the opportunity to learn and apply specific conditioning skills relating to the game of Water Polo. Instruction will focus on speed, quickness, strength, and cardiovascular conditioning in the pool as they relate to the play of Water Polo. Concepts of dryland training and periodization will be discussed. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN WT1 Weight Training 1 1 - 1 units
This course provides an introduction to weight training. Students will learn how to improve muscle strength and muscle endurance through the correct application of basic weight training principles. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN WT2 Weight Training 2 1 - 1 units
Weight Training 2 is a continuation course to the Basic course WTW1. The Principles of Training, Level 2 terminology and weight training biomechanics will be presented. Level 2 programs and possible variations will be applied in the prescription of the personal weight training program. The course will incorporate lectures on possible injuries and prevention in a more advanced weight training setting. Implementation of goal setting, tracking, analyzing, progressing individual programs will be included. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN WTW1 Women's Weight Training 1 1 units
This specialized course will provide an orientation to the basic weight training machines available in gyms/clubs and proper gym etiquette, a study of the basic musculoskeletal anatomy and kinesiology of the female body, present the fundamental tenets of weight training, discuss how to maintain healthy body composition, and information on designing a weight training program to achieve attainable personal goals. Pre/Post Fitness Assessments will be conducted to establish a baseline of fitness and a measuring instrument for improvement toward weight training goals. Through proper education and implementation of sound weight training principles, the female student will be able to maintain a healthy lifestyle throughout various stages of life. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN WTW2 Women's Weight Training 2 1 units
Women's Weight Training 2 is a continuation course to Women's Weight Training 1. Students will increase muscular strength and/or muscular endurance using weight machines, free weights, and body weight exercises. Implementation of program design and goal setting will be included. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN YIN1 Yin Yoga 1 1 units
This course is an introduction to the practice of Yin Yoga. Yin Yoga is a meditative, therapeutic practice that combines slow dynamic movement with longer static holds. Yin poses are held for 3-5 minutes, cultivating mindfulness, introspection, and the deeper aspects of Yoga. Longer hold times stimulate connective tissue, signaling the body to create more resilient ligaments, joints, deep fascial networks and bones. Appropriate for all levels. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN YO1 Yoga 1 1 units
This is an introductory course exploring the principles of Hatha Yoga and how they apply to achieving lifetime fitness. Emphasis is on developing awareness of body alignment, balance, and flexibility through a series of exercises and poses. Breathing exercises, relaxation and meditation techniques are learned and practiced throughout the course. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN YO2 Yoga 2 1 units
This is an intermediate Hatha Yoga course that emphasizes intense stretching, balancing, and building of muscular strength. A series of poses and breathing techniques will be practiced in order to create a more strenuous yoga experience. Emphasis will be on the principles of healthy living, along with proper posture, relaxation and meditation techniques. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN YO3 Yoga 3 1 units
This is an intermediate/advanced Hatha Yoga course that introduces the student to a variety of Yoga styles and meditation practices. Gentle, Restorative, and Vinyasa Yoga along with various meditation techniques will be practiced, improving concentration, physical endurance, flexibility, balance, and posture. The course integrates intermediate breathing techniques to deepen the level of introspection in both poses and meditation. Basic Sanskrit terminology will be introduced. Emphasis will be placed on mindfulness and strengthening the mind/body connection. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN YO4 Yoga 4 1 units
This course introduces the student to the advanced practice of Yoga and meditation. Students learn the practice of vigorous Vinyasa flow to improve concentration, physical endurance, flexibility, balance and posture. This course integrates Yoga philosophy and advanced breathing techniques to deepen the mind/body connection and reduce stress. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

KIN ZUM1 Zumba Fitness Workout 1 1 units
Zumba is a Latin-inspired, dance-fitness workout class that incorporates Latin American inspired music, along with jazz, hip hop, pop, country and African inspired international music. Zumba workouts will use choreographed steps and movements to form a fitness based calorie burning dance workout. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

LESBIAN, GAY, BISEXUAL, TRANSGENDER, AND QUEER STUDIES (LGBT)

LGBT 1 Introduction to LGBTQ Studies 3 units
A broad exploration of queer theory and its relationship to gay and lesbian studies, feminist theory, and intersectionality. Emphasis on theoretical and philosophical underpinnings of queer theory, social construction and essentialism, postmodernist theory, politics, LGBT studies and queer culture. Examines LGBTQ issues from psychological, bio-medical, sociological, political, racial and sexual perspectives. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

LGBT 2 Lesbian, Gay, Bisexual, Transgender, and Queer Psychology 3 units
Exploration of research concerning the psychology of people that are part of the lesbian, gay, bisexual, transgender, and queer communities. The course will examine psychological theories, empirical research, and phenomenological perspectives. Topics will include sexual and gender identifies in racial and ethnic minorities, identity development, coming out, prejudice, discrimination, violence, relationships, parenting, aging, physical health, and mental health. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

LIBRARY STUDIES (LIBR)

LIBR 1 Working with Sources 1 units
Introduction to using sources as supporting documentation in a college level research project. Teaches the skills needed to successfully find, evaluate, use, cite, and document information using library and open web sources. Focus on identifying appropriate sources and proper use of sources. Students will learn to distinguish between source types, how to avoid plagiarism, and how to use sources in their research projects. 18 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

LIBR 29 Independent Study, Library Studies 0.5 - 2 units
Supervised study in the area of Library Studies. Any student interested in registering for an Independent Studies course should contact a full/part-time instructor or dean in the appropriate area. 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

LIBR 4 College Research Techniques 0.5 units
Introduction to basic research techniques in a college library. Focus is on use of the library catalog, search strategies, organization of materials in the library including reference, faculty reserves, circulating books, audiovisuals, use of reference materials, evaluation of relevant resources, recognition of plagiarism, and bibliographic citation of books, audiovisuals, and magazines and journals. 9 hours lecture.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

LIBR 6 Research in Special Subjects 0.5 units
Introduction to college library research techniques in a specific subject area. Focus on campus and remote use of subject databases, emphasis on discipline specific physical and electronic resources, search strategies, evaluation of relevant resources, distinction between scholarly journals and popular magazines, discussion of plagiarism, and bibliographic citation of materials. 9 hours lecture.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

LIBR 7 The Open Web and Search Engines 0.5 units
Introduction to research techniques in a college library using search engines to find materials on the open web. Focus on use of the open web for research purposes, including web search strategies, appropriate search engines and directories, evaluation techniques for web resources, recognition of plagiarism, and bibliographic citation of web resources. 9 hours lecture.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

MATHEMATICS (MATH)

MATH 1 Calculus I 5 units
An introduction to single-variable differential and integral calculus including: functions, limits and continuity; techniques and applications of differentiation and integration; the Fundamental Theorem of Calculus; areas and volumes of solids of revolution. 90 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

MATH 10 Discrete Mathematical Structures 4 units
Designed for majors in mathematics and computer science, this course provides an introduction to discrete mathematical structures used in Computer Science and their applications. Course content includes: Propositional and predicate logic; rules of inference; quantifiers; elements of integer number theory; set theory; methods of proof; induction; combinatorics and discrete probability; functions and relations; recursive definitions and recurrence relations; elements of graph theory and trees. Applications include: analysis of algorithms, Boolean algebras and digital logic circuits. Students who have completed, or are enrolled in, CS 17 may not receive credit. 72 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

MATH 100C Concurrent Support for SLAM Mathematics 1 units
Concurrent Support for SLAM Math is for students interested in disciplines that require Statistics and Liberal Arts Mathematics (SLAM) courses. This course offers structured support to students who are concurrently enrolled in a first-level transfer course, such as Statistics and Mathematics for Liberal Arts, and Finite Mathematics. The support course includes material to prepare students for the rigor of the transfer math course by teaching learning skills necessary to succeed in college courses as well as review of relevant prerequisite algebraic and geometric concepts, and more in-depth investigation of core concepts in their concurrent math course. 54 hours laboratory.
- Credit - Not Degree Applicable
- Grading Option: Pass/No Pass

MATH 101C Concurrent Support for BSTEM Mathematics 1 units
Concurrent Support for BSTEM Mathematics is for students interested in Business, Science, Technology, Engineering and Mathematical fields. This course offers structured support to students who are concurrently enrolled in a first-level transfer course, such as College Algebra, Trigonometry, and Business Calculus. The support course includes material to prepare students for the rigor of the transfer math course by teaching learning skills necessary to succeed in college courses as well as review of relevant prerequisite algebraic and geometric concepts, and more in-depth investigation of core concepts in their concurrent math course. 54 hours laboratory.
- Credit - Not Degree Applicable
- Grading Option: Pass/No Pass

MATH 2 Calculus II 5 units
Continuation of single-variable differential and integral calculus. Topics covered include: inverse and hyperbolic functions; techniques of integration; polar and parametric equations; infinite sequences, series, power series and Taylor series; applications of integration. Primarily for mathematics, physical science and engineering majors. 90 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

MATH 27 Number Systems for Educators 3 units
This course focuses on the development of quantitative reasoning skills through in-depth, integrated explorations of topics in mathematics, including real number systems and subsystems. Emphasis is on comprehension and analysis of mathematical concepts and applications of logical reasoning. Prerequisite: Intermediate Algebra or a higher level of mathematics.. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

MATH 29 Independent Study, Mathematics 0.5 - 2 units
Supervised study in the area of Mathematics. Any student interested in registering for an Independent Studies course should contact a full/part-time instructor or dean in the appropriate area. 27 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MATH 3 Multivariable Calculus 5 units

Vector valued functions, functions of several variables, partial differentiation, multiple integration, change of variables theorem, scalar and vector fields, gradient, divergence, curl, line integral, surface integral, Green's, Stokes', and divergence theorem, applications. 90 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

MATH 30 College Algebra for STEM 4 units

College algebra core concepts relating to Science, Technology, Engineering and Mathematics (STEM) and Business fields are explored, such as: polynomial, rational, radical, exponential, absolute value, and logarithmic functions; systems of equations; theory of polynomial equations; and analytic geometry. Multiple representations, applications and modeling with functions are emphasized throughout. Prerequisite: Intermediate Algebra or a higher level of mathematics.. 72 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

MATH 33 Finite Mathematics 4 units

Linear functions, systems of linear equations and inequalities, exponential and logarithmic functions and applications, matrices, linear programming, mathematics of finance, sets and Venn diagrams, combinatorial techniques and an introduction to probability. Applications in business, economics and social sciences. Prerequisite: Intermediate Algebra or a higher level of mathematics.. 72 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

MATH 34 Business Calculus 4 units

Functions and their graphs; limits of functions; differential and integral calculus of algebraic, exponential and logarithmic functions. Applications in business, economics, and social sciences. Functions of several variables and partial derivatives. Prerequisite: Intermediate Algebra or a higher level of mathematics.. 72 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

MATH 39 Trigonometry 4 units

Trigonometry includes definitions of the trigonometric functions and their inverses, graphs of the trigonometric functions and their inverses, trigonometric equations, trigonometric expressions and identities, including proofs, an introduction to vectors, polar coordinates and complex numbers. Applications include solving right triangles and solving triangles using the law of sines and the law of cosines. Prerequisite: Intermediate Algebra or a higher level of mathematics.. 72 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

MATH 40 Statistics and Probability 4 units

Descriptive statistics, including measures of central tendency, dispersion and position; elements of probability; confidence intervals; hypothesis tests; two-population comparisons; correlation and regression; goodness of fit; analysis of variance; applications in various fields. Introduction to the use of a computer software package to complete both descriptive and inferential statistics problems. Prerequisite: Intermediate Algebra or a higher level of mathematics.. 72 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

MATH 47 Mathematics for Liberal Arts 3 units

An introduction to a variety of mathematical concepts for students interested in liberal arts. Intended to cultivate an appreciation of the significance of mathematics in daily life and help develop students' mathematical reasoning. Topics include personal finance, logic, and exponential growth. Prerequisite: Intermediate Algebra or a higher level of mathematics.. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

MATH 5 Ordinary Differential Equations 3.5 units

Introduction to differential equations including the conditions under which a unique solution exists, techniques for obtaining solutions, and applications. Techniques include generation of series solutions, use of Laplace Transforms, and the use of eigenvalues to solve linear systems. Generation of exact solutions, approximate solutions, and graphs of solutions using MATLAB. 54 hours lecture, 27 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter Grade

MATH 55 Intermediate Algebra 5 units

Intermediate Algebra concepts will be explored in this course including: an introduction to functions; linear and absolute value functions; absolute value equations and inequalities; compound linear inequalities; rational expressions, functions and equations; radical expressions, functions and equations; rational exponents; complex numbers; quadratic functions and equations; inverse of a function; exponential and logarithmic functions; properties of logarithms; exponential and logarithmic equations; conic sections; and systems of equations and inequalities. Multiple representations, applications and modeling with functions are emphasized throughout. Prerequisite: Elementary Algebra or a higher level of mathematics.. 90 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MATH 55C Concurrent Support for Intermediate Algebra 1 units

This course is concurrent support for Intermediate Algebra. The course is designed to provide additional, formal support to students who are currently taking an Intermediate Algebra. It includes a review of arithmetic, algebraic and geometric concepts that are relevant to their Intermediate Algebra course, study strategies that promote understanding and improve performance, and more in-depth investigation of core concepts that are difficult for students to master. Embedded are learning skills such as growth mindset, brain research, time management, study skills, test taking, math anxiety and more. 54 hours laboratory.

- Credit - Not Degree Applicable
- Grading Option: Pass/No Pass

MATH 66 Math Jam for Calculus I 0.5 - 1 units

Math Jam for Calculus I is a credit course for students preparing for Calculus I. Embedded are essential study and life skills to develop each student holistically, including career development. Students will be learning basic skills and transfer-level material with the goal of preparing them to be successful in their upcoming class. It is strongly recommended that students taking this course are enrolled in a calculus course. 27 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Pass/No Pass

MATH 66C Concurrent Support for Calculus I 1 units

This course offers structured support to students who are concurrently enrolled in Calculus I. The support course includes material to prepare students for the rigor of the calculus course by teaching learning skills necessary to succeed in college courses as well as review of relevant prerequisite algebraic, geometric and trigonometric concepts, and more in-depth investigation of core concepts in their concurrent math course. 54 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Pass/No Pass

MATH 67 Math Jam for Calculus II 0.5 units

Math Jam for Calculus II is a credit course for students preparing for Calculus II. Embedded are essential study and life skills to develop each student holistically, including career development. Students will be learning basic skills and transfer-level material with the goal of preparing them to be successful in their upcoming class. It is strongly recommended that students taking this course are enrolled in a calculus course. 27 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Pass/No Pass

MATH 67C Concurrent Support for Calculus II 1 units

This course offers structured support to students who are concurrently enrolled in Calculus II. The support course includes material to prepare students for the rigor of the calculus course by teaching learning skills necessary to succeed in college courses as well as review of relevant prerequisite algebraic, geometric and trigonometric concepts, and more in-depth investigation of core concepts in their concurrent math course. 54 hours laboratory.

