

# "A" Course Descriptions

*Click on the course area below to get to the exact page.*

**ACCOUNTING**

**ADMINISTRATION OF JUSTICE**

**AEROSPACE PRODUCTION TECHNOLOGY**

**AFRICAN-AMERICAN STUDIES**

**AIRCRAFT ELECTRONICS TECHNOLOGY**

**ALLIED HEALTH**

**AMERICAN SIGN LANGUAGE**

**ANATOMY**

**ANTHROPOLOGY**

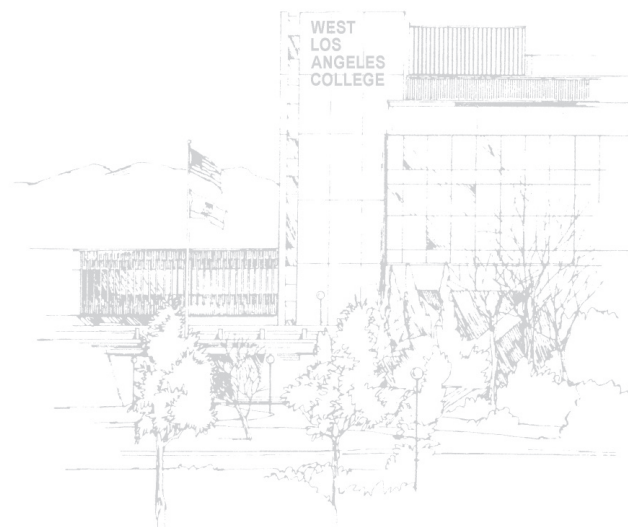
**ARABIC**

**ARCHITECTURE**

**ART**

**ASTRONOMY**

**AVIATION MAINTENANCE TECHNICIAN**



# ACCOUNTING

(Also see Business)

## 1 Introductory Accounting I (5) UC:CSU

This course emphasizes basic accounting theory and practices which include an analysis of records of original entry and their relationship to the general ledger, controlling accounts and their subsidiary ledgers, the voucher system, periodic adjustments, worksheets, financial statements, and closing the ledger. *Note: Same as Accounting 21 plus Accounting 22.*

## 2 Introductory Accounting II (5) UC:CSU

*Prerequisite: Accounting 1 or Accounting 22 with a grade of "C" or better, or equivalent.*

Accounting principles and procedures relating to partnerships and corporations, accounting for manufacturing, cost accounting, branch and departmental accounting, interpretation of financial statements, supplementary statements, data processing and management controls are covered.

## 15 Tax Accounting I (3) CSU

*Prerequisite: Accounting 1 or equivalent.*

In this course, tax laws, accounting procedures, and preparation of returns required for Federal and California State individual income taxes are covered.

## 16 Tax Accounting II (3) CSU

*Prerequisite: Accounting 15.*

This course deals with tax laws, accounting procedures and preparation of state and federal tax returns required for partnerships, corporations, estates and trusts. Federal and state tax returns for inheritance and gift taxes will also be considered, along with a review of individual tax returns to update students on new tax laws and forms.

## 20 Managerial Accounting (3) CSU

*Prerequisite: Accounting 2 with a grade of "C" or better.*

The application of accounting analysis to business decision making, planning, and control is presented. The emphasis is on the usefulness and appropriateness of data.

## 21 Bookkeeping and Accounting I (3) UC:CSU

Fundamentals of double-entry bookkeeping, preparation of the trial balance, worksheets and simple financial statements, use of controlling accounts, and the control of cash and bank reconciliation statements are presented. Credit allowed only for either Accounting 1 or 21.

Accounting 21 and 22 together equal Accounting 1.

*UC Transfer Credit Limit: A maximum of 5 units from Accounting 1, 21 and 22.*

## 22 Bookkeeping and Accounting II (3) UC:CSU

*Prerequisite: Accounting 21 or equivalent.*

The voucher system; payroll accounting; accounting of notes, bad debts, inventories, cost of goods sold, fixed assets, depreciation, adjustments and interim statements are presented. Together with Accounting 21, these courses equal Accounting 1.

*UC Transfer Credit Limit: A maximum of 5 units from Accounting 1, 21 and 22.*

## 25 Automated Accounting Methods and Procedures (3) CSU

*Prerequisite: Completion of one semester of Accounting Principles (or equivalent), through and including material on payroll accounting, with a grade of "C" or better.*

Using the computer, this introduction to accounting will provide information and practice in the basic machine operations, plus instruction in the following areas: general ledger, depreciation, accounts receivable, accounts payable, and payroll. Real-world applications will be stressed throughout the course.

# ADMINISTRATION OF JUSTICE

(See Corrections for additional course offerings.)

(Also known as Public Safety Training)

## 1 Introduction to Administration of Justice (3) UC:CSU

The philosophy and history of law enforcement are presented, as well as an overview of crime and police problems, the organization and jurisdiction of local, state and federal law enforcement agencies, a survey of professional career opportunities, and the qualifications required for entry into a career in Administration of Justice.

## 2 Concepts of Criminal Law (3) UC:CSU

The structure, definitions, and the most frequently used sections of the Penal Code and other criminal statutes are covered.

## 3 Legal Aspects of Evidence (3) CSU

A careful study of the kinds and degrees of evidence and the rules governing the admissibility of evidence in court is made.

## 4 Principles and Procedures of the Justice System (3) CSU

Procedures from incident to final disposition, including the police, prosecution court and correctional process, and principles of constitutional, federal, state and civil laws are considered as they apply to and affect law enforcement. Theories of crime and punishment are included.

## 5 Criminal Investigation (3) CSU

This course covers the fundamentals of investigation; crime scene search and recording, collection and presentation of physical evidence; scientific aids; modus operandi; sources of information; interviews and interrogation; follow up, and case preparation.

## 6 Patrol Procedures (3) CSU

*Prerequisite: Administration of Justice 1.*

This course is a study of the responsibility, techniques and methods of police patrol. Topics include patrol distribution, selective enforcement, pullover and approach methods, emergency pursuit driving, search of suspects and buildings, field interrogations, procedures in the handling of calls for police service and special police problems.

## 8 Juvenile Procedures (3) CSU

This course is a study of the organization, functions and jurisdiction of juvenile agencies; the processing and detention of juveniles; juvenile case disposition; juvenile statutes and court procedures.

**9 Defensive Tactics (1) CSU**

This is a weaponless self-defense course originally designed for law enforcement personnel as a protection against persons attacking them. Special emphasis will be placed on demonstrating a limited number of restraint and control techniques. Physical fitness and upper body strength exercises will be emphasized as well.

**11 First Aid in Law Enforcement (1) CSU**

This course will focus on the initial response to an accident or an emergency, and the immediate care given to victims. Students will be able to recognize and classify common injuries into general classifications for law enforcement purposes. CPR will be demonstrated.

**14 Report Writing for Peace Officers (3) CSU (Same as English 130)**

This course includes the study of and practice in preparing various types of reports required by the criminal justice system, review of basic writing skills, technical and legal terminology, and the requirements for preparation of legally admissible documents.

**15 Police Supervision (3) CSU**

*Prerequisite: Employment in law enforcement.*

This course is specifically designed to prepare law enforcement officers for the duties and responsibilities of a police supervisor. The course is primarily concerned with supervisory functions, employee evaluations, discipline, human relations, field operations and understanding police resources. This is an excellent class for employees preparing for promotion.

**16 Recruitment Selection Process (3) CSU**

This course provides an in-depth coverage of the legal selection for employment with an agency in the criminal justice system. Topics will include a review of the minimum qualifications for employment as a peace officer as determined by the Commission on Peace Officer Standards & Training (POST) and/or Standards and Training for Corrections (STC). Specific topics will include the application, written exam, oral interview, background investigation, psychology exam, medical exam, polygraph exam, and agility qualification. Employment opportunities will be presented, and ways to assist the student will be explained. *Note: When course is offered on-line, instructor may require three class meetings on campus.*

**39 Probation and Parole (3) CSU**

This course provides students with the history and development of probation and parole. Special emphasis will be placed on the relationships between the police, courts and corrections.

**60 Arrest, Search and Seizure (3) CSU**

This course covers information regarding powers of arrest, search and seizure for peace officers with limited police powers. The main topics for this course are laws of arrest, arrest and control methods, and communication. This course meets the curriculum requirements for the Commission on Peace Officer Standards and Training (POST), P.C. 832 Laws of Arrest, and Board of Corrections, Standards and Training for Corrections (STC) when certified.

**62 Fingerprint Classification (3) CSU**

This is a practical course which covers the technical terminology of fingerprinting, pattern interpretation and classification of fingerprinting, searching and filing procedures. Time will also be devoted to laboratory work in the classroom. A skills award will be awarded on successful completion of this course.

**67 Community Relations I (3) UC:CSU**

This course offers an in-depth exploration of the roles of Administration of Justice practitioners and their agencies. Through interaction and study, students become aware of the interrelationships and role expectations among the various agencies and the public. Primary emphasis is placed upon the professional image of the Justice Administration system, and the development of positive relationships between members of the system and the public.

**75 Introduction to Corrections (3) CSU**

This basic course deals with the nature of correctional work; the aims and objectives of Correctional Administration; probation and practices; skills, knowledge and attitudes required for employment in this field; types of institutions and services; and career opportunities.

**87 Campus Patrol (3)**

This course deals with the law enforcement aspect of campus safety for Administration of Justice majors. Students will gain practical experience, develop insights into the problems of a college or school environment, and have the opportunity to blend theory and practice. The purpose of this class is to provide a service learning atmosphere to allow students to see connections between criminal justice theory and practice and gain on the job experience. Class will meet for one hour of lecture in a roll-call setting and then spend time in the field, hours to be arranged.

**102 Orientation to Public Service Academy (1) CSU**

This course will detail the curricula and requirements of public service training academy courses and prepare students for the successful completion of these academy courses. This course is required as a prerequisite for all academy courses as established by the Peace Officer Standards and Training (POST) Commission for individuals entering the career of law enforcement. *Note: A document processing fee of \$50 is required of all students.*

**129 Emergency Medical Training (7) CSU (Same as Allied Health 52)**

This course provides the basic Emergency Medical Training for response teams in patient examination, airway emergencies, breathing emergencies, CPR, circulation emergencies, neurological emergencies, and musculoskeletal and soft tissue injuries for an EMT-1 certification. Certification is from the State of California through UCLA.

**160 Police Organization and Administration (3) CSU**

The effect of the organizational structure and administrative procedures on the implementation of police functions, assessment of the recruitment and hiring process, career advancement and leadership, and administrative problems of staffing and morale as a law enforcement employer are examined.

**185 Directed Study - Administration of Justice (1)**

Allows a student to pursue Directed Study in Administration of Justice on a contract basis under the direction of a supervising instructor.

## COURSE DESCRIPTIONS

### **260 Juvenile Corrections Officer Core Course (9.75) CSU (RPT 3)**

*Prerequisite: Administration of Justice 102, or Law Enforcement Agency sponsored.*

This course is for recently appointed juvenile counselors and juvenile custody officers. Topics include handling emergencies, housing, dealing with assaultive clients, diversity, and the juvenile justice system.

### **261 Probation Officer Core Course (9.75) CSU**

*Prerequisite: Administration of Justice 102.*

This is a basic training course for entry-level probation officers. Subject areas include the criminal justice system, roles and responsibilities of the officer, classification and housing, casework, visitation, report writing, handling disputes, tactics and procedures. May be certified by Board of Corrections, Standards and Training for Corrections (STC).

### **285 Directed Study - Administration of Justice (2) CSU**

Allows a student to pursue Directed Study in Administration of Justice on a contract basis under the direction of a supervising instructor.

### **306 Correctional Report Writing (3) CSU**

This is an introductory course dealing with all aspects of public safety communication. It will cover the techniques of effectively communicating facts, information, and ideas in a clear and logical manner for a variety of public safety systems reports, i.e., crime/violation/incident reports, letters, memoranda, directives, and administrative reports. Students will gain practical experience in interviewing, note taking, report writing and testifying.

### **307 Street Gangs/Prison Gangs (3) CSU**

This course will provide an introduction to the history and sociology of a gang. Topics will include a discussion on the problems law enforcement and the community have with gangs, the organization and structure of a street gang, recruitment into a gang, gang attire, hand signs, tattoos, body language, graffiti, and the unwritten rules of gangs and their effect on society. The organizational structure of a prison gang and the relationship with organized crime are also covered.

### **309 Correctional Interviewing and Counseling (3) CSU**

This course provides an overview of the techniques in counseling and interviewing available to practitioners in corrections. Students will learn the use of appropriate techniques and theories in confidence building which may be used by correctional employees in interviews and counseling. This is a basic course for students planning to enter, or already employed within the Correctional Science field.

### **310 Field Work I (3) CSU (Same as Corrections 3)**

This is a service/learning class. Students will participate, under supervision, in a law enforcement or correctional facility such as a probation/parole field office, jail, detention center, juvenile institution, or a similar agency. Students must meet the minimum entry-level requirements of the sponsoring agency and will be fingerprinted, take an oath, and TB test. The class meets once a week for one hour, and then students will have volunteer assignments for a minimum of five hours per week with a sponsoring agency.

### **311 Field Work II (3) CSU (Same as Corrections 4)**

This is a service/learning class. Students will participate, under supervision, in a law enforcement or correctional facility such as a probation/parole field office, jail, detention center, juvenile camp, juvenile institution, or a similar agency. Students must meet the minimum entry-level requirements of the sponsoring agency and will be fingerprinted, take an oath, and TB test. The class meets once a week for one hour, and then students will have volunteer assignments for a minimum of five hours per week with a sponsoring agency.

### **312 Aviation Security (1.5) (NDA)**

This course is designed for the student who is working in an airport, or who is seeking employment with an airport, to provide a basic understanding of the various types of threats to airport security and to understand how to respond to a criminal threat. Topics will include Federal Aviation Regulations, explosive devices, weapons, narcotics and dangerous drug recognition, and contraband that are prohibited at airports.

### **321 P.C. 832 Arrest Course (2) (RPT 3)**

This course covers information regarding powers of arrest, search and seizure for peace officers with limited powers. When certified, this course satisfies the curriculum requirements for Peace Officer Standards and Training (POST) P.C. 832 Arrest Course and by the Board of Corrections, Standards and Training for Corrections (STC).