- Credit - Degree Applicable

- Grading Option: Pass/No Pass

MATH 68 Math Jam for Calculus III 0.5 units
Math Jam for Calculus III is a credit course for students preparing for Calculus III. Embedded are essential study and life skills to develop each student holistically, including career development. Students will be learning basic skills and transfer-level material with the goal of preparing them to be successful in their upcoming class. It is strongly recommended that students taking this course are enrolled in a calculus course. 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

MATH 68C Concurrent Support for Calculus III 1 units
This course offers structured support to students who are concurrently enrolled in Calculus III. The support course includes material to prepare students for the rigor of the calculus course by teaching learning skills necessary to succeed in college courses as well as review of relevant prerequisite algebraic, geometric and trigonometric concepts, and more in-depth investigation of core concepts in their concurrent math course. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

MATH 7 Elementary Linear Algebra 3.5 units
An introduction to linear algebra including: techniques and theory needed to solve and classify systems of linear equations using Gaussian elimination and matrix algebra; properties of vectors in n-dimensions; generalized vector spaces, inner product spaces, basis, norms, orthogonality; eigenvalues, eigenspaces; and linear transformations. Selected applications of linear algebra, including the use of MATLAB™ to solve problems involving advanced numerical computation. 54 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

MARKETING (MKTG)

MKTG 50 Introduction to Marketing 3 units
Marketing as a value exchange process involving all societal members; an overview of product development, pricing, placement, and promotion; Target markets including the demographic and behavioral dimensions of markets; analyses of marketing placement and pricing strategies and the social, cultural, economic, competitive and legal factors affecting marketing mix decisions. Prerequisite: Eligibility for college-level composition (ENG 1A, ENG 1AEX, or ESL 1A) as determined by college assessment or other appropriate method. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MKTG 56 Marketing Strategies 3 units
Current marketing trends, strategies, and techniques. Introduction to online and social media marketing. The promotional process and techniques in the development of effective content creation and branding. Advanced theories, principles, and practices of customer service, customer loyalty, and the customer experience. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MKTG 61 Professional Selling 3 units
Principles and techniques involved in selling products , ideas, and/or services. Focus is on building relationships with others, identifying the reasons a purchase decision may be made. Includes buying motives, communication options, developing commonalities, sales call planning, ethics, follow-up contacts, and customer service. Interactions for face-to-face and online encounters; professional and technical products; consultants; and anyone wanting to improve their interactions with others. 54 hours lecture, 0 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUSIC (MUS)

MUS 1 Introduction to Music 3 units
Music for enjoyment and understanding through informed listening, analysis, evaluation and discernment of musical elements, forms, and repertoire. Attendance at concerts and listening to a variety of music may be required. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 10A Music Theory and Musicianship 3 4 units
This course incorporates the concepts from the Mus 8 series. In addition, through analysis and composition, the course will include: introduction to chromatic harmony; secondary/applied chords; modulation; borrowed chords; introduction to Neapolitan and augmented-sixth chords. Mus 10A also applies and develops the rhythmic, melodic, and harmonic materials of the musicianship portion of Mus 8 series through ear training, sight singing, analysis, and dictation. 54 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 10B Music Theory and Musicianship 4 4 units
This course incorporates the concepts from Music 10A. In addition, through writing and analysis, the course will include: post-Romantic techniques such as borrowed chords and modal mixture, chromatic mediants, 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. This course also applies and develops the rhythmic, melodic, and harmonic materials of Mus 10A through ear training, sight singing, analysis, and dictation. 54 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 11 Commercial Music Combo 1 units
For instrumentalists and vocalists who want experience in performing and interpreting small-group commercial music literature. Emphasis will be on articulations, stylistic differences, composition, arranging, and common performance practices. Enrollment by audition only. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 13 History of Rock & Roll 3 units
A cultural survey of original American music traditions, forms and trends influenced by cultural, socio-economic, socio-political and economic changes including blues, jazz, early rock, the “British invasion,” rap, hip hop culture, Latino rock, heavy metal, jazz-rock fusion, electronic, modern rock, and pop . 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 14 Jazz Workshop 1 units
Reading, preparation and performance of contemporary Jazz music. Opportunity to apply improvisation techniques in a group setting. Number of times course may be taken for credit: 4. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 15 Jazz Ensemble 1 units
This course is for the study, rehearsal, and public performance of standard jazz ensemble literature, with an emphasis on the development of skills needed to perform within an ensemble. New literature will be studied each term so that different technical and artistic issues are addressed. Opportunities to arrange and compose for the ensemble as well as to conduct. Opportunity to apply improvisation techniques in a group setting. Number of times course may be taken for credit: 4. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 16 Philharmonic Orchestra 1 units
This course is for the study, rehearsal, and public performance of the standard Classical orchestra literature, with an emphasis on the development of skills needed to perform within an ensemble. Different literature is studied each semester so that different technical, historical and artistic issues are addressed. Attendance at all scheduled performances is required. Audition required. Number of times course may be taken for credit: 4. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 17A Jazz Combo 1 1 units
For instrumentalists who want experience in performing and interpreting small-group literature. The music literature will cover important aspects of Jazz band development and works of all styles and periods. Emphasis will be on articulations, stylistic differences, composition, arranging, and common performance practices of the various periods of music. Number of times course may be taken for credit: 4. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 17B Jazz Combo 2 1 units
For intermediate/advanced instrumentalists who want to continue what they learned in 17A by performing, composing, and arranging small-group literature. Number of times course may be taken for credit: 4. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 18A Jazz/Pop Piano 1 1 units
Voicings, chords, and guidelines for interpretation of lead sheets in a variety of genres for the contemporary pianist. Emphasis on improvisation, accompaniment, bass lines, grooves, and reharmonization. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 18B Jazz/Pop Piano 2 1 units
Building on the content offered in Music 18A, this course offers more advanced voicings, chords, and guidelines for interpretation of lead sheets in a variety of genres for the contemporary pianist. The student learns chords and chord progressions used in jazz and popular music styles as applied to the keyboard, focusing on chromatic seventh chords and sequences, chord extensions and advanced rhythmic concepts. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 19 Studies in Music Composition 3 units
Presents a technical and historical analysis of works in various music languages. Students will compose individual pieces to be performed by college-based music ensembles. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 20A Elementary Guitar 1 units
Beginning guitar using a combination of folk and classic approaches to playing technique, utilizing basic scales and chords in first position, and music notation. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 20B Study of Guitar 1 units
Development of skills and knowledge from Music 20A. Emphasis on playing techniques and performance. Designed for the intermediate and advanced performer. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 20C Advanced Guitar 1 units
Development of skills and knowledge from Music 20B. Emphasis on advanced playing techniques and performance. Designed for the advanced performer. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 21A Beginning Piano 1 units
Group instruction in piano for the absolute beginner with emphasis on developing technique, reading music, and performing. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 21B Intermediate Piano 1 units
Development of skills learned in Music 21A. Emphasis on further development of technique and performance. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 22A Scoring for Film and Multimedia 1 3 units
Applications and techniques of composition and sound effects for film and other visual media. Musical and technical elements of producing digital audio tracks are covered. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 22B Scoring for Film and Multimedia 2 3 units
Building on material covered in Scoring for Film and Multimedia 1, students will continue to hone compositional technique for film and other visual media. Upon successful completion of this course, students will be prepared to enter the film music industry with necessary skill sets to succeed. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 23A Elementary Voice 1 units
Group singing with an emphasis on healthy vocal production, solo performance opportunities, breathing, diction, sight singing, and the study of vocal anatomy. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 23B Intermediate Voice 1 units
Further development of skills learned in Music 23A. Emphasis on continued development of vocal production, solo performance practice, sight singing, the International Phonetic Alphabet, and interpretation of non-English literature. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 25 Teaching Beginning Piano 2 units
Principles of successful piano teaching with emphasis upon development of technique and reading ability in beginner level students; private and group piano teaching methods; personal development as teacher and musician. Observation of piano lessons or classes and supervised practice teaching private or group piano students may be required. Intended for pianists with intermediate or advanced skills. 36 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 26 Methods/Materials/Piano Teachers 2 units
Examination of various methods for use in teaching piano; setting up a teaching studio and maintaining the business; finding and selecting supplementary literature; preparing for recitals and other special events. Intended for pianists with intermediate or advanced skills who are engaged in the teaching of piano or who would like to prepare to teach. 36 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 27 Teaching Intermediate Piano 2 units
Principles of successful piano teaching with emphasis upon continued development of technique and reading ability in intermediate level students; private and group piano teaching methods; selection of intermediate literature; Baroque, Classical, Romantic and 20th Century styles; studio organization and personal development as teacher and musician. Observation of piano lessons or classes and supervised practice teaching of private or class piano students may be required. Intended for pianists with intermediate or advanced skills. 36 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 28 Keyboard Skills 1 units
Emphasis on correct harmonization of melodies with various styles of piano accompaniments; transposition; improvisation; modulation; sight reading; principles of accompanying soloists and groups; ensemble playing; playing by ear. Frequent solo and ensemble performances in class. Intended for piano teachers or classroom music teachers. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 29 Independent Study, Music 0.5 - 2 units
Supervised study in the area of Music. Any student interested in registering for an Independent Studies course should contact a full/part-time instructor or dean in the appropriate area. 27 hours laboratory.
- Credit - Degree Applicable

- Grading Option: Letter or P/NP

MUS 3 World Music 3 units
The study of the folk and art music of world cultures. Includes the traditional music of Sub-Saharan Africa, Middle East, China, Japan, Indonesia, India, Latin America, Europe, and Native America. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 31 Study of Piano 1 units
Building off of knowledge and skills from MUS 21B, MUS 31 continues development of functional piano skill for intermediate or advanced level. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 34 Music in Film 3 units
The class traces the history and development of film music through reading, lecture and film viewing. The class studies the process of film scoring and how music and its relationship to film have changed over the last century. Class includes discussion and evaluation of different compositional styles and learning to listen critically to film scores while viewing movies. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 35 Introduction to Music Technology 3 units
This course introduces the following aspects of music technology: computer skills, principles of sound and acoustics, MIDI, digital audio manipulation, recording and production using a digital audio workstation, audio hardware, and audio in live performance. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 36 Intermediate Music Technology 3 units
This course is the 2nd level course in the music technology series. Topics include intermediate/advanced computer skills, software-based sequencing, synthesis, MIDI, sampling, notation, principles of sound, microphones, digital audio, signal processing, mixing, recording principles, cables and interconnects, and audio in live performance. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 37 Music Business 3 units
Career opportunities and business practices in the music industry. Focus on career options and development, artist management, unions, music merchandising, music for film and digital media, and concert promotion. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 38 Applied Lessons 1 units
Individualized study of the appropriate techniques and repertoire for the specific instrument or voice being studied. The emphasis is on the progressive development of skills needed for solo performance. Achievement is evaluated through a juried performance. Enrollment subject to a standardized audition demonstrating basic competencies in technique and musicianship in their major performance medium. Concurrent enrollment in one music theory class (MUS 8A, MUS 8B, MUS 10A or MUS 10B) and one performing ensemble (MUS 12, MUS 14, MUS 15, MUS 16, MUS 44, MUS 45, MUS 46A, MUS 46B, or MUS 48). 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 4 Jazz in American Culture 3 units
History, trends and influences of the phenomenon of jazz through integration of the cultures of (but not limited to) African-American, European-American and the Latin-American communities. Required listening, reading and concert attendance will guide the student to value jazz as a form of self expression and improve the ability to listen and understand the various eras in jazz from pre-Dixieland to present day. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 41 Instrumental Chamber Music 1 units
This course is an instrumental music ensemble that performs selections from the standard classical repertoire, as well as modern compositions. Students develop all aspects of instrumental performance including technique, sight-reading, intonation, rhythmic interpretation, ensemble balance, and stylistic interpretation. Musical instruments may include members of the brass, woodwind, string, percussion, and keyboard families. Enrollment by audition only. Number of times course may be taken for credit: 4. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 44 Concert Choir 1 units
This course offers an opportunity for students to study, interpret, and perform vocal ensemble music in a variety of styles. Emphasis is placed on building ensemble singing experience and techniques towards a successful audition into higher-level ensembles. Designed for students of all backgrounds and experience levels. Concurrent enrollment in MUS 6 (Basic Music Skills) is highly recommended. Number of times course may be taken for credit: 4. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 45 Chamber Choir 2 units
A performance-based class furthering the effective study, interpretation, and presentation of choral literature. Designed for vocalists with previous classical ensemble experience. Performs multiple times per semester. Number of times course may be taken for credit: 4. 9 hours lecture, 81 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 46 Vocal Jazz Ensemble 2 units
An advanced performance-based class exploring jazz voice in an ensemble setting. Course emphasizes the study of a variety of jazz and pop/rock styles, overall healthy vocal technique, use of microphones and an active sound system, vocal improvisation, and overall musicianship. Singing and ensemble experience highly recommended, as the class requires strong sense of intonation, rhythm, and vocal blend. Performs multiple times per semester. Number of times course may be taken for credit: 4. 9 hours lecture, 81 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 47 College Productions-Music 1 units
Participation in scheduled music productions. Includes music support for drama productions, college musicals, and other major performances. Enrollment is for the duration of the production, and by audition only. Number of times course may be taken for credit: 4. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 48 Improvisation Lab 1 units
This course exposes students to the fundamental concepts and skills needed for improvising in a group setting. The course is open to instrumentalists or vocalists at any level of proficiency, with no audition or prior improvisation experience required. The course is intended to expose students to the role of improvisation in a variety of music genres, and to provide experience playing in different-sized ensembles. The course prepares students for established advanced jazz ensembles in the department like Jazz Combos, Jazz Ensemble, and Vocal East. Emphasis will be on group activities, individual projects, independent listening and practice, basic theory concepts, and performance. Number of times course may be taken for credit: 4. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 5 American Cultures in Music 3 units
Music in twentieth century United States through the study of contributions of five selected groups from the following: African-Americans, Latin-Americans, Asian-Americans, European-Americans, and Native Americans. Emphasis on understanding diverse styles, and on integrating these styles into American music. Concert, religious, and folk-pop music will be included. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 6 Basic Music Skills 2 units
Essentials of music through notation, time elements, melody, harmony, and tonality, texture, dynamics and knowledge of the keyboard. Sight singing and ear training. 36 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 8A Music Theory and Musicianship 1 4 units
Elements of diatonic harmony through part writing and ear training exercises as typified by musical practice from 1600 to the present. Includes keys, modes, scales, tonality, intervals, solfeggio, consonance/dissonance, rhythmic organization, chord structures, chord and interval recognition, melodic and rhythmic dictation, voice leading principles, non-chord tones, four-part voice leading with selected primary and secondary chords, and figured bass realization. 63 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

MUS 8B Music Theory and Musicianship 2 4 units
Continues diatonic harmony through part writing and ear training exercises as typified by musical practice from 1600 to the present, continues solfeggio, chord recognition, melodic and rhythmic dictation, voice leading involving four-part choral writing, and figured bass realization. Introduces harmonic dictation, cadential elaboration, non-dominant seventh chords, and an introduction to secondary/applied chords and modulation. 54 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

NONCREDIT AUTOMOTIVE TECHNOLOGY (NAUT)

NAUT A1 Engine Repair 0 units
An in depth study of engines: mechanical, measurement, and assembly. A study of the above mentioned components including theory, teardown, evaluate, qualifying, and rebuilding. This class' emphasis is on engines. Students are encouraged to enroll in Automotive Lab concurrently. 36 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

NAUT A2 Automatic Transmission/Transaxle 0 units
An in depth study of engine, transmission, transaxles: mechanical, measurement, and assembly. An in-depth study of the above mentioned components including theory, teardown, evaluate, qualifying, and rebuilding. Students are encouraged to enroll in Automotive Lab concurrently. 36 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

NAUT A3 Manual Drive Train and Axles 0 units
An in-depth study of rear axle, front axle, and transfer cases: mechanical, measurement, and assembly. Including theory, teardown, qualifying, and rebuilding. Students are encouraged to enroll in Automotive Lab concurrently. 36 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

NAUT A4 Suspension and Steering 0 units
Diagnosis, evaluation, testing, adjustment, alignment and repair of steering and suspension systems. Including all common automotive steering and suspension systems both car and truck. Future systems will also be covered. Students are strongly recommended to enroll in Automotive Lab concurrently. 36 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

NAUT A5 Brakes 0 units
Diagnosis, evaluation, inspection, adjustment, and repair of braking, antilock braking systems, traction control and related devices. Class will involve California State law regarding brake and safety inspections. Includes the material on the California Brake Adjuster's Licensing Examination. Students are strongly recommended to enroll in Automotive Lab concurrently. 36 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

NAUT A6 Electrical/Electronic Systems 0 units
Automotive electrical/electronic systems, including electrical circuits, Ohm's Law, battery, starting, charging, ignition, fuel, accessories, brakes, chassis, suspension, steering, HVAC, and wiring systems. Emphasis on diagnosis of electrical troubles, assembly, repair of components, and diagnostic equipment usage. Students are strongly recommended to enroll in Automotive Lab concurrently. 54 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

NAUT A7 Automotive Heating and Air Conditioning 0 units
Diagnosing, evaluation, testing, adjustment, and repair of heating, ventilation and air conditioning (HVAC). Includes heat and energy, psychometrics, air flow, refrigerant recycling, equipment and controls. Student will be prepared to pass a nationally recognized HVAC certificate program, required by all California HVAC repair shops. Students are strongly recommended to enroll in Automotive Lab concurrently. 36 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

NAUT ASCL Automotive Summer Camp Hands On 0 units
This is the hands-on lab section of the Automotive Summer Camp! To enroll in this class you must first be enrolled in Automotive Summer Camp (ASMC). Have you ever wanted to know more about your car but do not have time to take an 18-week course? Have you ever wanted to change your own oil? Learn what the cryptic code on the tire means? Learn general knowledge about cars? This is the class for you! From maintenance to oil changes to tires to smog to hybrids to jump starting. Speaking of jump starting, let's start!. 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