### **385 Directed Study - Administration of Justice (3) CSU**

Allows a student to pursue Directed Study in Administration of Justice on a contract basis under the direction of a supervising instructor.

### **393 P.C. 832 Firearms Course (1.33) (RPT 2)**

This course covers firearms safety, hand gun familiarization, care, cleaning and storage, and live fire. When certified, this course satisfies the curriculum requirements for the Commission on Peace Officers Standards and Training (POST) for P.C. 832.

### **931 Cooperative Education - Administration of Justice (3) (RPT 3)**

---

## AEROSPACE PRODUCTION TECHNOLOGY

(See Aircraft Electronics and Aviation Maintenance Technician for additional Aviation classes)

### **102 Fabrication and Repair of Advanced Composites (6)**

Designed to give students the necessary skills to perform composite lay-up and fabrication, as well as composite repair procedures. Consists of classroom lecture and hands-on practice in graphite, Kevlar (aramid), fiberglass composite lay-up, and repair using vacuum bagging techniques with room temperature, hot bonder, and oven cures. Students are required to interpret engineering drawings.

**110 Aerospace Production Blueprint Reading I (4)**

Classroom lecture and hands-on practice reading and interpreting actual blueprints. Students will be required to interpret basic geometric definitions, basic lines and drafting methods, drawing numbering systems types of drawings, engineering parts lists, and coordinating reference systems.

**115 Aircraft Structures (6)**

Designed to give students the necessary skills to perform journeyman aerospace structures assembly and repair. Classroom lecture and hands-on practice drilling holes in aluminum alloys, cold working of holes, installation of special fasteners, the importance of aircraft sealants, and proper preparation of surfaces for application of sealants. Includes material fabrication using sheet metal equipment and completion of a final project of moderate complexity.

---

## AFRICAN-AMERICAN STUDIES

**2 The African-American in Contemporary Urban Society (3) UC:CSU**

A survey of the urbanization of African-Americans, with emphasis on social and political contemporary problems, proposed solutions to civil rights issues, and equality of opportunity.

**4 The African-American in the History of the United States I (3)**

**UC:CSU** (Same as History 41)

African-American Studies 4 is a survey of United States history from the early Colonial era to the Reconstruction Period, with special emphasis on the contribution of the African-American to the political, economic and social development of the nation. This course also surveys the U.S. Constitution and California state and local government.

*UC Transfer Credit Limit: A maximum of one course from African American Studies 4; History 11, 41, 43.*

**5 The African American in the History of the United States II (3)**

**UC:CSU** (Same as History 42)

This course provides a survey of United States history from the end of the Civil War to the present, with emphasis on the contributions of African-Americans to the social, cultural, political, and economic development of the United States. Also included is a continued survey of the United States Constitution.

*UC Transfer Credit Limit: A maximum of one course from African American Studies 5; History 12, 13, 42, 44.*

---

## AIRCRAFT ELECTRONICS TECHNOLOGY

(See Aviation Maintenance Technician and Aerospace Production for additional Aviation courses)

**65A Avionic Systems for Aircraft Maintenance Personnel A (6) CSU**

*Prerequisites: Aviation Maintenance Technician 1 - 14 or equivalent, or possession of a valid FAA Mechanic Certificate, Repairman Certificate.*

This course is designed to introduce the practicing aircraft mechanic, aircraft maintainer or graduating mechanic student to the operating concepts of aircraft communication and navigation systems currently used aboard commercial transport and large general aircraft. Equipment functions will be discussed at the black box level. Laboratory work includes soldering, typical wiring practices and modifications. Effective troubleshooting is emphasized. *Note: A scientific calculator with operator's manual is required.*

**65B Avionic Systems for Aircraft Maintenance Personnel B (6)**

*Prerequisite: 65A.*

This course continues the study of operating concepts for aircraft communication and navigation systems. Students gain an understanding of the workings of various avionic equipment and their relationship to other aircraft systems, the ability to interpret aircraft electrical schematics, and the ability to use test equipment. The combination of the above will provide the skills necessary to be an effective troubleshooter of avionic systems.

---

## ALLIED HEALTH

CARDIOPULMONARY RESUSCITATION (CPR)  
EMERGENCY MEDICAL TECHNICIAN  
PARAMEDIC PROGRAM

*These courses are offered in partnership with the University of California Los Angeles (UCLA) Center for Prehospital Care.*

**12 Introduction to Careers in Health Occupations (3) CSU**

This course is designed for students interested in learning about health care careers, including work descriptions, work environment, employment opportunities, educational requirements, and earnings. Students will also learn about the health care system in the United States, including the development of medicine and trends in financing.

**20 Heartsaver CPR (.25) (RPT 9)**

This course covers one-rescuer adult CPR, treatment of choking patients, and heart disease prevention. Successful course completion earns an American Heart Association Heartsaver card. The CPR card is valid for two years; students may want to retake the course to maintain their educational status.

**21 Basic Cardiac Life Support for the Healthcare Provider (.5) CSU (P/NP)**

This course covers infant, child and both one-rescuer and two-rescuer adult CPR. Treatment of the choking patient and heart disease prevention are also included.



## COURSE DESCRIPTIONS

### **22 Advanced Cardiovascular Support (1) CSU (P/NP)**

*Prerequisites: Allied Health 21, and must be a licensed health care provider.*

This course provides information for advanced cardiovascular life support. Lecture topics include acute cardiac care, pathophysiology, treatment modalities, and pharmacology.

### **23 Pediatric Advanced Life Support (1) CSU (P/NP)**

*Prerequisites: Allied Health 21, and must be a licensed health care provider.*

This course provides information for Pediatric Advanced Life Support. Lecture topics include interactive teaching stations related pediatric life support.

### **33 Medical Terminology (3) CSU (Same as CAOT 44)**

This course is designed for students interested in learning more about medical terminology and basic anatomy and applying this knowledge to a variety of allied health professions. Students will develop a comprehensive medical vocabulary applicable to all specialties of medicine through the study of Greek and Latin prefixes, suffixes and root words. Students will also develop a basic understanding of anatomy and the function of major body systems.

### **43 CO Anatomy and Physiology for Emergency Health Care Personnel (4) CSU**

*Corequisites: Ald Hth 43 CO, 44 CO, 45 CO, 46*

This course will provide an overview of the structure and function of all bodily systems. Emphasis will be placed on knowledge that will enhance the student's ability to treat medical emergencies. *NOTE: This course is only open to students admitted through UCLA Center for Prehospital Care.*

### **44 CO Introduction to Emergency Medical Service Systems (2) CSU**

*Corequisites: Ald Hth 43 CO, 44 CO, 45 CO, 46 CO*

Overview of Emergency Medical Service Systems, the ethics of patient care management and the law and policies of emergency services, including the relationship between the emergency care provider and other health care professionals. Verbal and nonverbal behavior and communications related to the delivery of emergency medical services are also discussed. *NOTE: This course is only open to students admitted through UCLA Center for Prehospital Care.*

### **45 CO Patient Assessment and Airway Management (2) CSU**

*Corequisites: Ald Hth 43 CO, 44 CO, 45 CO, 46 CO*

This course gives an overview of prehospital patient assessment for Emergency Health Care. This course provides foundational knowledge and skills to effectively assess and treat patients in a prehospital setting. *NOTE: This course is only open to students admitted through UCLA Center for Prehospital Care.*

### **46 CO Cardiology Assessment and Medical Emergencies (6) CSU**

*Corequisites: Ald Hth 43 CO, 44 CO, 45 CO, 46 CO*

Through lectures and discussions, this course will cover the pathophysiological principles and assessment findings in cardiology, neurology, and respiratory emergencies. *NOTE: This course is only open to students admitted through UCLA Center for Prehospital Care.*

### **47 CO Emergency Response to Crisis (4) CSU**

*Prerequisites: Ald Hth 43 CO, 44 CO, 45 CO, 46 CO.*

*Corequisites: Ald Hth 48 CO, 49 CO.*

This course will focus on techniques of immediate intervention in a variety of field crises including shock, pediatric emergencies, abuse, and trauma to various body systems, obstetrics, and burns. *NOTE: This course is only open to students admitted through UCLA Center for Prehospital Care.*

### **48 CO Medical Emergencies and Pharmacological Interventions (5) CSU**

*Prerequisites: Ald Hth 43 CO, 44 CO, 45 CO, 46 CO.*

*Corequisites: Ald Hth 47 CO, 49 CO.*

This course emphasizes pathophysiology, assessment and management of patients with various systematic diseases, and the application of advanced life support techniques in medical emergencies. Formulation of a field impression and implementation of pharmacological intervention in a laboratory setting are also studied. *NOTE: This course is only open to students admitted through UCLA Center for Prehospital Care.*

### **49 CO Clinical Internship (4) CSU**

*Prerequisites: Ald Hth 43 CO, 44 CO, 45 CO, 46 CO.*

*Corequisites: Ald Hth 47 CO, 48 CO.*

This course presents the coordination of advanced emergency medical service training within a hospital setting. Students will be able to participate in multiple departments within the hospital: critical care units, OB/GYN, operating rooms, anesthesia, recovery, pediatrics, and psychiatrics. This will assure a variety of patient presentations and complaints. *NOTE: This course is only open to students admitted through UCLA Center for Prehospital Care.*

### **50 CO Field Internship (9) CSU**

*Prerequisites: Ald Hth 47 CO, 48 CO, 49 CO.*

Coordination of advanced emergency medical service training with a field advanced life support unit. Students will be able to participate in emergency intervention in traumatic and medical emergencies. Field internship represents the phase of instruction where the student learns how to apply knowledge and skills to the field environment. *NOTE: This course is only open to students admitted through UCLA Center for Prehospital Care.*

### **52 Emergency Medical Training - Basic (7) CSU**

This course provides basic emergency medical care training for firefighters and ambulance attendants. Successful course completion results in NREMT-B certification granted from the State of California, through the Los Angeles County EMS Agency. *NOTE: This course is only open to students admitted through UCLA Center for Prehospital Care.*

### **53 Emergency Care Technician (3.5) CSU**

*Prerequisites: Allied Health 21 and Allied Health 52.*

This course combines theoretical information and practical skills to train students to work as nurse extenders, and care for the sick and/or injured in an emergency department.

**54 CO Prehospital Trauma Life Support (1)**

The Prehospital Trauma Life Support (PHTLS) course is designed to enhance and increase knowledge and skill in delivering critical care in the prehospital environment. The course is designed to provide the prehospital provider (EMT, paramedic and RN) with the knowledge and skills for the prehospital assessment and care of the trauma patient.

**55 CO Trauma Aims (3.5)**

This course is designed to prepare military prehospital EMTs, paramedics and RNs to provide emergency medical treatment, limited primary care, health protection and evacuation in a variety of operational and clinical settings, from point of injury to illness, through the continuum of care. Students receive training in trauma assessment, advance airway management and ventilation, intravenous infusion, pharmacology, medication administration and shock management.

**56 Communication & Customer Service Skills in Healthcare (1)**

*Recommended: CAOT 1A*

This course will introduce students to the workplace skills necessary to succeed in healthcare professions. The focus will be on professional behavior, communication techniques and HIPAA regulations.

**57 Computers in Health Occupations (1)**

*Corequisites: Pharmacy Tech 21 and 23. Recommended: CAOT 1A*

This course will introduce students to the use of computers in a variety of healthcare settings. Students will use software systems used in pharmacies, medical offices, and hospitals.

**80 Pharmacy Services Associate In-Service Training (3.5)**

This course is designed for Pharmacy Clerks working in community pharmacies. This course provides the students with additional job skills to perform third party billing, understand workflow and work station procedures, operate a cash register, utilize pharmacy software, understand drive-thru procedures and understand quality systems in a community pharmacy.

**81 Pharmacy Technician In-Service Training (4)**

This course is designed for newly hired Pharmacy Technicians working in community pharmacies. This course meets employer orientation requirements and provides the students with the specific job and technical skills to work as a Pharmacy Technician.

**82 Lead Pharmacy Technician In-Service Training (3.5)**

This course is designed for newly hired Lead Pharmacy Technicians working in community pharmacies. This course meets employer orientation requirements and provides the students with the specific job and technical skills to work as a Lead Pharmacy Technician.

---

## AMERICAN SIGN LANGUAGE

**1 American Sign Language (4) CSU**

Develops basic vocabulary and grammar of American Sign Language. Emphasis is placed on receptive and comprehension skills. Incorporates vital aspects of the Deaf culture and community.

**2 American Sign Language II (4) CSU**

*Prerequisite: ASL 1 with a grade of "C" or better*

Completes the study of elementary vocabulary and grammar. Increased development of inflectional and non-manual behavior patterns. There will also be extensive study on the Deaf Culture and Community within receptive and expressive conversation.

---

## ANATOMY

**1 Introduction to Human Anatomy (4) UC:CSU**

*Recommended: College Biology.*

This course presents the structure of the human body by subdividing it into individual body systems. The functional anatomy of each level of organization is then studied from the microscopic level of organization to the gross level. In addition, the embryological development of each body system and selected pathologies will be examined. Laboratory exercises include the study of histological slides, photomicrographs, x-rays, the human skeleton, and the dissection of a cat. This course is intended to meet the requirements of students majoring in nursing, dental hygiene, occupational therapy, physical education, or for those who wish to extend their knowledge of the human body beyond the scope of introductory biology.

---

## ANTHROPOLOGY

**101 Human Biological Evolution (3) UC:CSU**

Students in this course will focus on the relationship between human biology, culture and the physical environment as interpreted within the frameworks of evolutionary theory and the science of genetics. Students will trace humans place in the animal kingdom, with special emphasis on primates. They will examine archeological evidence associated with human fossils and probe human physical variability within the context of Mendelian and population genetics.

**102 Human Ways of Life: Cultural Anthropology (3) UC:CSU**

This course presents students with an anthropological understanding of the varieties of lifestyles in human societies throughout the world, from nomadic foragers to complex state-level societies such as our own. The varied forms of marriage and the family, economic, political, and legal arrangements, religious expressions and art forms are examined in their own contexts and compared with others.