NAUT ASMC Automotive Summer Camp 0 units
Have you ever wanted to know more about your car but do not have time to take an 18-week course? Have you ever wanted to change your own oil? Learn what the cryptic code on the tire means? Learn general knowledge about cars? This is the class for you! From maintenance to oil changes to tires to smog to hybrids to jump starting. Speaking of jump starting, let's start! There is a lab section that follows the lecture section for students to gain hands-on experience. 17.5 hours lecture.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

NAUT CA1 Concepts of Engine Repair 0 units
This class is lecture only and non-credit. An in depth study of engines: mechanical, measurement, and assembly. A study of the above mentioned components including theory, teardown, evaluate, qualifying, and rebuilding. This class' emphasis is on engines. 36 hours lecture.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

NAUT CA2 Concepts of Automatic Transmission/ Transaxle 0 units
This class is lecture only and non-credit. An in depth study of engine, transmission, transaxles: mechanical, measurement, and assembly. An in-depth study of the above mentioned components including theory, teardown, evaluate, qualifying, and rebuilding. 36 hours lecture.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

NAUT CA3 Concepts of Manual Drive Train and Axles 0 units
This class is lecture only and non-credit. An in-depth study of rear axle, front axle, and transfer cases: mechanical, measurement, and assembly. Including theory, teardown, qualifying, and rebuilding. 36 hours lecture.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

NAUT CA4 Concepts of Suspension and Steering 0 units
This class is lecture only and non-credit. Diagnosis, evaluation, testing, adjustment, alignment and repair of steering and suspension systems. Including all common automotive steering and suspension systems both car and truck. Future systems will also be covered. 36 hours lecture.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

NAUT CA5 Concepts of Brakes 0 units
This class is lecture only and non-credit. Diagnosis, evaluation, inspection, adjustment, and repair of braking, antilock braking systems, traction control and related devices. Class will involve California State law regarding brake and safety inspections. Includes the material on the California Brake Adjuster's Licensing Examination. 36 hours lecture.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

NAUT CA6 Concepts of Electrical/Electronic Systems 0 units
This class is lecture only and non-credit. Automotive electrical/electronic systems, including electrical circuits, Ohm's Law, battery, starting, charging, ignition, fuel, accessories, brakes, chassis, suspension, steering, HVAC, and wiring systems. Emphasis on diagnosis of electrical troubles, assembly, repair of components, and diagnostic equipment usage. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

NAUT CA7 Concepts of Automotive Heating and Air Conditioning 0 units
This class is lecture only and non-credit. Diagnosing, evaluation, testing, adjustment, and repair of heating, ventilation and air conditioning (HVAC). Includes heat and energy, psychometrics, air flow, refrigerant recycling, equipment and controls. Student will be prepared to pass a nationally recognized HVAC certificate program, required by all California HVAC repair shops. 36 hours lecture.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

NAUT CA8 Concepts of Engine Performance 0 units
This class is lecture only and non-credit. Principles of automotive fuel induction, ignition and emission control systems, including inspection, diagnosis and repair of fuel and emission control systems/components governed by federal and state laws and standards. Electrical diagnosis of emission control systems. Relation of chassis and body systems to emissions. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

NAUT CA9 Concepts of Light Vehicle Diesel Engines 0 units
This class is lecture only and non-credit. An in-depth study of diesel engines: mechanical, measurement, and assembly. A study of the above mentioned components including theory, teardown, evaluate, qualifying, and rebuilding. Diesel engine performance including emissions, turbos, exhaust and intake systems. This class's emphasis is on diesel engines and diesel engine performance/emissions. 36 hours lecture.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

NAUT CINTR Concepts of Automotive Service and Introduction 0 units
This class is lecture only and non-credit. Bumper-to-Bumper Automotive Knowledge. Starting with hazardous waste handling, tool identification, maintenance and lubrication, moving into engine mechanical, emissions controls, suspension systems, air conditioning, airbags and safety, transmissions, axles, and finishing off with the future of the automotive industry. This is an introductory class for people who want to know more about their vehicle. 36 hours lecture.
- Noncredit
- Grading Option: Pass/No Pass

NAUT CSDR Concepts of Specified Diagnostic and Repair 0 units
This class is lecture only and non-credit. This is a Bureau of Automotive Repair alternative to the ASE A6, A8 and L1 certification. This class is intended to allow California drivers to understand the training and laws of the smog check program. Student will not qualify for the license exam after taking this class. For more information see www.smogcheck.ca.gov. 72 hours lecture.
- Credit - Not Degree Applicable
- Grading Option: Pass/No Pass

NAUT CSMG Concepts of Smog Level One and Level Two 0 units
This class is lecture only and non-credit. This class will include Level One and Level Two smog lectures only. This class is intended to allow California drivers to understand the training and laws of the smog check program. At the end of the class students will not qualify for either EI or EO smog license. See www.smogcheck.ca.gov for more information. 90 hours lecture.
- Noncredit
- Grading Option: Pass/No Pass

NAUT INTR Automotive Service and Introduction 0 units
Bumper-to-Bumper Automotive Knowledge. Starting with hazardous waste handling, tool identification, maintenance and lubrication, moving into engine mechanical, emissions controls, suspension systems, air conditioning, airbags and safety, transmissions, axles, and finishing off with the future of the automotive industry. This is an introductory class for people who want to know more about their vehicle or who are planning an automotive career. 36 hours lecture, 108 hours laboratory.
- Noncredit
- Grading Option: Letter or P/NP

NAUT L1L2 Smog Level One and Level Two 0 units
This course includes classes/modules the State of California's requires for a student/automotive technician to be prepared to take their Smog License Test. This class will include Level One and Level Two smog training only. At the end of the class students may or may not qualify for either EI or EO smog license. See www.smogcheck.ca.gov for more information. 90 hours lecture, 27 hours laboratory.
- Noncredit
- Grading Option: Letter or P/NP

NAUT LABA Automotive Lab 0 units
Automotive Lab is an open laboratory class for basic automotive students. This class is for students desiring to expand their hands-on experience using their own vehicle. Instructor will provide technical and supervisory support to guide students in completion of their self initiated projects. Service information via computer service manuals will be available for students to use for vehicle information and research. 108 hours laboratory.
- Noncredit
- Grading Option: Letter or P/NP

NAUT LABB Automotive Lab Advanced 0 units
Automotive Lab Advanced is an open laboratory class for advanced automotive students. This class is for students desiring to expand their hands-on experience using their own vehicle. Instructor will provide technical and supervisory support to guide students in completion of their self initiated projects. Students are expected to help others in class and be able to work without guidance. Service information via computer service manuals will be available for students to use for vehicle information and research. Class is recommended for second year students only. 108 hours laboratory.
- Noncredit
- Grading Option: Letter or P/NP

NAUT LABC Automotive Lab Specialized Bench Work 0 units
Automotive Lab Specialized Bench Work is an open laboratory class for automotive students. This class is for students desiring to expand their hands-on experience using shop equipment. This class specializes in rebuilding automotive parts. The instructor will provide technical and supervisory support to guide students in the completion of their self-initiated projects. Service information via computer service manuals will be available for students to use for vehicle information and research. Class is recommended for second year students only. 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

NAUT LABD Automotive Lab Specialized Electronic Work 0 units
Automotive Lab Specialized Electronic Work is an open laboratory class for automotive students. This class is for students desiring to expand their hands-on experience using shop equipment. This class specializes in electronics work. This includes accessories, EV, hybrid, and aftermarket electrical. The instructor will provide technical and supervisory support to guide students in the completion of their self-initiated projects. Service information via computer service manuals will be available for students to use for vehicle information and research. 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

NAUT SDR Specified Diagnostic and Repair 0 units
This is a Bureau of Automotive Repair approved alternative to the ASE A6, A8 and L1 certification required for obtaining and maintaining smog

technician licenses. This course will follow BAR guidelines for smog license prep. Student may or may not qualify for license exam after taking this class. For more information see www.smogcheck.ca.gov. 72 hours lecture, 54 hours laboratory.
- Credit - Not Degree Applicable
- Grading Option: Letter or P/NP

NONCREDIT AVIATION (NAVI)

NAVI 201 Orientation to Drones and Unoccupied Aerial Systems (UAS) 0 units

This course introduces students to the fundamentals of drones and Unoccupied Aerial System (UAS) focused on mission planning, basic flight operations and the legal (local, state, and federal) and ethical frameworks in order to safely operate a UAS. It includes a hands-on lab component. 12 hours lecture, 15 hours laboratory.
- Noncredit
- Grading Option: Pass/No Pass

NAVI 202 Drone Aerial Survey, Photography and Videography 0 units

This course is an introduction to using drones and Unoccupied Aerial Systems (UAS) to capture and process a wide array of remote sensing data and digital imagery. It will cover pre-flight planning, in-flight choreography, and post processing stages. An emphasis is developing post-processing skills for commercial applications with exposure to the craft of report writing, cartography, and desktop stills/video editing. This is a creative starting point to using drones in multiple disciplines and careers. It involves a hands-on laboratory component. 12 hours lecture, 15 hours laboratory.
- Noncredit
- Grading Option: Pass/No Pass

NAVI 203 FAA Remote Pilot Certificate Exam Preparation 0 units

This course prepares students to pass the FAA Part 107 Remote Pilot Certificate exam. It will focus on the main sections of the exam including: the basic flight operations, the legal and ethical frameworks, safety considerations, airspace classification, operating requirements, flight restrictions and the effects of weather on a drone's performance. 27 hours lecture.
- Noncredit
- Grading Option: Pass/No Pass

NONCREDIT BUSINESS (NBUS)

NBUS 200 Communication in the Workplace 0 units

This course introduces the key elements for communication in the professional workplace, and is beneficial for students seeking to improve their interpersonal communication skills. 9 hours lecture.
- Noncredit
- Grading Option: Letter or P/NP

NBUS 201 Writing Skills for Managers 0 units

This course is designed to provide students with the skills necessary to effectively write various business documents. This course is beneficial for students seeking to improve their written communication skills in the workplace. Not applicable to associate degree. 9 hours lecture.
- Noncredit
- Grading Option: Letter or P/NP

NBUS 202 Attitude in the Workplace 0 units

This course introduces the key elements for attitude in the professional workplace. This course is beneficial for students seeking to improve their ability to communicate a positive attitude while at work. Not applicable to associate degree. 9 hours lecture.
- Noncredit
- Grading Option: Letter or P/NP

NBUS 203 Decision Making and Problem Solving 0 units

This noncredit course introduces the key elements for decision making and problem solving in the professional workplace. This course is beneficial for students seeking to improve their decision making and problem solving skills. Not applicable to associate degree. 9 hours lecture.
- Noncredit
- Grading Option: Letter or P/NP

NBUS 204 Managing Organizational Change 0 units

This noncredit course introduces the key elements for managing organizational change in the professional workplace. This course is beneficial for students seeking to improve their understanding of how to manage organizational change. Not applicable to associate degree. 9 hours lecture.
- Noncredit
- Grading Option: Letter or P/NP

NBUS 205 Team Building 0 units

This course is designed to provide students with an understanding of how teams work together, and common problems teams encounter and how to solve them. Not applicable to associate degree. 9 hours lecture.
- Noncredit
- Grading Option: Letter or P/NP

NBUS 206 Time Management 0 units

This course is designed to introduce students to time management principles and specific tools that assist in making the most efficient use of time. This course is beneficial for students seeking to improve their time management skills. Not applicable to associate degree. 9 hours lecture.
- Noncredit
- Grading Option: Letter or P/NP

NBUS 207 Conflict Resolution 0 units

This course is designed to introduce students to the meaning of conflict, the causes of conflict, and strategies for resolving interpersonal conflict. This course is beneficial for students seeking to improve their conflict resolution skills. Not applicable to associate degree. 9 hours lecture.
- Noncredit
- Grading Option: Letter or P/NP

NBUS 208 Stress Management in the Workplace 0 units

This course is designed to acquaint students with key elements of stress management in the workplace. This course is beneficial for students seeking to improve their skills in recognizing and managing stress. Not applicable to associate degree. 9 hours lecture.
- Noncredit
- Grading Option: Letter or P/NP

NBUS 209 Values and Ethics 0 units

This course is designed to acquaint students with the importance of values and ethics in the workplace. This course is beneficial for students seeking to improve skills in interpreting how values influence actions and evaluating the impact of ethical behavior. Not applicable to associate degree. 9 hours lecture.
- Noncredit
- Grading Option: Letter or P/NP

NBUS 210 Customer Service 0 units

This noncredit course covers key skills and attitudes necessary to effectively meet the customer's need and teaches students best practices for the importance of values and ethics in the workplace. Not applicable to associate degree. 9 hours lecture.
- Noncredit
- Grading Option: Letter or P/NP

NBUS 211 Design Thinking for the Entrepreneur 0 units

This course introduces students to the decision making process called Design Thinking. Design Thinking emphasizes deep user understanding, intentional iteration and a focus on possibilities as a way to improve people's lives and enhance and create value for stakeholders. Design Thinking draws on methods from engineering and design and combines them with ideas from the arts, social services and the business world. Emphasis will be placed on experiential learning, identifying specific behaviors and skills that enable design thinkers to meet customer demands in all types of organizations including for-profits, non-profits, healthcare, arts and education. 9 hours lecture.
- Noncredit
- Grading Option: Letter or P/NP

NBUS 212 Developing Your Business Plan 0 units

This is a course designed for students considering starting their own businesses. All major elements of a business plan will be covered, including financial statements, marketing, and competitive strategies. 9 hours lecture.
- Noncredit
- Grading Option: Letter or P/NP

NBUS 213 Legal Aspects of Small Business 0 units
This course is designed for students interested in establishing a business and who need information about the legal issues involved. Legal aspects such as forms of ownership, licensing, and taxes will be covered. 9 hours lecture.
- Noncredit
- Grading Option: Letter or P/NP

NBUS 214 Success in the Gig Economy 0 units
This course provides students with a hands-on class experience in starting a side business that can add to a student's income stream or grow into a full-time business. Students will learn to: identify income producing opportunities, develop business and promotion plans, and fund, launch, refine their business and make a profit. Emphasis will be placed on experiential learning, taking action and the iterative refinement process needed to start a new business. 9 hours lecture.
- Noncredit
- Grading Option: Letter or P/NP

NBUS 233 Personal Financial Management and Planning 0 units
Designed to provide students with the practical, hands-on means of successfully managing their personal finances and of becoming financially empowered upon course completion. Among other topics, the course will cover the basics of credit management, assessing insurance needs, budgeting, personal financial statement preparation, investment and savings accounts, management of taxes, retirement accounts, will preparation and estate planning. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

NONCREDIT COMPUTER INFORMATION SYSTEMS (NCIS)

NCIS 201 CyberSecurity Camp 0 units
This course will introduce the novice to cybersecurity career opportunities, cyber ethics, online safety, and cyber threats. Students will be introduced to cybersecurity principles, virtual machines, basic Windows and Linux administration security policies, fundamental CISCO network routing and CISCO packet tracer. As a culminating activity students will compete by analyzing and fixing vulnerabilities on the provided Windows and Linux images. 15 hours lecture, 25 hours laboratory.
- Noncredit
- Grading Option: Pass/No Pass/Satisfactory Progress

NCIS 201B CyberSecurity Advanced Skills 0 units
This course will build upon the intro to cybersecurity camp. Review cybersecurity career opportunities, cyber ethics, online safety, and cyber threats. Students will build upon cybersecurity principles, virtual machines, basic Windows and Linux administration security policies, fundamental CISCO network routing and CISCO packet tracer. As a culminating activity students will compete by analyzing and fixing vulnerabilities on the provided Windows and Linux images. 15 hours lecture, 25 hours laboratory.
- Noncredit
- Grading Option: Pass/No Pass/Satisfactory Progress

NCIS 202 CyberSecurity Competition Prep 0 units
This course prepares students to participate in cyber security competitions (CyberPatriot, National Cyber League, etc). Topics include an overview of cyber competitions, virtual machines, Linux operating systems and administration, Windows operating systems and administration, CISCO networking, and packet tracer. Through business scenarios, students will create checklists of potential vulnerabilities and work in teams to secure networks and sensitive data. true hours lecture, 30 hours laboratory.
- Noncredit
- Grading Option: Pass/No Pass/Satisfactory Progress

NCIS 203 CyberSecurity Competition 0 units
This course allows students to participate in cyber security competitions (CyberPatriot, National Cyber League, etc). Topics include an overview of cyber competitions, virtual machines, Linux operating systems and administration, Windows operating systems and administration, CISCO networking, and packet tracer. Through business scenarios, students will create checklists of potential vulnerabilities and work in teams to secure networks and sensitive data. 30 hours laboratory.
- Noncredit
- Grading Option: Pass/No Pass/Satisfactory Progress