**103 Archaeology: Reconstructing the Human Past (3) UC:CSU**

Students of this course will focus on the discovery and reconstruction of the life ways of extinct societies through the excavation, analysis and interpretation of the material remains, including refuse, stone tools, pottery, burials, and housing. By examining these remains within the context of their environments and changes over time, students acquire a means of understanding the human past.

## COURSE DESCRIPTIONS

### 104 Human Language and Communication (3) UC:CSU

This course offers students an introduction to Linguistic Anthropology. This course surveys the great variety of ways humans communicate both verbally and non-verbally. The course focuses on the structure, function, history, and evolution of language.

### 109 Gender, Sex and Culture (3) UC:CSU

This course presents students with a cross-cultural comparison of gender roles as viewed from biological/evolutionary, cultural, psychological, prehistoric and historic perspectives as they relate to the status of women and men in all levels of society, from bands to the modern state.

### 111 Human Biology Lab (2) UC:CSU

This laboratory class offers students an exploration of selected topics in biologic anthropology including genetics, human variation, the living primates, human osteology and paleoanthropology.

### 119 Introduction to Forensic Anthropology (2) CSU

This course provides students with a hands-on study of the types and nature of information that can be recovered from bones and teeth including age, sex, size, population affinity, pathology, diet, and demography.

### 121 Anthropology of Religion, Magic, and Witchcraft (3) UC:CSU

This course provides students with a broad view of anthropological ways of looking at religion. Students will gain a socio-cultural understanding of religious behaviors through the exploration of core topics within the subject, such as myth, ritual, and various types of religious specialists as well as related practices including magic, witchcraft, and divination.

### 132 Native Peoples of North America (3) UC:CSU

This course offers students a broad survey of Native Americans living north of Mexico, with emphasis on the natives of California. The survey of the various native groups will be from the ethnographic present and include an examination of the issues facing indigenous groups today.

### 134 People and Cultures of the Middle East (3) CSU

Through this course, students will explore diversity, complexity, and dynamism of social life in the region known as the Middle East. From the holistic and comparative nature of anthropological study, the course offers students a broad survey of peoples living in the region. Included in this study are a variety of interconnected topics that have been important in the anthropological literature on the region. The diverse social forms of nomads, tribes, villages, and cities and the associated social and economic intricacies will be examined. Also explored will be the systems of values, norms, and religious beliefs as part of social processes. The region will be defined in both a geographic and cultural framework.

---

## ARABIC

### 1 Elementary Arabic I (5) CSU

*Corequisite: Arabic 101*

This course stresses the fundamentals of pronunciation, grammar, practical vocabulary, useful phrases, and the ability to understand, speak, read, and write basic Arabic. It includes an introduction to Arabic civilization and culture.

### 112 WEST LOS ANGELES COLLEGE | 2010 - 2012 CATALOG

### 2 Elementary Arabic II (5) CSU

*Corequisite: Arabic 101*

This course completes the elementary Arabic grammar and begins the reading and writing of more advanced elementary texts. It continues with the study of the Arabic culture.

### 101 Arabic Language Laboratory (1)

This is a mediated, independent study course which allows students to enhance their Arabic language skills through audio, video, and computer work in the language lab. Its content is directly related to the level of the Arabic language class a student is concurrently enrolled in an the textbook being used for that course.

---

## ARCHITECTURE

The coursework in Architecture is primarily intended for transfer students who wish to pursue a professional degree (B. Arch.) in architecture or related design fields. Pursuant to an articulation agreement between the Los Angeles Institute of Architecture and Design in Los Angeles (LAIAD) and West Los Angeles College, LAIAD courses completed by West students will appear on the students West Los Angeles College transcripts.

### 161 Introduction to Computer-Aided Architectural Drawing (2) (Formerly Architecture 36)

This is an introductory course in two-dimensional computer-aided drafting. Students learn the basic concepts involved in making computer-aided drawings, which are constructed using a microcomputer with appropriate software such as AutoCAD. Students use workstations equipped with a microcomputer, monitor, disk drives, digitizer, plotter, and printer.

### 162 Computer-Aided Design/Drafting (3) (Formerly Architecture 37)

This second-semester course provides instruction in computer-aided drafting. Students use concepts learned in the introductory course and apply the fundamentals of two-dimensional concepts to three-dimensional concepts. Drawings are constructed using a microcomputer with appropriate software such as AutoCAD.

### 172 Architectural Drawing I (3) CSU (Formerly Architecture 5)

This course explores the nature and limitations of materials using two and three-dimensional studies of form and composition. The study of architectural plan and section drawings, model making and finishing skills, materials studies, painting and finishes are also included.

### 173 Architectural Drawing II (3) CSU (Formerly Architecture 6)

*Prerequisites: Architecture 172.*

A continuation of Architectural Drawing I, exploring classical and contemporary geometrical drawing and ordering systems, from Roman town planning to the present. The emphasis is on uniquely American land development concepts. The class will continue the development of 2-D and 3-D hand and computer-aided drawing skills.

### 180 Computer-Aided Architectural Laboratory (1)

(Formerly Architecture 39)

This course is designed to reinforce the lectures presented in each computer-aided architecture class. It gives students the needed practice in applying software programs to various class assignments.



**201 Basic Architectural Design I (3) UC:CSU**

(Formerly Architecture 33)

*Prerequisites: Architecture 172.*

An introduction to the formal and spatial language of architecture explored through studio projects, informed by case study projects.

**202 Basic Architectural Design II (3) UC:CSU**

(Formerly Architecture 34)

This course further extends the theories of space, form and vision, and applies them to architectural problem solving. Horizontal and vertical flow are studied. Computer application to design is also studied.

---

## ART

*NOTE: Outstanding works of student art may be retained for a maximum of two years by the college art gallery.*

**101 Survey Of Art History I (3) UC:CSU (CAN ART 2)**

This course introduces students to some of the great ancient civilizations of the world. By studying the visual arts created during these times, students will come to understand the beliefs and aspirations of cultures such as the Ancient Egyptians, Greeks and Romans, and civilizations in geographic areas such as Africa, India, and Central America prior to the Spanish Conquest.

**102 Survey of Art History II (3) UC:CSU***Note: Art 101 is not a prerequisite to Art 102.*

This course introduces students to the visual arts of Western Europe and the United States, beginning with the Renaissance and ending in the late twentieth century. The constantly-changing world view of this period will be studied in the works of such artists as Michelangelo and Rembrandt, and also through such movements as Romanticism, Impressionism, Expressionism and Cubism.

**103 Art Appreciation I (3) UC:CSU**

This broad introduction to the nature, vocabulary, media, and history of art, with selections from Western and non-Western culture, is designed to expand awareness and understanding of the visual arts as a unique medium for human interrelationships.

**107 Mexican Art - Modern (3) UC:CSU**

This course surveys the pictorial arts of Mexico from the Pre-Revolutionary years of 1900 to the present day. It includes the Renaissance of Indigenous Mexican Art, the contemporary popular and fine arts, and investigates the development of Mexican-American Art. Among the artists discussed are Rivera, Tamayo, and Barragan.