NCIS 210 Orientation to IT Careers 0 units
This course enables students to analyze the field of information technology (IT). The class will include a survey of the IT professions, industry certifications, employment skills, definitions, associations, current issues, salaries, and self-assessment survey of skills and competencies. Students will be able to identify an IT program pathway at LPC. 18 hours laboratory.
- Noncredit
- Grading Option: Pass/No Pass/Satisfactory Progress

NCIS 244 IT Fundamentals+ 0 units
Information Technology Fundamentals+ (ITF+) is the essential qualification for exploring a career in IT. This course will cover the topics of the CompTIA IT Fundamentals certification, which validates the knowledge and skills required to identify and explain the basics of computing hardware and software, IT infrastructure, applications and software, software development concepts, database fundamentals, and security. Technologies and trends of the IT industry and the exploration of IT careers. This course will prepare you to take the CompTIA certification exam. 36 hours lecture.
- Noncredit
- Grading Option: Pass/No Pass

NONCREDIT ENGLISH (NENG)

NENG 204 Integrated Reading and Writing II 0 units
An accelerated one-semester preparation in English for success in college. Integrates reading, critical thinking and writing assignments, using materials that present a variety of perspectives from across the curriculum. 54 hours lecture, 54 hours laboratory.
- Noncredit
- Grading Option: Pass/No Pass

NONCREDIT ENGLISH AS A SECOND LANGUAGE (NESL)

NESL 201 Vocational ESL for Retail 1 0 units
VESL for Retail 1 is a noncredit, short-term certificate of completion designed for high-beginning and intermediate ESL students seeking immediate employment. Students gain knowledge in occupation-specific application and intake processes, terminology and communication skills. Upon completion of VESL for Retail 1, students will be provided the opportunity to interview with our retail partners. 10 hours lecture.
- Noncredit
- Grading Option: Pass/No Pass

NESL 202 Vocational ESL for Retail 2 0 units
VESL for Retail 2 is a noncredit, short-term certificate of completion designed for high-beginning and intermediate ESL students seeking employment promotions. Students gain knowledge in occupation-specific terminology and communication skills, as well as an understanding of company culture, such as cross training and promotion opportunities. 10 hours lecture.
- Noncredit
- Grading Option: Pass/No Pass

NESL 220A Intermediate Grammar for Reading and Writing 0 units
This is the first semester of a one-year course in intermediate grammar for academic writing and reading designed to enable students to identify, comprehend, and use linguistic forms accurately, meaningfully and appropriately in reading and writing. The course focuses on types of sentences, clauses, and phrases, word order, verb forms, verb tenses, and on the connection between vocabulary and grammar. Students are advised to enroll concurrently in NESL 220A and NESL 221A, and ESL 123 or ESL 126. Prerequisite: or placement through the ESL assessment process. 54 hours lecture.
- Noncredit
- Grading Option: Pass/No Pass

NESL 220B High-Intermediate Grammar for Reading and Writing 0 units
This is the second semester of a one-year course in intermediate grammar for academic writing and reading designed to enable students to use linguistic forms accurately, meaningfully and appropriately in written

expression. The course focuses on types of sentences, clauses, phrases, word order, verb forms, verb tenses, and on the connection between vocabulary and grammar. This course also emphasizes analyzing grammar and meaning and detecting and correcting grammatical errors. Students are advised to enroll concurrently in NESL 220B and NESL 221B, and ESL 123 or ESL 126. Prerequisite: or placement through the ESL assessment process. 54 hours lecture.

- Noncredit
- Grading Option: Pass/No Pass

NESL 221A Intermediate Reading and Writing 0 units

This is the first semester of a one-year course in intermediate academic writing and reading. Classes will focus on writing sentences, paragraphs and compositions, developing strategies for reading comprehension and flexibility, on interactive reading, and on academic vocabulary development. Students will develop cultural understanding, vocabulary, and fluency through a variety of academic writing and reading tasks. Students are advised to enroll concurrently in NESL 220A and NESL 221A, and ESL 123 or ESL 126. Prerequisite: Placement through ESL assessment process. 108 hours lecture, 18 hours laboratory.

- Credit - Not Degree Applicable
- Grading Option: Pass/No Pass

NESL 221B High-Intermediate Reading and Writing 0 units

This is the second semester of a one-year course in intermediate academic writing and reading. Classes will focus on writing sentences, paragraphs and compositions, developing strategies for reading comprehension and flexibility, on interactive reading, and academic vocabulary development. Students will develop cultural understanding and fluency through a variety of academic writing and reading tasks. Students are advised to enroll concurrently in NESL 221B and NESL 220B, and ESL 123 or ESL 126. Prerequisite: Placement through ESL assessment process. 108 hours lecture, 18 hours laboratory.

- Noncredit
- Grading Option: Pass/No Pass

NESL 230A Beginning Grammar for Reading and Writing 0 units

This is the first semester of a one-year course in beginning grammar for academic purposes designed to enable students to understand and use English accurately, meaningfully and appropriately. The course focuses on the connection between vocabulary and grammar, simple and compound sentences, phrases, verb forms, and verb tenses, especially simple present, simple past, and present progressive. Students are advised to enroll concurrently in NESL 230A and NESL 231A, and ESL 133 or ESL 136. Prerequisite: Placement through the ESL assessment process. 54 hours lecture.

- Noncredit
- Grading Option: Pass/No Pass

NESL 230B High-Beginning Grammar for Reading and Writing 0 units

This is the second semester of a one-year course in beginning grammar for academic purposes designed to enable students to identify and use linguistic forms accurately, meaningfully and appropriately in written expression. The course focuses on simple and compound sentences, word order, verb tenses: simple present, past, and future as well as present and past progressive, verb forms, modals, phrases, and vocabulary development. Students are advised to enroll concurrently in NESL 230B, NESL 231B, and ESL 133 or ESL 136. Prerequisite: or placement through the ESL assessment process. 54 hours lecture.

- Noncredit
- Grading Option: Pass/No Pass

NESL 231A Beginning Reading and Writing 0 units

This is the first semester of a one-year course in beginning academic writing and reading. Classes will focus on writing simple and compound sentences in short paragraphs, on developing strategies for increasing reading comprehension and flexibility, on interactive reading, and on developing academic vocabulary. Students will develop cultural understanding and fluency through a variety of writing and reading tasks. Students are advised to enroll concurrently in NESL 231A and NESL 230A, and ESL 133 or ESL 136. Prerequisite: Appropriate skill level demonstrated through the ESL assessment process. 108 hours lecture, 18 hours laboratory.

- Noncredit
- Grading Option: Pass/No Pass

NESL 231B High-Beginning Reading and Writing 0 units

This is the second semester of a one-year course in beginning academic writing and reading. Classes will focus on writing simple, compound, and complex sentences in structured paragraphs, on developing strategies for increasing reading comprehension and flexibility, on interactive reading, and on developing academic vocabulary. Students will develop cultural understanding and fluency through a variety of writing and reading tasks. Students are advised to enroll concurrently in NESL 231B and NESL 230B, and ESL 133 or ESL 136. Prerequisite: Placement through ESL assessment process. 108 hours lecture, 18 hours laboratory.

- Noncredit
- Grading Option: Pass/No Pass

NESL 240 Public Speaking Delivery for Advanced ESL (Communicate With Confidence) 0 units

A comprehensive introduction to the concepts of public speaking delivery skills used in academic and work settings. Covers key skills of eye contact, gestures, stance, and vocal variety. Classes will be performance based with intensive practice and individual coaching. 4 hours lecture.

- Noncredit
- Grading Option: Pass/No Pass

NESL 241 Public Speaking Structure for Advanced ESL (Find Your Voice) 0 units

A comprehensive introduction to structure in public speaking used in academic and work settings. Covers key skills of culturally appropriate interjection, concise response to questions, and assertive presence. Classes will be performance based with intensive practice and individual coaching. 4 hours lecture.

- Noncredit
- Grading Option: Pass/No Pass

NONCREDIT HORTICULTURE (NHRT)

NHRT 201 Fundamentals of Horticulture 0 units

This is an eight week short-term vocational horticulture course with lessons and lab activities are designed for students that have difficulty in a traditional classroom setting. Students will learn basic horticultural skills used in landscape, nursery, organic garden, and greenhouse settings. Safety training will be incorporated throughout the course. 8 hours lecture, 24 hours laboratory.

- Noncredit
- Grading Option: Pass/No Pass

NHRT 202 Landscape and Garden Maintenance 0 units

This is an eight week short-term vocational horticulture course with lessons and lab activities are designed for students that have difficulty in a traditional classroom setting. Students will demonstrate basic skills and safety procedures used in lawn maintenance, tree and shrub pruning, basic irrigation repair, and organic weed control strategies. 8 hours lecture, 24 hours laboratory.

- Noncredit
- Grading Option: Pass/No Pass

NHRT 203 Nursery and Garden Center Practices 0 units

This is an eight week short-term vocational horticulture course with lessons and lab activities are designed for students that have difficulty in a traditional classroom setting. Students will demonstrate basic skills used in plant identification, nursery and garden center operations, plant propagation, and sales presentation. 8 hours lecture, 24 hours laboratory.

- Noncredit
- Grading Option: Pass/No Pass

NHRT 204 Landscape and Garden Planning 0 units

This is an eight week short-term vocational horticulture course with lessons and lab activities are designed for students that have difficulty in a traditional classroom setting. Students will visit examples of well-planned gardens, recognize and implement a simple garden plan, and participate in the marketing of garden plants to fulfill landscape and garden goals. 8 hours lecture, 24 hours laboratory.

- Noncredit
- Grading Option: Pass/No Pass

NONCREDIT KINESIOLOGY (NKIN)

NKIN FCOA Fitness Center for Older Adults 1 units
Individualized exercise program will be created for older adults based on training principles and personal goals. The following considerations for older adult populations will be incorporated: Maintaining bone density, improving balance, coordination, and mobility, as well as appropriate strength training exercises. Also, a health risk appraisal will be conducted. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass/Satisfactory Progress

NONCREDIT LIBRARY STUDIES (NLIB)

NLIB 201 Getting Started with Research 0 units
Introduction to characteristics of academic and workplace research, the research process, and libraries. Familiarizes students with physical and online library resources; including availability, organization, and formats. Students will gain confidence to create a research strategy and to seek help when needed. 3 hours lecture.
- Noncredit
- Grading Option: Pass/No Pass

NLIB 202 Gathering Information 0 units
Introduction to gathering information used in academic and workplace research. Familiarizes students with characteristics and types of information used to research; including primary and secondary research. Students will gain confidence with research terminology and to seek help when needed. 3 hours lecture.
- Noncredit
- Grading Option: Pass/No Pass

NLIB 203 Evaluating Information 0 units
Introduction to evaluating information used in academic and workplace research. Familiarizes students with selecting suitable sources for academic and workplace research through examinations of source reliability, validity, accuracy, authority, timeliness, and objectivity. Students will gain confidence with research terminology and to seek help when needed. 3 hours lecture.
- Noncredit
- Grading Option: Pass/No Pass

NLIB 204 Using Information 0 units
Introduction to using information for academic and workplace research. Familiarizes students with the organization, presentation, and ethical use of information in academic and workplace contexts. Students will gain confidence with research terminology and to seek help when needed. 3 hours lecture.
- Noncredit
- Grading Option: Pass/No Pass

NONCREDIT MATHEMATICS (NMAT)

NMAT 200C Concurrent Support for SLAM Mathematics 0 units
Concurrent Support for SLAM Math is for students interested in disciplines that require Statistics and Liberal Arts Mathematics (SLAM) courses. This course offers structured support to students who are concurrently enrolled in a first-level transfer course, such as Statistics and Mathematics for Liberal Arts, and Finite Mathematics. The support course includes material to prepare students for the rigor of the transfer math course by teaching learning skills necessary to succeed in college courses as well as review of relevant prerequisite algebraic and geometric concepts, and more in-depth investigation of core concepts in their concurrent math course. 54 hours laboratory.
- Noncredit
- Grading Option: Pass/No Pass

NMAT 201C Concurrent Support for BSTEM Mathematics 0 units
Concurrent Support for BSTEM Math is for students interested in Business, Science, Technology, Engineering and Mathematical fields. This course offers structured support to students who are concurrently enrolled in a first-level transfer course, such as College Algebra, Trigonometry, and Business Calculus. The support course includes material to prepare students for the rigor of the transfer math course by teaching learning skills necessary to succeed in college courses as well as review of relevant prerequisite algebraic and geometric concepts, and more in-depth investigation of core concepts in their concurrent math course. 54 hours laboratory.
- Noncredit
- Grading Option: Pass/No Pass

NMAT 202C Just In Time Tutoring for Mathematics 0 units
This course offers individualized support tailored to college students seeking assistance with their mathematics coursework. Trained tutors and instructors will provide tutoring in foundational mathematics subjects. Students will also develop the study skills needed to succeed in their math classes. 1 hours laboratory.
- Noncredit
- Grading Option: Pass/No Pass

NMAT 207 Pre-Algebra 0 units
This course is intended to serve as a bridge between arithmetic and Elementary Algebra. It includes a review of arithmetic, operations involving signed integers, fractions, and decimals, variables and variable expressions, simple linear equations and their graphs, percent and proportion, introduction to statistics, geometry and measurement, and application problems. Students can petition to get credit for the credit Math 107 course by examination. 54 hours lecture, 54 hours laboratory.
- Noncredit
- Grading Option: Letter or P/NP

NMAT 210 Elementary Algebra 0 units
Elementary algebra concepts, including: real numbers and their properties; algebraic expressions; integer exponents; operations with polynomial expressions; linear and quadratic equations; linear inequalities and set notation; graphs of linear equations and inequalities; slope; systems of linear equations and inequalities; and modeling with linear and quadratic equations. Prerequisite: Pre-Algebra or a higher level of mathematics.. 72 hours lecture.
- Credit - Not Degree Applicable
- Grading Option: Letter or P/NP

NMAT 255 Intermediate Algebra 0 units
Intermediate Algebra concepts will be explored in this course including: an introduction to functions; linear and absolute value functions; absolute value equations and inequalities; compound linear inequalities; rational expressions, functions and equations; radical expressions, functions and equations; rational exponents; complex numbers; quadratic functions and equations; inverse of a function; exponential and logarithmic functions; properties of logarithms; exponential and logarithmic equations; conic sections; and systems of equations and inequalities. Multiple representations, applications and modeling with functions are emphasized throughout. Students can petition to get credit for the Math 55 Intermediate Algebra course by examination. Prerequisite: Elementary Algebra or a higher level of mathematics.. 90 hours lecture.
- Noncredit
- Grading Option: Letter or P/NP

NMAT 255C Concurrent Support for Intermediate Algebra 0 units
This course is concurrent support for Intermediate Algebra. The course is designed to provide additional, formal support to students who are currently taking an Intermediate Algebra. It includes a review of arithmetic, algebraic and geometric concepts that are relevant to their Intermediate Algebra course, study strategies that promote understanding and improve performance, and more in-depth investigation of core concepts that are difficult for students to master. Embedded are learning skills such as growth mindset, brain research, time management, study skills, test taking, math anxiety and more. 54 hours laboratory.
- Noncredit
- Grading Option: Pass/No Pass

NMAT 256 Geometry 0 units
Topics include congruence, similarity, right triangles, trigonometry, circles, expressing geometric properties with equations, geometric measurement and dimension, modeling with geometry, conditional probability and the rules of probability, and using probability to make decisions. Prerequisite: Elementary Algebra or a higher level of mathematics.. 54 hours lecture, 27 hours laboratory.
- Credit - Not Degree Applicable
- Grading Option: Letter or P/NP

NMAT 260A Math Jam Introduction to Tutoring 0 units
Math Jam is designed to help students prepare for their upcoming math class. This Math Jam Tutor Training course is designed to train tutors prior to Math Jam in strategies for effectively engaging students in learning difficult math concepts. Tutors will learn about intelligent practices for mastering material and how to navigate in the online course environment participants will be using during Math Jam. This is designed for students who are interested in becoming a paid mathematics tutor at Las Positas College or in any educational capacity. 4 hours lecture.
- Noncredit
- Grading Option: Pass/No Pass