**109 Arts of Africa, Oceania, and Ancient America (3) UC:CSU**

This course introduces students to some of the great cultures of the world. The Ife and Benin kingdoms of Africa, as well as the Maya and Aztec empires of Central America, are just some of civilizations which are brought to life once more through a study of their visual arts.

**111 History of Contemporary Art (3) UC:CSU**

This course traces the development of twentieth century European and North American painting, sculpture and architecture. Beginning with the late nineteenth century art movements of Impressionism and Post-Impressionism, this course attempts to reveal the meaning behind such visually challenging forms as Cubism, Expressionism, Dadaism, and Surrealism. Artists discussed will include Monet, Picasso, Matisse, Dali, and Warhol.

**115 History of Modern Art (3) CSU**

An examination of Western art and its relationship to social, political, and economic aspects of modern society from the mid-nineteenth through the twentieth century. The influence of the Industrial Revolution, cross-cultural influences of Western and non-Western cultures, artistic response to new intellectual trends and disciplines, impact of the two World Wars, the rise of the Civil Rights and Feminist movements, innovations in technology, various stylistic movements, as well as methodological approaches to analysis of the subject will be considered. Students will master art historical and artistic vocabulary, will learn to perform visual analysis of compositions of painting, sculpture and other forms of visual art.

**117 Meso-American Art: From Olmec to Aztec (3) CSU**

This introductory course covers the history of pre-Columbian art in Mexico, Guatemala, Honduras, and Belize from the Olmec to the Aztec periods (1500 BC - 1519 AD). Also included will be a survey of the art of the Late Formative Period, the city of Teotihuacan, the Classic Cities, and the Maya.

**185 Directed Study - Art (1) CSU**

Allows a student to pursue Directed Study in Art on a contract basis under the direction of a supervising instructor.

**201 Drawing I (3) UC:CSU**

This course can teach you how to draw. Students learn to draw the world around them while developing their personal expressive visions. Various media, including pencil, ink, and charcoal is used. Students are expected to complete an additional two hours per week of studio homework.

**202 Drawing II (3) UC:CSU***Recommended: Art 201 with a grade of "C" or better, or equivalent.*

Compositional aspects of drawing as applied to still lifes, natural forms, landscapes and human figures are explored. Students are expected to complete an additional two hours per week of studio homework.

**203 Drawing III (3) UC:CSU***Recommended: Art 202 with a grade of "C" or better, or equivalent.*

Working primarily from a nude model, students learn to render the human figure in expressive and aesthetic ways, and a variety of media are used. Students are expected to complete an additional two hours per week of studio homework.

**204 Life Drawing I (3) UC:CSU***Recommended: Art 201 with a grade of "C" or better, or equivalent.*

An introductory study of human structure and proportion is provided. Fundamental drawing approaches are explored in black and white media, with emphasis upon the development of observation and skill in graphic representation. Students are expected to complete an additional two hours per week of studio homework.

## COURSE DESCRIPTIONS

### **205 Life Drawing II (3) UC:CSU**

*Recommended: Art 204 with a grade of "C" or better, or equivalent.*  
This course consists of drawing from the human figure, with emphasis upon the development of observation, structure and draftsmanship. Various media are explored stressing line and tone. Students are expected to complete an additional two hours per week of studio homework.

### **206 Life Drawing III (3) UC:CSU**

*Recommended: Art 205 with a grade of "C" or better, or equivalent.*  
This course is a continuation of Art 205. Students are expected to complete an additional two hours per week of studio homework.

### **285 Directed Study - Art (2) CSU**

Allows a student to pursue Directed Study in Art on a contract basis under the direction of a supervising instructor.

### **300 Introduction to Painting (3) UC:CSU**

*Recommended: Art 201 or 501 with a grade of "C" or better, or equivalent.*  
This course provides a solid foundation for success in painting. Using a variety of media and techniques, students learn to paint aesthetically and expressively. Students are expected to complete an additional two hours per week of studio homework.

### **301 Watercolor Painting I (3) UC:CSU**

*Recommended: Art 300 with a grade of "C" or better, or equivalent.*  
This course is an introduction to and an exploration of watercolor media in varied styles, techniques and pictorial methods. Students are expected to complete an additional two hours per week of studio homework.

### **302 Watercolor Painting II (3) UC:CSU**

*Recommended: Art 301 with a grade of "C" or better, or equivalent.*  
This is a continuation of Art 301. Students are expected to complete an additional two hours per week of studio homework.

### **304 Acrylic Painting I (3) UC:CSU**

*Recommended: Art 300 or 501 with a grade of "C" or better, or equivalent.*  
This course is an introduction to fundamental skills in acrylic media, canvas preparation and brush techniques. Composition and color theory are studied as applied to still life, landscape and natural forms. Students are expected to complete an additional two hours per week of studio homework.

### **305 Acrylic Painting II (3) UC:CSU**

*Recommended: Art 304 with a grade of "C" or better, or equivalent.*  
This course is a continuation of Art 304. Students are expected to complete an additional two hours per week of studio homework.

### **306 Acrylic Painting III (3)**

*Recommended: Art 305 with a grade of "C" or better, or equivalent.*  
This continuation of Art 305 emphasizes concepts and subject matter.

### **307 Oil Painting I (3) CSU**

*Prerequisites: Art 201, Art 501.*  
This is an introductory-level course in oil painting, and expands upon techniques and applied color theories explored in Art 304, 305 and 503. This course is geared toward the manipulation of more painterly, fuller-bodied and color rich characteristics specific to the oil medium.

### **385 Directed Study - Art (3) CSU**

Allows a student to pursue Directed Study in Art on a contract basis under the direction of a supervising instructor.

### **407 Relief Printmaking I (3)**

An introductory course in basic relief printmaking processes. Students explore a wide range of relief printmaking processes and techniques from traditional woodcut to polymer plate while refining their printing and conceptual skills.

### **408 Relief Printmaking II (3) CSU**

A more advanced course in relief printmaking processes. Students will explore color processes in depth, as well as cross-process work, while deepening their conceptual skills.

### **411 Printmaking Studio (1)**

A course providing serious beginning and more advanced printmaking students the opportunity to explore processes in greater depth with the full resources of the printmaking laboratory.

### **501 Beginning Two-Dimensional Design (3) UC:CSU**

This course lays the foundation for all the arts. By learning how to organize two-dimensional space, students will be prepared to successfully work in such other areas such as painting, drawing, and graphic design. Students are expected to complete an additional two hours per week of studio homework.

### **502 Beginning Three-Dimensional Design (3) UC:CSU**

*Recommended: Art 501 with a grade of "C" or better, or equivalent. Art 503 may be taken concurrently.*  
This course provides an introduction to the organization of forms in three dimensions. Experimental problems in a variety of materials using various spatial constructions are dealt with. Students are expected to complete an additional two hours per week of studio homework.

### **503 Intermediate Design (3) UC:CSU**

*Recommended: Art 501 with a grade of "C" or better. Art 502 may be taken concurrently.*  
This course teaches students how to organize three-dimensional space, and lays the foundation for such other areas as sculpture, ceramics, and architecture. Students are expected to complete an additional two hours per week of studio homework.

### **520 Design Workshop (3)**

This is a course in the principles of design. Emphasis is placed on individual research, experimentation and the development of style. Students work with a variety of art materials.

### **523 Introduction to Entertainment Industry Crafts (3) CSU**

This course provides an introduction to the crafts as applied to the entertainment industry. Fundamentals in prop shop and carpentry will be covered.

**604 Graphic Design I (3)**

This is an introductory course in graphic design. Students learn to create thumbnail, rough and comprehensive layouts while exploring a variety of formats used to create graphic designs. Selecting appropriate type styles and sizes for headings and body copy, crop marks and presentation of the layout will also be covered. Students will prepare a camera-ready mechanical and have it printed in one color.

**605 Graphic Design II (3)**

This is a course in graphic design concentrating on full color applications of graphic art. Students learn to develop ad campaigns for print media, and to develop a series for advertising. Students will also create a mechanical for color printing.

**633 Introduction to Computer Graphics (3) (RPT 3)**

This is an introductory course in computer graphics designed to introduce students to the microcomputer, its operating system, and applications used as tools by artists and graphic designers.

**635 Desktop Publishing Design (3) (RPT 3)**

This is an introductory course in desktop publishing design. The course is designed for students of design, fine art, computer graphics and journalism. Emphasis will be on computer layout and composition. Basic concepts relating to type fonts, type styles, page design, readability, digital output, laser printers, and typesetters will be explored.

**638 Computer-Aided Art Laboratory (1) CSU**

This course is designed to reinforce lectures presented in each computer aided art class. It allows the student needed practice in applying the concepts learned to various class assignments.

**639 Introduction to Digital Imaging (3) (RPT 3)**

This is an introductory course in computer still-image manipulation. The topics presented include image editing, application of filters, integration of text, and the combination of scanned images.

**641 Advanced Desktop Publishing (3) (RPT 3)**

This course presents the advanced use of "grids" in desktop publishing design. Emphasis will be placed on advanced computer layout, composition techniques, and team projects. Current issues regarding printing methods, pre-press and image setters will be explored.

**642 Audio/Video Post Production (3) CSU**

This course will introduce students to editing techniques using non-linear computerized editing software.

**700 Introduction to Sculpture (3) UC:CSU**

*Prerequisite: Art 502.*

This course provides a general introduction to the materials and processes of sculptural art. Instruction in basic construction techniques, analysis of form, function, and decoration is given. The safe and proper use of materials and tools is emphasized.

**701 Sculpture I (3) UC:CSU**

*Prerequisite: Art 700.*

This course provides instruction in the conceptual, material, and organization designing and executing basics of sculptural forms. Basic skills, theory, historical background, and contemporary issues in sculpture will be discussed.

**708 Introduction to Ceramics (3) UC:CSU**

This course provides a general introduction to the materials and processes of ceramic art. Instruction in basic hand construction methods of vessel forms is provided. Analysis of form, function and decoration emphasizing the proper use of materials and tools is presented. Focus is placed on developing skills in forming and decorating primarily functional pieces.

**709 Ceramics I (3) UC:CSU**

*Recommended: Art 708 with a grade of "C" or better, or equivalent.*

Continued utilization and expansion of skills developed in Art 708. Increased emphasis upon individual growth in creative design abilities. Introduction to use of the potter's wheel.

**710 Ceramics II (3) UC:CSU**

*Recommended: Art 709 with a grade of "C" or better, or equivalent.*

This course continues to focus on the use of the potter's wheel as a forming method. Increased skill building on the wheel, and growth in creative design abilities will be emphasized.

**711 Ceramics III (3) UC:CSU**

*Recommended: Art 710 with a grade of "C" or better, or equivalent.*

This course continues to focus on the use of the potter's wheel as a forming method. Design and decorative techniques will be applied to wheel-thrown forms, with increased emphasis upon individual growth in creative design abilities.

**712 Ceramics Workshop (2) UC:CSU**

*Prerequisite: Concurrent or previous enrollment in any other ceramics course.*

This course provides a studio experience for beginning and advanced students. A variety of construction methods are undertaken simultaneously, including hand-building and wheel-throwing. Techniques for surface enrichment, glazing and firing are explored at various levels of ability.

**911 Cooperative Education - Art (1) CSU (RPT 3)**


---

## ASTRONOMY

**1 Elementary Astronomy (3) UC:CSU**

All areas of modern astronomy are discussed in this introductory course. Major topics include the history of astronomy, the sun, moon and planets, stars, constellations and galaxies, telescopes and other instruments.

# AVIATION MAINTENANCE TECHNICIAN

(See Aircraft Electronics and Aerospace Production Technology for additional Aviation classes)

*NOTE: Students may receive subject credit for coursework at California State University, Los Angeles and San Jose, and at National University after transfer with an AS Degree. Program entrance requirement: All new and re-entering students must have appropriate placement level demonstrated through the assessment process.*

## 1 Maintenance Procedures (4)

*Corequisite: Must be taken concurrently with Aviation Maintenance Technician 2.*

Instruction is offered in ground operations, servicing airplanes, maintenance publications, forms, records, and mechanics privileges and limitations. Aircraft materials and processes are identified, with an emphasis on inspection procedures.

## 2 Maintenance Procedures Laboratory (2)

*Corequisite: Must be taken concurrently with Aviation Maintenance Technician 1.*

Instruction and practice is offered in the ground operations and servicing of airplanes. Maintenance publications, forms, and records are used in conjunction with inspection and repair procedures. Materials are identified and inspected to specifications.

## 3 Basic Aircraft Science (4)

*Corequisite: Must be taken concurrently with Aviation Maintenance Technician 4.*

Instruction is offered in applied mathematics, physics, aircraft drawing, and application of aircraft coverings, doping, and corrosion control composites.

## 4 Basic Aircraft Science Laboratory (2)

*Corequisite: Must be taken concurrently with Aviation Maintenance Technician 3.*

Instruction and practical application is offered in basic mathematics, physics, aircraft drawings and prints. Instruction and practice is also given in wood structures, aircraft coverings, aircraft finishing and corrosion control.

## 5 Basic Electricity and Auxiliary Systems (4)

*Corequisite: Must be taken concurrently with Aviation Maintenance Technician 6.*

Instruction is offered in basic electricity, Ohm's law, DC and AC circuits, semiconductors, metric prefixes, and scientific notation. Communication and navigation systems, cabin atmosphere control, and ice and rain control systems are also covered.

## 6 Basic Electricity and Auxiliary Systems Laboratory (2)

*Corequisite: Must be taken concurrently with Aviation Maintenance Technician 5.*

This course describes relationships between voltage, current and power and explains how to use testing and measuring equipment in the inspection, checking, servicing and repair of the following systems: air conditioning, communication and navigation, and ice and rain control.

## 7 Electrical and Instrument Systems (4)

*Prerequisite: Aviation Maintenance Technician 5. Corequisite: Must be taken concurrently with Aviation Maintenance Technician 8.*

Instruction is offered in the function of aircraft electrical systems and components, generators, and aircraft instruments including flight, navigation, engine instrumentation, and position and warning systems.

## 8 Electrical and Instrument Systems Laboratory (2)

*Prerequisite: Aviation Maintenance Technician 6. Corequisite: Must be taken concurrently with Aviation Maintenance Technician 7.*

An analysis is made of series, parallel and complex electrical circuitry in DC and AC supplemented by discussions of testing and measuring equipment. Description, operation, and maintenance procedures for aircraft instrumentation are also explained, as well as position and warning systems.