NMAT 260B Math Jam for Tutors 0 units
Math Jam is designed to help students prepare for their upcoming math class. This Math Jam Tutor Training course supports tutors during Math Jam to apply strategies for effectively engaging students in learning difficult math concepts with participants. Tutors apply knowledge around intelligent practices for mastering material as they tutor participants during Math Jam. This is an excellent second course for students who are interested in becoming a paid mathematics tutor at Las Positas College or in any educational capacity. 5 hours lecture.
- Noncredit
- Grading Option: Pass/No Pass

NMAT 264 Math Jam for SLAM Preparation 0 units
Math Jam for SLAM Prep is for students preparing for math courses in Statistics and Probability or Mathematics for Liberal Arts. Math Jam is a FREE noncredit program designed to help students prepare for their upcoming math class at a community college. Embedded are essential study and life skills to develop each student holistically, including career development. Students will be learning prerequisite algebraic and basic probability material with the goal of preparing them to be successful in their upcoming first-level transfer course of Statistics or Math for Liberal Arts class. It is strongly recommended that students taking this course be enrolled in Math 40: Statistics and Probability or Math 47: Mathematics for Liberal Arts at Las Positas College. 12 hours laboratory.
- Noncredit
- Grading Option: Pass/No Pass

NMAT 265 Math Jam for BSTEM Preparation 0 units
Math Jam for BSTEM Prep is for students preparing for math courses in College Algebra, Trigonometry, Business Calculus and review prior to Calculus I. Math Jam is a noncredit program designed to help students prepare for their upcoming STEM focused math class at a community college. Embedded are essential study and life skills to develop each student holistically, including career development. Students will be learning pre-transfer level material with the goal of preparing them to be successful in their upcoming class. It is strongly recommended that students taking this course are enrolled in a community college math course. 12 hours laboratory.
- Noncredit
- Grading Option: Pass/No Pass

NONCREDIT MUSIC (NMUS)

NMUS 215 Jazz Band for Older Adults 0 units
This course is for the study, rehearsal, and public performance of standard jazz ensemble literature for the older adult. Emphasis is on the development of skills needed to perform within an ensemble. New literature will be studied each term so that different technical and artistic issues are addressed. Opportunities to arrange and compose for the ensemble as well as to conduct. Opportunity to apply improvisation techniques in a group setting. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

NMUS 216 Orchestra for Older Adults 0 units
This course is for the study, rehearsal, and public performance of the orchestral literature for the older adult, with a continued emphasis on the development of skills needed to perform within an ensemble. Different literature is studied each semester so that various technical, historical and artistic issues are addressed. Attendance at all scheduled performances is required. Audition required. 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter/Pass/No Pass/Satisfactory Progress

NUTRITION (NTRN)

NTRN 1 Introduction to Nutrition Science 3 units
Scientific concepts of nutrition related to the function of nutrients, sources and recommended intakes. Nutritional assessment and the role of nutrition in the maintenance of health. Prerequisite: Eligibility for college-level composition (ENG 1A, ENG 1AEX, or ESL 1A) as determined by college assessment or other appropriate method.. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

NTRN 5 Sports Nutrition 3 units
Students will study the role of nutrition in sports, performance and physical fitness. Optimal food, nutrient, and activity choices to maximize athletic performance for all athlete types. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

NONCREDIT TUTORING (NTUT)

NTUT 200 Supervised Tutoring 0 units
Open-entry/open-exit supervised tutoring course provided to students requesting assistance or referred by a counselor or instructor. Tutoring is conducted in a learning center and is structured to strengthen student skills, reinforce student mastery, and help students achieve specific course objectives. Trained tutors and instructors will provide individualized/small group tutoring and learning assistance for basic skills, vocational skills, and academic subject matter areas including mathematics, English, science, social science, humanities and a variety of general education courses vital to the overall success and retention of students..
- Noncredit
- Grading Option: Pass/No Pass

OCCUPATIONAL HEALTH AND SAFETY (OSH)

OSH 50 Intro Occupational Safety/Hlth 3 units
An introduction to the principles and techniques of occupational safety and health management. Includes historical evolution, professional make-up and responsibilities of the occupational and safety practitioners, and analysis and implementation of a typical safety program. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

OSH 60 Elements of Industrial Hygiene 3 units
Introduction to the major subject areas of Industrial Hygiene. This includes anticipation, recognition, evaluation, and control of workplace hazards; effects of toxic agents on the body; measurement of these agents; general methods for their control; as well as State and Federal regulatory requirements. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

OSH 62 Physical Hazards 3 units
Examination of physical hazards in the work environment and methods of control. Includes review of key hazards and regulatory requirements associated with human factors e.g., work area layout and planning, machine guarding, electrical safety, materials handling, rigging, conveyors, power tools, personal protective equipment, compressed gases, illumination, and working surfaces. Emphasis on methods for observation and inspection of workplace conditions and practices. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

OSH 67 Comp Regulatory Requirements 3 units
An introductory review of State and Federal Occupational Safety and Health Acts, awareness of life safety, fire safety and building codes and standards, Workers' Compensation laws, and other important regulations as they relate to occupational safety and health management. Includes interactive discussion of key regulatory requirements, focusing on employer responsibilities, interpretation of key regulations and techniques to implement an effective, comprehensive occupational safety and health program. 54 hours lecture, 0 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

PSYCHOLOGY-COUNSELING (PCN)

PCN 10 Career and Educational Planning 2 units
Exploration of the concept of career, educational and life planning focusing on personal career development through self-assessment. Emphasis on clarification of individual interests, values, needs, abilities and decision making styles, investigation of occupational opportunities in the world of work, and introduction to job search strategies, resume writing and interview skills. Designed for those undecided or uncertain about their career and educational plans. 36 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PCN 13 Multicultural Issues in Contemporary America 3 - 3 units
Exploration of issues relating to the multicultural community in which we live today. Interpersonal relations and communication. Focus on improving individuals understanding of other cultures and how those cultures impact the American lifestyle. Includes exploration of myths and misunderstandings. Discussion of four specific cultures or sub-cultures from the following groups: 1) African-American, 2) Asian-American, 3) Hispanic-American, 4) Native-American, 5) Middle Eastern-American, 6) European-American, 7) Gay/Lesbian American, 8) Disabled American. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PCN 15 College Study Skills 2 units
A review of study skill techniques for success in college. Topics include college culture and resources, time management, personal learning style, organization, note-taking and test-preparation strategies. Includes practice and evaluation of study skill techniques. 36 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PCN 18 University Transfer Planning 1 units
Introduction to the resources and planning process needed to ease transition from community college to a four-year college or university. Development of a transfer action plan. Preparation for major and general education requirements. Application cycles and important deadlines. Recommended for those transferring to four-year colleges or universities. 18 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PCN 25 Transition to College 0.5 units
A survey of practical strategies for academic success focusing on the new student. Examines goal setting, college policies, graduation requirements, campus resources, student's rights and responsibilities, and student educational planning. Designed for first time college students in order to enhance their transition into college and maximize their academic/career technical potential. 9 hours lecture.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

PCN 3 Theories And Concepts Of Counseling: An Introduction 3 units
This is an introductory course to the theories and concepts, as well as the historical foundations of counseling with an emphasis on fundamental principles of the therapeutic process. There will be a major focus on multicultural principles and major diagnostic categories, problems, and solutions relating to recovery in counseling. Ethics in counseling, as well as legal implications will also be introduced and examined. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PCN 30 Student Success and the College Experience 3 units
This course explores concepts, knowledge, and skills relevant to college success. Students will engage in critical analysis on a variety of topics, including motivation, decision making, interpersonal communication, multicultural awareness, and learning theory. Problem solving strategies will be applied to areas including goal setting, career development, wellness, and accessing campus resources. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PCN 35 Drugs, Health, and Society 3 units
This course provides an overview of the epidemiology and toxicology of substance abuse and its relevance to personal and public health. Students will be introduced to the concept of substance abuse and dependence, the definition of licit and illicit drugs, and the pharmacologic, neurologic and physiologic effects of selected substances on the human brain. Political, social and economic factors involved in the supply and demand for drugs will be discussed. Epidemiologic data on the prevalence, incidence, and trends of smoking, alcohol, prescription and other drug dependencies in the U.S. will be covered, as well as risk factors associated with the use and abuse of these substances. Current options for recovery and a survey of local resources will be reviewed. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PCN 5 Introduction to Social Work and Human Services 3 units
An introductory overview of social welfare and the societal institutions in the U.S. that structure the provision of social services. The course presents a historical perspective on the development of U.S. social work and human services. Special attention is given to the evolution of social welfare programs and institutions, contemporary social problems, current service delivery systems, policies, procedures, and the tasks of culturally responsive social workers and human service workers within those settings. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PCN 50 Social Work and Human Services Seminar 1 units
This course provides the student who is participating in a supervised field experience in a community organization, agency, or institution with a weekly class meeting that provides the academic element to the experiential course offering. The application of concepts gained in the prerequisite or corequisite course to the field experience will be emphasized. This course is designed to provide the student with an opportunity to develop skills that would facilitate gaining employment in the human services field. 18 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PCN 50L Social Work and Human Services Fieldwork 2 - 2 units
This course provides an introduction to fieldwork participation in the area of Social Work/Human Services (community organization, agency, or institution) allowing the student to apply knowledge and learn new skills outside of the classroom environment. This course is designed to provide the student with an opportunity to develop skills in preparation for gaining employment in the human services field. Students will be required to participate in a minimum of 120 hours of fieldwork per term..
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PHILOSOPHY (PHIL)

PHIL 1 God, Nature, Human Nature 3 units
An exploration of the nature and range of philosophical inquiry in relation to everyday problems of humans as individuals, as citizens, as physical creatures, and as creators of spiritual and artistic works. Philosophical texts are analyzed with special attention given to the development of skills in analysis and argumentation. NOTE: Philosophy 2 and 4 are also introductory courses and may be taken before Philosophy 1 if a more detailed examination of ethical problems, the theory of knowledge, or political philosophy is desired. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

PHIL 2 Ethics 3 units
This course covers the concepts of morality, values and influential ethical theories. Students taking this course will be required to use philosophical methods to evaluate these theories for themselves and show how these theories can apply to everyday ethical questions. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

PHIL 29 Independent Study, Philosophy 0.5 - 2 units
Supervised study in Philosophy. Any student interested in registering for a Independent Study course should contact a full/part-time instructor or dean in the appropriate area. 9 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PHIL 3 Aesthetics 3 units
An introduction to the philosophical analysis of art. Topics include the nature of art and beauty, the value of art, and philosophical methods of evaluating, critiquing, and drawing meaning from artistic works. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PHIL 4 Intro to Philosophy: Knowledge 3 units
Systematic analysis of documents that constitute the major statements in the theory of knowledge. Investigation of the nature of knowledge, truth and belief. Emphasis placed on enabling students to analyze, critique and defend their own systems of beliefs. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

PHIL 5 Feminist Philosophy 3 units
Introduction to feminist philosophical perspectives on such issues as gender, art, sexuality, knowledge, power, identity, popular culture, religion, ethics, and war. Emphasis placed on critical analysis as well as application to contemporary problems facing women today. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PHIL 6 Introduction to Logic 3 units
An introduction to Logic. This course is designed to develop effective reasoning skills. Valid reasoning through formal deductive logic is emphasized, but the course also covers meaning in language, fallacies, and inductive reasoning methods in philosophy, literature and the sciences. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PHIL 8 Logic and Argumentation 4 units
Logic and Argumentation. This course is designed to develop effective reasoning skills. Valid reasoning through formal deductive logic is emphasized, but the course also covers meaning in language, fallacies, and inductive reasoning methods in philosophy, literature and the sciences. This course differs from Philosophy 6 (Introduction to Logic) in that it has a prerequisite of English 1A and involves the application of logical technique to a major research paper. 72 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

PHOTOGRAPHY (PHTO)

PHTO 29P Independent Study, Photography 0.5 - 2 units
Supervised study in the area of Photography. Any student interested in registering for a Independent Studies course should contact a full/part-time instructor or dean in the appropriate area. 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PHTO 29V Independent Study, Video Production 0.5 - 2 units
Supervised study in the area of Video Production. Any student interested in registering for a Independent Studies course should contact a full/part-time instructor or dean in the appropriate area. 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PHTO 50 Introduction to Photography 3 units
Introduction to the history and development of photography, basic processes, various types of cameras, materials, basic shooting, processing, developing, and printing of photographs. 27 hours lecture, 81 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PHTO 51A Individual Projects A 1.5 units
Individual projects in digital or film-based photography at the intermediate to advanced level. Development of knowledge and skills acquired in previous or current photography work with emphasis on current projects. 9 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PHTO 51B Individual Projects B 1.5 units
Continued study on advanced topics of photography and exhibition, installation, and portfolio of photography. 9 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PHTO 56 Introduction to Digital Photography 1.5 units
The course covers basics for the beginner's use of digital cameras, film and flatbed scanners, and use of Adobe software for image adjustments. Exploration of digital photography compared with traditional photographic approaches and processes. Operation of Adobe digital imaging software for preparation of web site photos and print output, in both black and white and in color. 18 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PHTO 57 Intermediate Digital Photography 1.5 units
This course covers digital photography including intermediate and advanced digital image capture assignments, camera use, digital manipulation using software such as Adobe Photoshop, and preparation of image files for display printing and use on the Web. 18 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PHTO 58 Introduction to Videography 3 units
Introduction to the theory and practice of video production and desktop video editing including project production phases, time-based visual and sound design, digitizing footage, video output issues, working creatively in a collaborative environment, industry standards, using a Macintosh computer platform. 36 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PHTO 60 Intermediate Black and White Photography 3 units
Using exposure/development controls related to black and white negative materials. Development of intermediate/advanced print making skills. Emphasis on visual and critical problems related to black and white photography. 27 hours lecture, 81 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PHTO 64A Artificial Light Photography 3 units
Photography using light sources selected and manipulated by the photographer, use of light sources in a controlled situation to achieve technically accurate renditions of subject matter and to make successful visual statements, and lighting techniques for product, still life, and portrait photography. 27 hours lecture, 81 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PHTO 66 Digital Imaging 3 units
The course covers desktop digital imaging systems including editing software, scanning, camera use, and digital printing. Students will learn to use devices for image capture, storage, output, how to apply traditional photographic controls to enhance image quality in the digital medium, and to digitally manipulate images using digital editing software. 27 hours lecture, 81 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PHTO 67 History of Photography 3 units
A broad chronological survey of photography from its invention to the present. Considers the medium's dual role as technology and art, addresses a multiplicity of photographic themes and purposes, and considers the intersections of photography and technology, history, art, and everyday life. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PHTO 68 Color Field Photography 3 units
This course covers the use of either digital photography or color slide or negative film to explore the solution of special technical and visual problems encountered in location shooting. 45 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PHTO 69 Intermediate Videography 3 units
This course covers intermediate level digital video production to integrate and build upon prior video making skills. emphasis is on creative expression, improving all production values, edited quality of finished presentation, distribution of quality video piece to festivals and the web. Class is taught on the Macintosh computer platform. 36 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PHTO 70 Photoshop and Lightroom for Photographers 3 units
Learn to use Lightroom and Photoshop in a workflow designed for digital photographers. Learn best practices for digital workflows, database management, non-destructive parametric editing, color management, and output to print, web, slideshows, and photo book. Students who have completed, or are enrolled in, GDDM 70 may not receive credit. 27 hours lecture, 81 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PHTO 72 Introduction to Photojournalism 3 units
This course deals with the photographer as a journalist, focusing on theory and practice in press and publications photography, with emphasis on using the camera as a reporting and communications tool. Covered are news and feature photography and photographic essays, including composition, impact, and creativity, for newspapers, magazines, the Internet, and other mass communications media. Understanding and applying photojournalistic and basic technical and visual skills in the making of successful reportage photographs. Consideration of the work of major 20th and 21st century photojournalists. Students who have completed, or are enrolled in, JAMS 12 may not receive credit. 27 hours lecture, 81 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PHYSICS (PHYS)

PHYS 10 Descriptive Physics 3 units
Motion, gravitation, heat, light, sound, electricity, magnetism, atoms, and nuclei. Present-day scientific problems and developments such as alternative energy sources, solar energy, nuclear power, lasers, relativity and black holes. Designed for non-majors in physical science. Prerequisite: Intermediate Algebra or a higher level of mathematics.. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

PHYS 10L Descriptive Physics Laboratory 1 units
Introduction to laboratory principles and techniques with emphasis on the basic concepts of physics such as mechanics, thermodynamics, energy, electricity, magnetism, and optics. Prerequisite: MATH 55 with a minimum grade of C. Corequisite: PHYS 10 (may also be taken after successful completion of PHYS 10). 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

PHYS 1A General Physics I 5 units
Introduction to the principles of Newtonian Mechanics and analytical methods of physics using calculus as needed. Topics covered include vectors, kinematics, forces, energy, momentum, rotation, and gravitation. 72 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

PHYS 1B General Physics II 5 units
Introduction to fluid dynamics, oscillations, mechanical waves, thermodynamics, light and optics. 72 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

PHYS 1C General Physics III 5 units
Introduction to electricity and magnetism, circuits, Maxwell's equations and electromagnetic waves. 72 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

PHYS 1D General Physics IV 3 units
Introduction to relativity and modern physics, including: introduction to quantum theory; atomic, molecular, nuclear and particle physics; condensed matter physics; astrophysics and cosmology. 36 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

PHYS 29 Independent Study, Physics 0.5 - 2 units
For course information, see "Independent Studies". 27-108 hours lab. 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

PHYS 2A Introduction to Physics I 4 units
Introduction to the major principles of classical mechanics using pre-calculus mathematics. Includes Newtonian mechanics, energy, gravitation, fluids, thermodynamics, oscillations, and waves. 54 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

PHYS 2B Introduction to Physics II 4 units
This algebra-based course is an introduction to the basic principles of electricity, magnetism, and modern physics. Topics include electrostatics, magnetism, circuits, electromagnetic waves, optics, relativity, atomic physics, and nuclear physics. 54 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

POLITICAL SCIENCE (POLI)

POLI 12 Introduction to California State and Local Government 3 units
Organization and operation of government and politics at the state, county and municipal level; emphasis on current issues and the influences of historical, geographical, political, economic and social factors on public policy. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

POLI 20 Comparative Government 3 - 3 units
Contemporary forms of government, institutions and political problems of selected national governments. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

POLI 25 Introduction to Political Theory 3 - 3 units
Various theoretical approaches to politics including selected aspects of political thought from ancient times to the present with application of current political thought. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

POLI 26 Introduction to Gender, Sexuality, and Politics 3 units
Gender, Sexuality, and Politics illustrates that politics involves more than the institutions of government and representation. Politics also revolves around social, cultural, economic, and legal structures as well. The course examines the impact of politics on the lives of cis women and LGBTQ people and their reciprocal impact on politics, primarily in United States but contextualized using intersectional and comparative methods. Students will think critically about the theories and relationship of gender, sexuality, and power. Assessment of the role and impact of individuals, groups, and

cultural attitudes and traditions involved in the women's and LGBTQ rights movements, exploring the debates over theory and strategy that have worked to their advantage and disadvantage to achieve social policy aimed at bringing equality. The course uses historical and topical approaches, analyzing the struggles for gaining a political voice and participation, with discussion of public policies, and a critique of contemporary issues and self-perceptions that affect cis women and LGBTQ people's political rights. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

POLI 29 Independent Study, Political Science 0.5 - 2 units

Supervised study in the area of Political Science. Any student interested in registering for an Independent Studies course should contact a full/part-time instructor or dean in the appropriate area. 27 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

POLI 30 International Relations 3 - 3 units

Introduction to international relations, politics, theories and institutions with an emphasis on contemporary practices. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

POLI 7 Introduction to American Government 4 - 4 units

Introduction to the principles, problems and basic issues of government with particular emphasis on the national government in the United States, including discussion of the American Constitution, and California state and local government. 72 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PSYCHOLOGY (PSYC)

PSYC 1 General Psychology 3 units

Introduces students to the scientific study of human behavior and mental processes. Provides an overview of major psychological concepts and theories in such areas as consciousness, learning, memory, motivation, perception, personality, stress, and social behavior. Strongly recommended: Eligibility for English 1 A. 3 hours. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PSYC 10 Psychology of Human Sexuality 3 units

Physiological and psychosocial aspects of sexual health in our contemporary society. Understanding the interrelationship of attitude and behavior as it relates to sexual well-being and sexual integrity. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PSYC 12 Life-Span Psychology 3 units

Introduction to the psychological, physiological, and socio-cultural factors influencing development from conception through death. Emphasis on the process of normal development and its variations. Examination of theoretical models and research for practical application. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PSYC 13 Psychology of Women 3 units

This course examines the diverse experiences of women from a psychological perspective. Students will explore psychological theory and research on gender and issues that affect women, and will gain insight into how psychologists investigate gender-related issues. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PSYC 15 Abnormal Child Psychology 3 units

An exploration of the emotional, cognitive, developmental, and behavioral problems of childhood and adolescence. Topics include: common stresses and problems of adjustment; the effects of stress, abuse, and traumas on development; intellectual disability, autistic spectrum disorder, and other developmental disabilities; normal and abnormal problems of attention, conduct, mood, anxiety, sleep, eating, sex, learning and speech. Examination of the causes of mental health problems in children and adolescents and approaches to treatment. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PSYC 17 The Psychology of Sleep and Dreams 3 units

An introduction to the scientific study of sleep and dreams. Major historic, modern, multicultural views and theories of sleep and dreams; research methods in the study of sleep and dreams; the biological basis of sleep and dreams; biological rhythms; individual differences in biological rhythms and their implication for social policies; the stages and cycles of sleep; sleep requirements and changes across the lifespan; the relationship between sleep and daytime alertness, cognitive, emotional, and behavioral functioning, and physical and mental health; societal implications of sleep deprivation in diverse populations; theories of dream content, function, and meaning; dreaming and creativity; lucid dreaming; sleep disorders and their characteristics and treatments. Examination of information and theories for practical application. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PSYC 21 Psychology of Race and Identity 3 units

This course is an introduction to the impact of race and ethnicity on identity in the United States, which focuses on how these influence human behavior and shape one's understanding of the world around them. We will study a variety of topics related to race, ethnicity, social and cultural group developmental norms and the extent of influence these norms may have on an individual's worldview. This course seeks to strengthen diversity awareness and knowledge by engaging in difficult discussions surrounding race and identity. This course will review a broad range of theories and research findings regarding race and ethnicity's influence on human behavior and cognitive process. Topics covered include stereotypes, prejudice, discrimination, racism, the intersection between race, ethnicity and other forms of oppression, privilege, and identity development. Students who have completed, or are enrolled in, ETHS 5 may not receive credit. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PSYC 25 Research Methods 4 units

Introduction to the use of the scientific method in the study of human and animal behavior. Coverage of descriptive, experimental, and non-experimental methods commonly used in psychological research. Topics will include ethical principles in research, hypothesis development and testing, observational methods, survey research, the fundamentals of experimental design, basic data analysis, and the presentation of research findings. 54 hours lecture, 54 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PSYC 27 Introduction to Cognitive Science 3 units

An introduction to the interdisciplinary field of cognitive science. Basic issues related to cognition, including perception, memory, language, learning, problem solving, spatial cognition, attention, mental imagery, consciousness, brain damage, development, and artificial intelligence, are considered from the perspectives of psychology, philosophy, computer science, and neuroscience. 54 hours lecture, 0 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PSYC 29 Independent Study, Psychology 0.5 - 2 units

For course information, see "Independent Studies". 27-108 hours lab. 27 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PSYC 3 Introduction to Social Psychology 3 - 3 units

This course will introduce theories and concepts that explain individual behavior in social settings. The topics include research methods, social perception, social cognition, beliefs, prejudice/discrimination, interpersonal relationships, aggression, and group behavior. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PSYC 4 Brain, Mind, and Behavior 3 units

Introduction to the field of biopsychology. The biopsychology of cognitive, perceptual, emotional, developmental, and social processes. Includes

the biopsychology of personality, gender, emotions, learning, learning disabilities, drugs, neurological and developmental disorders, and mental health. Examination of information and theory for practical application. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

PSYC 6 Abnormal Psychology 3 units
An introduction to mental health and the major mental health disorders in adults and children; includes anxiety, mood, personality, sexual, and psychotic disorders. The course will include the study of the major psychological, biological, and sociocultural models of mental health disorders and their treatment. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

RADIATION SAFETY (RADS)

RADS 40A Radiation Safety 2 units
A course designed to provide basic radiation safety instruction. Includes identification of the sources of radiation and radioactive materials, the nature of ionization radiation, biological effects, and risk assessment. 36 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

RADS 40B Emergency Response and Monitoring 1 units
A course designed to provide overview and understanding of radiological emergencies and instrumentation. Builds upon principles, concepts, and terminology from 40A, and introduces practical use of radiological survey equipment. 18 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

RADS 40C Safety Controls and Regulation 1 units
A course designed to provide further understanding of radiological controls, regulations, environmental impacts, and waste management. Prerequisite: or Instructor Approval. 18 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

RELIGIOUS STUDIES (RELS)

RELS 1 Religions of the World 3 units
This course is an introduction to select religious traditions and cultures through exploring the history and beliefs of different religions. This course will also examine classic sacred texts and a variety of sacred practices. Religions studied include Shamanistic/Indigenous Religions, Hinduism, Buddhism, Jainism. Sikhism, Taoism, Confucianism, Judaism, Christianity, and Islam. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

RELS 11 Introduction to Islam 3 units
Introduction to Islam as a religion or system for life, its culture and its impact on Muslim individuals and groups. Includes a brief history of Islam and Muslims in relation to the basic sources of Islam. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

RELS 2 Bible: History and Literature 3 units
Study of the historical context and literary forms of the Hebrew Bible and New Testament. Emphasis on social, political and economic origins of the works, their literary motifs, and how their creation reflected ongoing cultural values. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

RELS 3 Introduction to Women's Spirituality 3 units
An interdisciplinary and cross-cultural examination of women's spirituality with particular reference to women's contributions and influence in redefining feminine aspects of the divine. Examines the use of feminine experience as a primary construct for understanding the connection between women's spirituality and the sacred. This course will also explore how issues of gender, culture, and identity influence women's religious experiences. Explores religious texts, rituals, music, poetry and film. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

SOCIOLOGY (SOC)

SOC 1 Principles of Sociology 3 units
The sociological perspective: scientific study of human interaction and society as a whole with emphasis on impact of groups on social behavior; systematic examination of culture and social organization, and methodology. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

SOC 11 Sociology of Gender 3 units
This course examines the social construction of masculinity and femininity historically and cross-culturally. It analyzes the impact of economic and political change on gender expectations and practices. This class focus includes both macro-analysis of how institutions shape gender and microanalyses of how individuals "do" or practice gender. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

SOC 12 Popular Culture 3 units
The course explores the historical, theoretical, political, economic, and global factors that influence the construction and consumption of popular culture from a sociological perspective. The course investigates representations of intersectional social identities involving race, class, gender, sexual orientation, and disability in popular culture through the critical analysis of film, television, music, print and digital media. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

SOC 13 Research Methods 4 units
This course orients students to the methods of data collection and analysis used by sociologists. Instruction includes an overview of sociological theory, instruction on experimental methods, surveys, interviews, field research, participant observation, demographic methods, and comparative historical approaches. 54 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

SOC 29 Independent Study, Sociology 0.5 - 2 units
Supervised study in the area of Sociology. Any student interested in registering for an Independent Studies course should contact a full/part-time instructor or dean in the appropriate area. 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

SOC 3 Introduction to Race and Ethnicity 3 units
Racial and ethnic relations in the United States. Examines the cultural, political, and economic practices and institutions that support or challenge racism, racial and ethnic inequalities, as well as patterns of interaction between various racial and ethnic groups. Students who have completed, or are enrolled in, ETHS 6 may not receive credit. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

SOC 4 Marriage and Family Relations 3 units
Sociological perspective of the family including mate selection, marital roles, marital adjustment, sexual adjustment, reproduction, child rearing, marital dissolution, and problems associated with the family in modern industrial society. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

SOC 5 Introduction to Global Studies 3 units
This course looks at the economic and political forces that have led to rapid changes in global interaction and culture over the past century, with special emphasis on the last twenty years. It explores the issues of nationalism, global citizenry, state violence, terrorism, the global economy, migration, the threatened environment, technology, and the role of multinational media industries on culture. Students who have completed, or are enrolled in, GS 1 may not receive credit. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

SOC 6 Social Problems 3 units
An identification and analysis of contemporary social problems including (1) the role of power and ideology in the definition of social problems, (2) their causes and consequences, (3) evaluations of proposed solutions, and (4) methods of intervention. Topics will vary. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

SOC 7 Sociology of Sexuality 3 units
This course looks at the social forces that influence, and are influenced by our construction of sexuality. Topics covered include: the social construction of the erotic, the creation of sexual identities, gender and sexuality, religion and sexuality, sexual commerce, and global issues such as birth control and STDs. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

SPANISH (SPAN)

SPAN 1A Beginning Spanish 5 units
This introductory level course offers a balanced approach to language and culture. It will enable students to begin speaking, reading and writing elementary level Spanish as well as understanding the spoken language as they explore the culture and countries of the Spanish-speaking world. Students are introduced to concepts of grammar, vocabulary and verb tenses in a variety of auditory, visual and written contexts. 90 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

SPAN 1B Elementary Spanish 5 units
This is the second semester of the introductory level course. It continues to offer a balanced approach to language and culture. It enables students to continue learning to speak, read and write elementary level Spanish as well as to understand the spoken language as they explore the culture and countries of the Spanish-speaking world. Students continue to review and improve upon concepts of grammar, vocabulary and verb tenses in a variety of auditory, visual and written contexts. The course will continue to examine the culture of the Spanish-speaking world. 90 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

SPAN 21 Spanish for Spanish Speakers I 5 units
This course is designed for bilingual students whose heritage language is Spanish and for linguistically qualified students. Culture, language structures, basic fundamentals of grammar and composition, and oral and written communication are included in this course. The course provides students with instruction that builds upon their existing reading, writing, speaking and listening skills, and their cultural heritage and knowledge. The course increases awareness of linguistic registers and introduces a broad range of vocabulary. The course will allow students to discuss topics beyond their familiar routine and enhance their knowledge of Hispanic cultures as manifested in Spanish speaking countries and in the United States. This course is conducted entirely in Spanish. Prerequisite: Spanish heritage speaker proficiency or the equivalent intermediate level as assessed.. 90 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

SPAN 22 Spanish for Spanish Speakers II 5 units
This course is designed for bilingual students whose heritage language is Spanish and for linguistically qualified students who wish to continue to improve their development of writing and reading skills in Spanish through literary analysis. It continues to provide students with instruction that builds upon the students' existing reading, writing, speaking and listening skills, and cultural knowledge. The course will continue to help students increase awareness of linguistic registers, discuss topics beyond the students' familiar routine and expand upon appreciation for Hispanic cultures as manifested in Spanish speaking countries and in the United States. This course is conducted entirely in Spanish: oral fluency in Spanish is strongly recommended. 90 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

SPAN 23 Introduction to Hispanic Literature 3 units
This course is designed for Spanish speakers and for linguistically qualified students who wish to improve their skills to a high-advanced level of reading, writing and literary analysis. The emphasis is on critical thinking and logical and effective support of ideas. Literary discussions will be an important component of the class , but writing composition will also be included, as well as exposure to international Hispanic culture. This course is conducted entirely in Spanish. Prerequisite: Spanish heritage speaker proficiency or the equivalent intermediate level as assessed., Successful completion of AP Spanish in high school.. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

SPAN 29 Independent Study, Spanish 0.5 - 2 units
Supervised study in the area of Spanish. Any student interested in registering for an Independent Studies course should contact a full/part-time instructor or dean in the appropriate area. 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

SPAN 2A Intermediate Spanish I 4 units
This course covers a review of grammar, reading of contemporary literature, practice in conversation and composition, and discussion of cultural topics. 72 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

SPAN 2B Intermediate Spanish II 4 units
A course covering the reading of contemporary works, advanced review of grammar emphasis on speaking and composition, and further discussion of cultural topics. 72 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

THEATER ARTS (THEA)

THEA 1 Conservatory Readiness 1 units
This course is required for students interested in participating in the Actors Conservatory at Las Positas College. This course prepares students for a rigorous two-year training program in acting, musical theater, and dance. Students are expected to perform monologues, solos, and short dance sequences in this course, as well as participate in mentorship and cohort activities throughout the semester. 18 hours lecture.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

THEA 10 Introduction to Dramatic Arts 3 units
A survey of the elements of Theater and its contribution to cultures and societies throughout history. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

THEA 11 Stage to Screen 3 units
Major plays which subsequently have been made into films. Analysis of each playscript augmented by a viewing and analysis of the film adaptation. Major areas of concentration may vary from semester to semester. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

THEA 14 Bay Area Theater 3 units
Appreciation of theatrical performances through reading, evaluating and attending live productions. Specific content is determined by currently available theatrical productions. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