## 9 Assembly, Rigging and Inspection (4)

*Corequisite: Must be taken concurrently with Aviation Maintenance Technician 10.*

Instruction is offered in assembly and rigging techniques, with weight and balance theory and procedure emphasized, and in the fabrication and installation of fluid lines and fittings.

## 10 Assembly, Rigging and Inspection Laboratory (2)

*Corequisite: Must be taken concurrently with Aviation Maintenance Technician 9.*

Instruction is provided in the skills and techniques needed for the assembly and rigging of airframe structures, including weight and balance computation. Opportunity is provided to fabricate fluid lines and fittings.

## 11 Aircraft Metal Assembly (4)

*Corequisite: Must be taken concurrently with Aviation Maintenance Technician 12.*

This course offers a study of metal and non-metal repair procedures, including the materials and methods of fastening by welding, riveting, and other accepted techniques.

## 12 Aircraft Metal Assembly Laboratory (2)

*Corequisite: Must be taken concurrently with Aviation Maintenance Technician 11.*

Instruction and practice is offered in cutting, bending, forming, welding and fastening metal structures. Plastic enclosures, honeycomb and composites are evaluated. Structural repairs using various fastening and bonding techniques are emphasized.

## 13 Hydraulic, Landing Gear, and Fuel Systems (4)

*Corequisite: Must be taken concurrently with Aviation Maintenance Technician 14.*

Instruction is offered in the study of hydraulic landing gear and aircraft fuel systems. Emphasis is placed on component design, operation, relationships, and systems troubleshooting.

## 14 Hydraulic, Landing Gear, and Fuel Systems Laboratory (2)

*Corequisite: Must be taken concurrently with Aviation Maintenance Technician 13.*

Hydraulic, landing gear, and fuel systems are studied and operated, with components removed and reinstalled. Emphasis is placed on procedures and techniques, troubleshooting and diagnosis.



**15 Propeller and Powerplant Systems (4)**

*Corequisite: Must be taken concurrently with Aviation Maintenance Technician 16.*

Instruction is offered in propellers and powerplant lubrication, and cooling, induction, and exhaust systems. Fire protection, including fire detection and extinguishing systems, is included.

**16 Propeller and Powerplant Systems Laboratory (2)**

*Corequisite: Must be taken concurrently with Aviation Maintenance Technician 15.*

Instruction and practice is offered in identifying lubrication; troubleshooting engine lubricating systems; servicing and repairing propellers and control systems; troubleshooting and repairing powerplant cooling, induction and exhaust systems; and inspecting and servicing powerplant fire protection systems.

**17 Ignition and Fuel Metering Systems (4)**

*Corequisite: Must be taken concurrently with Aviation Maintenance Technician 18.*

Instruction is offered in the principles and practices of aircraft powerplant ignition systems and fuel metering systems.

**18 Ignition and Fuel Metering Systems Laboratory (2)**

*Corequisite: Must be taken concurrently with Aviation Maintenance Technician 17.*

Instruction and practice is offered in inspecting, checking, servicing, troubleshooting, and repairing aircraft ignition and fuel metering systems.

**19 Reciprocating Powerplant Overhaul (4)**

*Prerequisites: Aviation Maintenance Technician 15 and 17.*

*Corequisite: Must be taken concurrently with Aviation Maintenance Technician 20.*

Instruction is offered in the maintenance, maintenance publications, and basic engine theory and overhaul procedures of reciprocating engines.

**20 Reciprocating Powerplant Overhaul Laboratory (2)**

*Prerequisites: Aviation Maintenance Technician 16 and 18.*

*Corequisite: Must be taken concurrently with Aviation Maintenance Technician 19.*

Instruction and practice is offered in the use of maintenance publication records relative to overhaul procedures. Complete engine overhaul procedures, methods and practice are presented.

**21 Powerplant Troubleshooting and Testing (4)**

*Prerequisite: Aviation Maintenance Technician 19.*

*Corequisite: Must be taken concurrently with Aviation Maintenance Technician 22.*

Instruction is offered in powerplant inspection and troubleshooting procedures. Course includes turbine engine theory and operation.

**22 Powerplant Troubleshooting and Testing Laboratory (2)**

*Prerequisite: Aviation Maintenance Technician 20. Corequisite: Must be taken concurrently with Aviation Maintenance Technician 21.*

Instruction and practice is offered in the installation, operation, and troubleshooting of aircraft powerplants.

**23 Inspection and Evaluation (4)**

*Prerequisite: Aviation Maintenance Technician 1-22, or authorization for written exams. Corequisite: Must be taken concurrently with Aviation Maintenance Technician 24.*

Instruction is offered in conducting 100-hour inspections. General airframe and powerplant subjects for the Airframe and/or Powerplant License are reviewed. Emphasis is placed on preparation for Federal Aviation Administration written examinations. *Note: Students must have a minimum 2.0 GPA in Aviation Maintenance Technology prior to enrolling in AMT 23 and AMT 24.*

**24 Inspection and Evaluation Laboratory (2)**

*Prerequisite: Aviation Maintenance Technician 1-22 or authorization for written exams. Corequisite: Must be taken concurrently with Aviation Maintenance Technician 23.*

Instruction and practice is offered in conducting a 100-hour inspection on an airframe and powerplant, using the appropriate reference material and correct procedures to determine airworthiness of an airframe or powerplant. Students perform general practical airframe and powerplant projects. *Note: Students must have a minimum 2.0 GPA in Aviation Maintenance Technology prior to enrolling in AMT 23 and AMT 24.*

**31 Inspection Authorization for Aviation Mechanics (3) NDA**

*Prerequisite: FAA Mechanic Certificate with Airframe and Powerplant ratings.*

Instruction is offered to the Certificated Aviation Mechanic to review regulations and inspection procedures in preparation for the Federal Aviation Administration Mechanic Inspection Authorization.

---

## BIOLOGY

(Also see Anatomy, Environmental Science, Microbiology, and Physiology)

**3 Introduction to Biology (4) UC:CSU**

This is a course in general biology designed to fulfill a laboratory science requirement for students not majoring in biology. Students must be enrolled concurrently in a lecture and a lab section. The lecture portion of the course (Biology 3A) emphasizes the basic principles in biology and the fundamental characteristics of all living organisms. Lecture topics include the scientific method, cell structure and function, levels of organization of living organisms, heredity, and the genetic control of cellular processes, evolution, and ecology. The laboratory portion of the course (Biology 3B) emphasizes the diversity of living organisms. Laboratory topics include an introduction to the microscope, study of the cell, a survey of the microorganisms, plants, and animals that comprise the kingdoms of life, and the anatomic study of the earthworm, grasshopper, and fetal pig. *Note: 3A and 3B must be taken concurrently. Biology 3A and 3B do not transfer separately. UC Transfer Credit Limit: No credit will be given for Biology 3A or 3B if taken after Biology 6 or 7.*

**3A Introduction to Biology - Lecture (3) UC:CSU****3B Introduction to Biology - Laboratory (1) UC:CSU**