THEA 1A Theory/Practice of Acting I 3 units
This course prepares a student to apply basic acting theory to performance and develops the skills of interpretation of drama through acting. Special attention is paid to skills for performance: memorization, stage movement, vocal production, and interpretation of text. An introduction to the techniques and theories of acting, explored through improvisation, exercises and scene study. Students should be able to demonstrate the following skills: development of the physical and psychological resources

for acting including relaxation, concentration, creativity, believability, and commitment. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

THEA 1B Theory/Practice of Acting II 3 units
Continued exploration of the theory and practice of acting, focusing on more complex characterization and character analysis. Introduction to theatrical styles and period acting with emphasis on monologues and scenes. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

THEA 25 Fundamentals of Stage Speech 3 units
Theory and practice of speech improvement for acting with emphasis on development of the voice, articulation, and pronunciation for theater production. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

THEA 29A Independent Study, Theater 0.5 - 2 units
Supervised study in the area of Theatrical performance. Any student interested in registering for an Independent Studies course should contact a full/part-time instructor or dean in the appropriate area. 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

THEA 29S Independent Study, Stagecraft 0.5 - 2 units
Supervised study in the area of Stagecraft. Any student interested in registering for an Independent Studies course should contact a full/part-time instructor or dean in the appropriate area. 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

THEA 31A Drama Workshop - Beginning 3 units
Participation as an actor in experimental workshop plays, original student scripts, and other projects, possibly leading to scheduled performances. Casting subject to in class audition. 36 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

THEA 31B Drama Workshop - Intermediate 3 units
Participation as an experienced actor in one act plays, original student scripts, or other projects, leading to scheduled performances. Casting subject to audition. 36 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

THEA 31C Drama Workshop - Technical Theater 3 units
Participation as designer or stage crew in one act plays, original student scripts, or other projects developed in collaboration with students in Theater 31 A and 31B. 36 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

THEA 31D Drama Workshop - Directing 3 units
Participation as a director or assistant director of one act plays, original student scripts, or other projects, leading to scheduled performances. 36 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

THEA 39A Musical Theater Workshop - Beginning 3 units
Training in performance skills for the musical theater, with emphasis on acting, stage movement and vocal production. Solo, duet and ensemble work, possibly leading to a culminating public performance. 36 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

THEA 39B Musical Theater Workshop - Intermediate 3 units
Intermediate training in performance skills for the musical theater, with emphasis on acting, stage movement and vocal production. Study includes written analyses, musical theater staging and basic acting and vocal techniques. Solo, duet, and ensemble work possibly leading to culminating public performance. 36 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

THEA 39C Musical Theater Workshop - Advanced 3 units
Advanced training in performance skills for the musical theater, with emphasis on acting, stage movement and vocal production. Study includes auditioning techniques and critical analyses of musical theater performances. Culminating public performance required. 36 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

THEA 3A Beginning Improvisation 3 units
An entry level course designed to introduce to students to concepts of improvisation and creative dramatics . It will encourage students to "think out of the box", promoting creative problem solving within a supportive ensemble. Recommended for non-majors (Early Childhood education, Business, Speech/Communication majors especially encouraged) as well as Theatre: AA students. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

THEA 3B Intermediate Improvisation 3 units
This course will teach students Long-Form Improvisation. The class will concentrate on finding style and improving skills through various in class, supportive, exercises. We will focus on accepting/supporting, creating honest and strong relationship, and developing complex and engaging circumstances. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

THEA 3C Improvisation in Performance 3 units
From Saturday Night Live to Flash Mobs - Improvisation is part of our culture. Students will get the opportunity to perform as well as teach improvisation techniques and creative dramatics in a supportive and fun atmosphere. The students will also have opportunities to attend and critique the work various local improvisation troupes. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

THEA 4 Modern American Theater 3 units
The history, representation and contributions of various works of Modern American Theater and the study of Modern American theater as an instrument for expressing and understanding cultural identity. The focus will be on at least three of the following cultural groups: African Americans, Asian Americans, European Americans, Latin Americans and Native Americans. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

THEA 47A Performance in Production: Introduction to Live Performance 3 units
This course provides instruction and supervised participation in theatre rehearsal and performance. On stage participation in cast of scheduled main stage production. Prerequisite: Enrollment by audition only.. 18 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

THEA 47B Performance in Production: Beginning 3 units
As a continuation of THEA 47A, students will participate in the cast of a scheduled main stage production. Emphasis will be on character development, objectives, and actions. Prerequisite: Enrollment by audition only.. 18 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

THEA 47C Performance in Production: Intermediate 3 units
This course is a continuation of THEA 47B. Student will participate in the cast of a scheduled main stage production. This course will focus on rehearsal technique, personal creative exploration, and ensemble building and motivated performance response. Prerequisite: Enrollment by audition only.. 18 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable

- Grading Option: Letter Grade

THEA 47D Performance in Production: Advanced 3 units
As a continuation of THEA 47C, students will continue to develop onstage with participation in the cast of the scheduled main stage production. This course will emphasize complexity and polish in performance, personal and creative development as a theater professional, and outreach and publicity obligations. Prerequisite: Enrollment by audition only.. 18 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

THEA 48A Technical Theater in Production - Beginning 3 units
Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, and running crews. Enrollment is for the duration of the semester. 18 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

THEA 48B Technical Theater in Production - Intermediate 3 units
Participation in scheduled productions and events as crew members and/or construction of said productions technical elements, including lighting and sound implementation. Enrollment is for the duration of the semester. Students may participate in the design and board operation of multiple productions or events per semester. 18 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

THEA 48C Technical Theater in Production - Advanced 3 units
Participation in scheduled productions as assistant stage managers or assistant designers of said productions technical elements, including scenic, costume, lighting and sound design. Enrollment is for the duration of the semester. Students may participate in more than one production per semester, as needed. 18 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

THEA 48D Technical Theater in Production - Capstone 3 units
Participation in scheduled productions as manager of productions technical elements, which may include stage management, publicity management, or designer's apprentice in lighting, sound, costume, or scenic design. Enrollment is for the duration of the semester. Students may participate in more than one production or event per semester. 18 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

THEA 5 Theater for Young Audiences 3 units
Introduction to the history, theory, and techniques of theater for young audiences. Creation, including possible props, puppets, masks, and costumes, and performance of a theatrical production to be performed for local K-12 students. All enrolled will be a part of the production and will learn aspects of a show for public performance for young audiences. Casting is subject to audition. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

THEA 50 Stagecraft 3 units
An introduction to technical theatre and the creation of scenic elements. Includes basic concepts of design, painting techniques, set construction, set movement, prop construction, backstage organization, and career possibilities. May include stage management, lighting, and/or sound techniques. Lecture, reading, projects, and practical experience. 36 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

THEA 50L Introduction to Stage Lighting 3 units
This course involves the study and execution of stage lighting with emphasis on equipment, control, color and their relationship to design. Introduction to stage lighting design. Physics of light, color, electricity; components of basic lighting technology; comprehensive overview of the art of theater lighting design. 36 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

THEA 51 Introduction to Costume Design 3 units
Students will study costume history, design, and basic construction techniques as an introduction to basic theatrical costuming. Fabrics and their various uses will be investigated. Design and fabrication of costumes for production; components of basic sewing and costume construction; comprehensive overview of the history of fashion and costume, color, manufacturing techniques; Introduction to basic makeup design; makeup application techniques and design; special effects makeup techniques. 36 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

THEA 52 Introduction to Design 3 units
Students will be offered a survey of the design and history of scenery, lighting, sound, costumes, makeup, properties, theatrical equipment and construction techniques through demonstration, and laboratory experience. Information is applicable to all formal theatrical applications. 45 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

THEA 53 Script Analysis 3 units
Develops critical thinking , analysis, and writing skills as they apply to the exploration of the principles, theories and techniques of play script analysis for theatrical production. Class content includes the historical and cultural importance of various kinds of script; genre and form; narrative and plot analysis; linguistic analysis; interpreting stage directions; and identification of main themes. Emphasis on effective written communication in literature. Research required. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

THEA 54 Shakespeare Through Performance 3 units
Study and performance of classical Shakespearean texts (monologues and dialogues), with a focus on the Elizabethan world as it applies to performance. Students will come to understand the works of William Shakespeare through active performance techniques as well as traditional literary analysis. 45 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

THEA 55 Movement for the Actor 1 units
Movement for the Actor is designed to use movement and gesture for furthering skills in character development, enhancing the actor's understanding of their body as a tool for communication. This course focuses on the actor's body and mind connection, and how they might use that connection to further enhance their performance skills. Course included exercises based on various techniques including an introduction to mime, Laban, Viewpoints, character masks, and ensemble development exercises. 18 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

THEA 56 Acting for the Camera 3 units
Introduction to the principles and techniques of acting on camera and voice-over acting. This course explores acting techniques for industrials, commercials, film and television as well as voice-over for television, radio, cartoons, and more. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

THEA 57A Performance in Production - Introduction to Musical Theater 3 units
This course provides instruction and supervised participation in theatre rehearsal and performance. On stage participation in cast of scheduled main stage production. Enrollment is for the duration of the production. Prerequisite: Enrollment by audition only.. 18 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

THEA 57B Performance in Production -Beginning Musical Theater 3 units

As a continuation of THEA 57A, students will participate in the cast of a scheduled main stage musical production. Emphasis will be on character development, objectives, and actions. Prerequisite: Enrollment by audition only.. 18 hours lecture, 108 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter Grade

THEA 57C Performance in Production -Intermediate Musical Theater 3 units

This course is a continuation of THEA 57B. Student will participate in the cast of a scheduled main stage musical production. This course will focus on rehearsal technique, personal creative exploration, and ensemble building and motivated performance response. Prerequisite: Enrollment by audition only.. 18 hours lecture, 108 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter Grade

THEA 57D Performance in Production -Advanced Musical Theater 3 units

As a continuation of THEA 57C, students will continue to develop onstage with participation in the cast of the scheduled main stage production. This course will emphasize complexity and polish in performance, personal and creative development as a theater professional, and development as a vocal musician. Prerequisite: Enrollment by audition only.. 18 hours lecture, 108 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter Grade

THEA 58 Stage Combat 2 units

This course introduces students to armed and unarmed stage combat for the theater and entertainment industry with a concentrated focus on partnership, safety, and storytelling through movement. Focus on hand to hand combat and single sword, among others. Students will have the option to complete certification with The Society of American Fight Directors. 18 hours lecture, 54 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter Grade

THEA 59 Acting for the Camera II/Voice Over 3 units

This course is a continuation of Acting for the Camera; this course further explores the challenges an actor faces in delivery for TV/Film/Media. Additionally, this course covers an introduction to Voice Over Acting. This course will prepare students for on-camera or voice-over auditions and work. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

THEA 60 Business of Acting 1 units

Students with an interest in pursuing acting beyond the community college setting will work on preparations to audition for theater, film and four-year schools and develop an understanding of the expectations of professional actors. Work on monologues and showcase scenes, cold reading technique included. 18 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

TUTORING (TUTR)

TUTR 17A Tutoring Theory and Practice I 0.5 units

Training for college tutors to acquire specific skills and techniques for tutoring in academic and vocational subject areas, and basic skills. The course will provide a conceptual framework of tutoring to guide students in leading effective tutoring sessions. 9 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

TUTR 17B Tutoring Theory and Practice II 0.5 units

Intermediate training class for college tutors. Tutors will acquire specific skills and techniques for tutoring in academic subjects, vocational subjects and basic skills. Required course for second semester tutors participating in the Las Positas College Tutorial Program. 9 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

TUTR 17C Tutoring Theory and Practice III 0.5 units

Advanced training for college tutors to obtain skills and techniques in academic and vocational subject areas and basic skills remediation. Emphasis upon leading group tutoring sessions and mentoring new tutors. Required course for third semester tutors participating in the Las Positas College Tutorial Program. 9 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

VITICULTURE (VWT)

VWT 1 World Wines: New World 3 units

This course is a comprehensive exploration of "new world" wines. The winemakers of the "new world" have taken the great grapes of the "old world" and created modern wines for a new generation. Explore the history of wine regions, origins of cultivars and the varied wines of the United States, Australia, New Zealand, South Africa, South America and Mexico. Students under the age of 21 must have a declared major of either viticulture and/or enology to participate in any tasting activities as stated in the California State Assembly Bill 1989. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

VWT 10 Introduction to Viticulture 3 - 3 units

This is an introduction to general viticulture covering the fundamental principles of the biology and culture of the grapevine. This includes taxonomy, morphology, physiology, distribution, domestication, utilization, propagation, production systems, harvesting, and storage and processing of grapes, with a brief overview of wine making. The class explores climate and soil preferences of Vitus vinifera, vineyard establishment, and training young vines. Cultural practice lectures will focus on canopy management disciplines, irrigation strategies, fertilization, pest and disease control, cover cropping and pruning. There will be practical experience workshops in the Campus Hill Vineyard. Successful completion of course should prepare students for upper division courses in viticulture. Students under the age of 21 must have a declared major of either viticulture and/or enology to participate in any tasting activities as stated in the California State Assembly Bill 1989. 54 hours lecture, 0 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter Grade

VWT 12 Landscape and Vineyard Soils, Fertilizers, and Irrigation 3 units

This course is a study of the physical, chemical and biological properties of soil. Areas of study will include: soil classification, derivation, uses, function and management including erosion, moisture retention, structure, cultivation, organic matter and microbiology. There is a focus on vineyard and landscape planting media, soil substitutes, hydroponics, and amendments to improve and promote plant growth which includes plant and vine nutrition, essential nutrients required for plant growth and healthy development. There will be instruction covering materials used for fertilizers which includes material origins, use, and application; and irrigation systems which will cover materials required for basic irrigation systems used in vineyard and landscape settings. Students that take HORT 54 may not receive credit for VWT 12. 45 hours lecture, 27 hours laboratory.

- Credit - Degree Applicable
- Grading Option: Letter Grade

VWT 2 World Wines: Old World 3 - 3 units

This course is a comprehensive exploration of "old world" wines. The winemakers of the "old world" have been creating distinctive wines for millennia and now have embraced modern techniques and equipment to add another facet to the wines of Europe and beyond. Explore the history of wine regions, wine cultures, and the varied wines of France, Italy, Spain, Portugal, Germany, and Eastern Europe. Students under the age of 21 must have a declared major of either viticulture and/or enology to participate in any tasting activities as stated in the California State Assembly Bill 1989. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Letter Grade

VWT 20 Introduction to Enology 3 - 3 units

This course is an overview of the history of wine, modern viticulture and enology principles and practices, the science of fermentation, and standard winery operations. There is a primer on grape varieties and wine styles produced in major wine-producing regions of the world including California which will focus on regional stylistic expression of specific,

heritage varietals. Instruction covering the physiology of wine consumption will precede practical exercises which will include the sensory evaluation of wines. Students under the age of 21 must have a declared major of either viticulture and/or enology to participate in any tasting activities as stated in the California State Assembly Bill 1989. 54 hours lecture, 0 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

VWT 21 Applied Enology 3 units
This is a fundamental course in the science and art of winemaking focusing on grape and wine chemistry, basic grape processing and wine production from vineyard to bottle. Lectures will build on the development of wine from the components in grapes through maturation, including ripeness parameters, pre and post fermentation management, alcoholic and malolactic fermentation. There will be a focus on wine health and integrity, the role and behavior of compounds found in musts and yeasts, and the relationship between wine and oak. There will be a strong emphasis on analytical methods and practical skills. Students under the age of 21 must have a declared major of either viticulture and/or enology to participate in any tasting activities as stated in the California State Assembly Bill 1989. 45 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

VWT 23 Fundamentals of Wine Science 3 units
This course covers the chemistry and microbiology of winemaking including the use of yeasts and enzymes, primary and secondary fermentation management, wine micro-organisms, phenolic compounds, color chemistry, aging and flavor development. There will be a focus on wine faults: the causes and corrections. Students under the age of 21 must have a declared major of either viticulture and/or enology to participate in any tasting activities as stated in the California State Assembly Bill 1989. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

VWT 25 Sensory Analysis of Wines 3 - 3 units
This is a sensory analysis of wine course designed for individuals to learn organoleptic tasting techniques, characteristics and styles of wine varieties, wine sensory evaluation methods including statistical analysis of trials, philosophy of wine styles, and the common evaluation methods used in sensory testing. Students must be 21 years of age or older, and this class has a materials fee above regular enrollment fee. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

VWT 29 Independent Study, Viticulture and Winery Technology 0.5 - 2 units
Supervised study in the area of Viticulture and Winery Technology. Any student interested in registering for a Independent Studies course should contact a full/part-time instructor or dean in the appropriate area. 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

VWT 31 Fall Vineyard Operations 3 - 3 units
This class has a strong emphasis on the practical applications of viticulture. Students will be involved in the operation of the LPC Campus Hill Vineyard putting into action, viticultural practices for the fall and winter seasons including canopy management techniques, irrigation disciplines, pest and disease control, fruit contracts, maturity sampling, harvesting, pruning, erosion control via cover crop, fertilization, weed control, and vineyard development and establishment with a focus on sustainable vineyard management. Students under the age of 21 must have a declared major of either viticulture and/or enology to participate in any tasting activities as stated in the California State Assembly Bill 1989. 2 hours lecture, 3 hours laboratory. 36 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

VWT 32 Spring Vineyard Operations 3 - 3 units
This class has a strong emphasis on the practical applications of viticulture. Students will be involved in the operation of the LPC Campus Hill Vineyard putting into action viticultural practices for the spring season including pruning, canopy management techniques, new vine planting and training, vine nutrition, weed control, irrigation system construction and maintenance, trellis construction and maintenance, vineyard equipment operation and maintenance, with a continued focus on sustainable vineyard management. Students under the age of 21 must have a declared major in either viticulture and/or enology to participate in any tasting activities as stated in the California State Assembly Bill 1989. 2 hours lecture, 3 hours laboratory. 36 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

VWT 33 Summer Viticulture Operations 1 units
This course covers vineyard practices for the summer session. The class will manage the Las Positas College Campus Hill vineyard, with an emphasis on the practical applications of viticulture theory including vine training, canopy management, assessment of insect and disease problems specific to the appellation, irrigation applications relating to soil and leaf moisture and crop estimation. 9 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

VWT 35 Landscape and Vineyard Pest and Disease Management 3 units
This course covers concepts of plant pathology, entomology, and weed science which are studied in order to identify symptoms, diagnose problems, and determine methods of controlling plant diseases, insects, and weed pests. Also included is the study of the identification and biology of common vineyard, landscape and other horticultural crop pests and diseases. Materials and instruction is provided for techniques and strategies for sampling, monitoring and effective control measures, pest management strategies for insects, weeds and diseases, including bio-control, sustainable agriculture practices and integrated pest management. In addition to pesticide use, safety and compliance, there is a focus on preparation for the California State Qualified Applicators license. Students that take HORT 53 may not receive credit for VWT 35. 45 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter Grade

VWT 41 Fall Winery Operations 3 units
This class has a strong emphasis on the practical applications of winery operations. Students will be involved in the grape processing of the annual LPC Campus Hill Vineyard harvest, putting into action winery operations for the fall season including the planning, managing and implementation of harvest, grape maturity monitoring, press pad equipment operation and safety, handling must and juices, alcoholic and malolactic fermentation disciplines, sensory and laboratory analysis, handling and storage of new wines, maintenance of wines from previous vintages, winery sanitation, forklift safety and operation and general cellar practices. Students under the age of 21 must have a declared major of either viticulture and/or enology to participate in any tasting activities as stated in the California State Assembly Bill 1989. 36 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

VWT 42 Winery Operations II 3 - 3 units
This class has a strong emphasis on the practical applications of winery operations. Students will be involved in the on-going maintenance of wines produced from the annual LPC Campus Hill Vineyard harvest, putting into action winery operations for the spring season including winery equipment operation and safety, the handling and storage of new wines, barrel and tank monitoring, sensory and laboratory analysis, the planning, managing and implementation of bottling including blending trials, fining and filtering, label design and compliance, winery sanitation and record keeping. 2 hours lecture, 3 hours laboratory Students under the age of 21 must have a declared major in either viticulture and/or enology to participate in any tasting activities as stated in California State Assembly Bill 1989. 36 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

VWT 45 Food and Wine Pairing 2 units
This course is an introduction to the art and science of food and wine pairing. Through lectures and formal tastings, students are instructed in the use of a sensory analysis model to identify components in food and wine that complement or contrast when initiating pairings. Students will participate in comprehensive palate exercises in which regional food preparations are paired with a broad spectrum of wines. Students under the age of 21 must have a declared major of either viticulture and/or enology to participate in any tasting activities as stated in the California State Assembly Bill 1989. 36 hours lecture.
- Credit - Degree Applicable

- Grading Option: Letter or P/NP

VWT 47 Wine Regions/Wines of Calif 3 units
Introduction to wines produced in California by region, including history, viticultural practices and winemaking styles. There is a strong emphasis on the sensory evaluation of representative California wines. There is a materials fee associated with this class. Students under the age of 21 must have a declared major of viticulture and/or enology to participate in any tasting activities as stated in the California State Assembly Bill 1989. 54 hours lecture, 0 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

VWT 55 Wine Service and Sales 2 units
This course will provide students with the information, skills, and abilities to provide high-quality wine service in restaurants, tasting rooms, wine bars, and/or catering events. Instruction will include both the technical and social skills necessary to maximize the guest experience and to be a successful wine sales/service professional. Students under the age of 21 must have a declared major of either viticulture and/or enology to participate in any tasting activities as stated in the California State Assembly Bill 1989. 36 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

WELDING TECHNOLOGY (WLDT)

WLDT 1 Welding Camp 1 units
This course is designed to introduce the basics of shop safety, hand tools and welding. Fabrication of simple metal projects. Emphasis on practical uses and applications. 9 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Pass/No Pass

WLDT 10 Machining for the Metal Trades 4 units
This course is intended to show how machine tools are used in the metal trades and manufacturing, as well as how machine tools operate and when to use one particular machine instead of another. The advantage and disadvantage of various machining techniques as well as their application in the fabrication process are explored. Students will learn the use of drawings, hand tools, precision measuring tools, drilling machines, grinders, lathes, milling machines, and other specialized tools used to shape and finish metal and nonmetal parts. Additive and subtractive manufacturing techniques as well as related processes are explored. 36 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

WLDT 55 Print Reading for Industry 2 units
Interpreting and visualizing drawings and prints used in industrial settings. The role of prints in the digital age, geometric dimensioning and tolerancing to current standards. Foundational skills needed for print reading success, including basic mathematics, geometry principles, measurement tools, and the design process. Welding symbols and their use in manufacturing. 36 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter Grade

WLDT 61A Beginning SMAW and FCAW Theory 1 units
Theory and safety of Shielded Metal Arc (SMAW) and Flux-Core Arc (FCAW) welding of steel, flame cutting, plasma and carbon arc cutting. American Welding Society nomenclature, electrode and wire selection, job opportunities. Blueprint reading, welding symbols for welders and hazardous material regulation. 18 hours lecture, 0 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

WLDT 61AL Beginning SMAW and FCAW Skills Lab 2 units
Skills of Shielded Metal Arc (SMAW) and Flux-Core Arc (FCAW) welding in the flat and horizontal positions to to American Welding Society code specifications. Oxy-fuel flame, plasma, and carbon arc cutting. Safe use and handling of welding equipment and consumables. 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

WLDT 61B Advanced SMAW and FCAW Theory 1 units
Theory and safety of Stick (SMAW) and Flux-core Arc (FCAW) welding of steel, flame cutting, plasma and carbon arc cutting. American Welding Society nomenclature, electrode and wire selection, job opportunities. Blueprint reading, welding symbols for welders and hazardous material regulations. 18 hours lecture, 0 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

WLDT 61BL Advanced SMAW and FCAW Skills Lab 2 units
Advanced skills in Shielded Metal Arc (SMAW) and Flux Cored Arc (FCAW) welding of steel in the horizontal, vertical and overhead positions to A.W.S. Codes. Safety and proper use of SMAW, FCAW, oxy-fuel cutting and plasma arc cutting equipment. Blueprint usage in the welding shop environment. 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

WLDT 62A Beginning GTAW and GMAW Theory 1 units
Theory of fuel and inert gas welding of steel, stainless steel and aluminum alloys, Oxy-Fuel welding, Oxy fuel brazing, flame cutting, and plasma cutting. Gas Tungsten Arc (GTAW) and Gas Metal Arc (GMAW) welding equipment and supplies. Nomenclature and metallurgy of steel, stainless steel and aluminum alloys. Introduction to blueprint reading and welding symbols. Hazardous material regulations and safety data sheets. 18 hours lecture, 0 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

WLDT 62AL Beginning GTAW and GMAW Skills Lab 2 units
Skills of TIG (GTAW) and MIG (GMAW) welding of ferrous and non-ferrous alloys in the flat and horizontal positions to A.W.S. codes. Safety and proper use of TIG and MIG equipment, oxy-fuel welding and cutting, plasma cutting. Blueprint usage in welding shop environment. 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

WLDT 62B Advanced GTAW and GMAW Theory 1 units
Theory of fuel and inert gas welding of Non-Ferrous alloys, Oxy-Fuel welding, Oxy fuel brazing, flame cutting, and plasma cutting. Gas Tungsten Arc (GTAW) and Gas Metal Arc (GMAW) welding equipment and supplies. Nomenclature and metallurgy of Non-Ferrous alloys. Introduction to blueprint reading and welding symbols. Hazardous material regulations and safety data sheets. 18 hours lecture, 0 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

WLDT 62BL Advanced GTAW and GMAW Skills Lab 2 units
Advanced skills in Gas Tungsten Arc (GTAW) and Gas Metal Arc (GMAW) welding of ferrous and non-ferrous alloys in the horizontal, vertical and overhead positions to A.W. S. codes. Safety and proper use of TIG and MIG equipment, oxy-fuel welding and cutting, plasma cutting. Blueprint usage in welding shop environment. Pipe and tubing fit-up and welding. 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

WLDT 63 Welding Layout and Fitting 2 units
Interpretation of welding blueprints by making welding layouts and weldment fitups. Current methods, practices, and recommended procedures. Use of jigs, fixtures, holding devices, and welding sequences. Methods of straightening and restoring dimensions to finished product. Laboratory includes SMAW, GMAW, GTAW, and FCAW welding, plasma and oxy-fuel cutting. 18 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

WLDT 66 Welding Inspection and Testing 2 units
Theory and skills in performing inspections and tests using destructive and nondestructive methods. American Welding Society (AWS) codes and their role in welding inspection. The role and duties of the Certified Welding Inspector (CWI). 27 hours lecture, 27 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

WLDT 67A Welding Skills Lab 2 units
Development and improvement of skills in Shielded Metal Arc (SMAW), Flux Cored Arc (FCAW), Gas Metal Arc (GMAW), and Gas Tungsten Arc (GTAW) welding. 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

WLDT 67B Advanced Welding Skills Lab 2 units
Advanced development and improvement of skills in Shielded Metal Arc (SMAW), Flux Cored Arc (FCAW), Gas Metal Arc (GMAW), and Gas Tungsten Arc (GTAW) welding. 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

WLDT 68 Certification Preparation 2 units
Welding skills preparation for certification testing. Theory of American Welding Society D1.1, American Society of Mechanical Engineers Section IX and American Petroleum Institute 1104. 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

WLDT 69A Beginning Pipe Welding 3 units
Theory and practical application of: pipe joint preparation and design, API (American Petroleum Institute) and AWS (American Welding Society) welding codes specification for pipe and pipe fittings, analysis of joint configuration, plasma and flame cutting of pipes, wire and electrodes selections, beginning of pipe welding blue print and welding symbols, SMAW, GMAW, FCAW and GTAW of pipe joints, non-destructive and destructive test and qualitative concepts of evaluation. Welding in the 1G and 2G positions. 18 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

WLDT 69B Advanced Pipe Welding 3 units
Theory and practical application of: pipe joint preparation and design, API (American Petroleum Institute) and AWS (American Welding Society) welding codes specification for pipe and pipe fittings, analysis of joint configuration, plasma and flame cutting of pipes, wire and electrodes selections, beginning of pipe welding blue print and welding symbols, SMAW, GMAW, FCAW and GTAW of pipe joints, non-destructive and destructive test and qualitative concepts of evaluation. Welding in the 5G and 6G positions. 18 hours lecture, 108 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

WLDT 70 Introduction to Welding 2 units
Basic skills in Shielded Metal Arc (SMAW), Gas Tungsten Arc (GTAW), Gas Metal Arc (GTAW) and Flux Core Arc (FCAW) welding. Oxy-fuel welding and thermal cutting. Emphasis on safety, proper usage, theory and care of welding equipment. 18 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

WLDT 71 Welding for the Arts 3 units
Provides basic welding, shop skills and instruction that artistically inclined individuals should know in order to be effective in the process of creating metal art and sculpture. Provides instruction on types of metals (aluminum, iron, steel, cast iron, bronze, stainless steel, etc.), mechanical fastenings, cutting and permanent joining together of metals and alloys through welding processes such as SMAW, GMAW, GTAW, FCAW, oxyacetylene and braze welding, plasma and fuel gas cutting. Instruction includes general shop safety, equipment use, finishing, welding electricity fundamentals, welding consumable identification, and hazardous materials regulation. 36 hours lecture, 54 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

WLDT 72A Beginning Laser Welding 2 units
This course will cover the theory and concepts associated with modern laser welding of metals and materials. The use of the laser in the manufacturing environment will be shown along with typical applications. The different types of lasers available for welding. The advantages and disadvantages of continuous power laser welding and pulsed laser welding. 36 hours lecture, 0 hours laboratory.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

WLDT 73 Welding Workplace Safety 1 units
This course provides the safety knowledge required to operate safely in a welding or construction workplace environment. This course will emphasize hazard identification, avoidance and control as a means to proactively create a safe workplace environment. OSHA safety standards will be emphasized throughout to maintain consistency with workplace environment. This course meets the 10 hour OSHA construction safety training requirements. 18 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

WLDT 79 Manufacturing Processes 2 units
This course examines the processes and equipment used in modern manufacturing. This course provides an excellent introduction to today's manufacturing processes, as well as an overview of the processes and equipment used in modern manufacturing. The course concentrates on the five major types of industrial materials; metals, plastics, ceramics, woods, and composites. It provides thorough coverage of the forming, separating, fabricating, conditioning, and finishing processes related to each material. Understanding the relationship between manufacturing processes, materials properties, materials processing and design. 36 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

WOMEN'S STUDIES (WMST)

WMST 1 Introduction to Women's Studies 3 units
Examines the cultural, historical, social, political and economic experiences of women in the United States. Introduces feminist perspectives on a wide range of issues affecting women incorporating race, class, ethnicity, sexual orientation and the life cycle. Analysis of African American women, Asian American women, Chicanas, European American women and Middle Eastern American women. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

WMST 2 Global Perspective of Women 3 units
Examines the cultural, historical, political and economic experiences of women globally. Introduces feminist perspectives on a wide range of issues affecting women including globalization, war, education, work, family and religion in Asia, Africa, the Middle East and Latin America. 54 hours lecture.
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

WORK EXPERIENCE (WRKX)

WRKX 94 Occupational Work Experience/Internship 1 - 8 units
This course of supervised employment provides students with the opportunity to earn college credit for developing marketable skills while working in their major field of study. Students working in a part-time or full-time, paid or unpaid internship or position related to their major field of study will contract, in collaboration with their work supervisor and instructor, to set measurable, achievable goals; accomplish new or expanded learning objectives; and broaden work skills and experiences. Students will apply discipline-specific knowledge, skills, and abilities gained in the classroom. Students can earn 1 to 8 units per semester for a maximum of 16 units of Cooperative Work Experience, which includes General Work Experience and Occupational Work Experience/Internship. Students must work 75 paid hours or 60 unpaid hours per unit earned during the semester. May be taken any number of times for a maximum of 16 units of Cooperative Work Experience..
- Credit - Degree Applicable
- Grading Option: Letter or P/NP

WRKX 95 General Work Experience 1 - 6 units
This course of supervised employment provides students with the opportunity to earn college credit while working and developing desirable work habits, attitudes, and skills. Students working in any part-time or full-time, paid or unpaid position will contract, in collaboration with their work supervisor and instructor, to set measurable, achievable goals; accomplish new or expanded learning objectives; and broaden work skills and experiences. The work experience need not be related to the students' educational goals. Students can earn 1 to 6 units per semester for a maximum of 16 units of Cooperative Work Experience, which includes General Work Experience and Occupational Work Experience/Internship.

Students must work 75 paid hours or 60 unpaid hours per unit earned during the semester. May be taken any number of times for a maximum of 16 units of Cooperative Work Experience..

- Credit - Degree Applicable
- Grading Option: Letter or P/NP