## Course Descriptions

### Course Index (by Subject)

<table>
<thead>
<tr>
<th>Subject (Abbreviation)</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting (ACCTG)</td>
<td>131</td>
</tr>
<tr>
<td>Administration of Justice (ADM JUS)</td>
<td>132</td>
</tr>
<tr>
<td>Anatomy (ANATOMY)</td>
<td>133</td>
</tr>
<tr>
<td>Animation</td>
<td>134</td>
</tr>
<tr>
<td>Anthropology (ANTHRO)</td>
<td>134</td>
</tr>
<tr>
<td>Architecture (ARC)</td>
<td>134</td>
</tr>
<tr>
<td>Art (ART)</td>
<td>136</td>
</tr>
<tr>
<td>Astronomy (ASTRON)</td>
<td>140</td>
</tr>
<tr>
<td>Basic Skills (BSICSKL)</td>
<td>141</td>
</tr>
<tr>
<td>Biology (BIOLOGY)</td>
<td>140</td>
</tr>
<tr>
<td>Business (BUS)</td>
<td>141</td>
</tr>
<tr>
<td>Chemistry (CHEM)</td>
<td>148</td>
</tr>
<tr>
<td>Child Development (CH DEV)</td>
<td>145</td>
</tr>
<tr>
<td>Communication Studies (COMM)</td>
<td>155</td>
</tr>
<tr>
<td>Computer Applications of Office Technologies (CAOT)</td>
<td>142</td>
</tr>
<tr>
<td>Computer Information Systems (CO INFO)</td>
<td>150</td>
</tr>
<tr>
<td>Computer Science (CO SCI)</td>
<td>152</td>
</tr>
<tr>
<td>Computer Technology (CO TECH)</td>
<td>153</td>
</tr>
<tr>
<td>Counseling (COUNSEL)</td>
<td>156</td>
</tr>
<tr>
<td>Culinary Arts (CLN ART)</td>
<td>149</td>
</tr>
<tr>
<td>Dance Studies (DANCEST)</td>
<td>157</td>
</tr>
<tr>
<td>Dance Techniques (DANCETQ)</td>
<td>157</td>
</tr>
<tr>
<td>Developmental Communication (DEV COM)</td>
<td>157</td>
</tr>
<tr>
<td>Drafting (DRAFT)</td>
<td>158</td>
</tr>
<tr>
<td>Economics (ECON)</td>
<td>161</td>
</tr>
<tr>
<td>Electronics (ELECTRN)</td>
<td>161</td>
</tr>
<tr>
<td>Emergency Department Assistant (E D A)</td>
<td>159</td>
</tr>
<tr>
<td>Engineering, General (ENG GEN)</td>
<td>162</td>
</tr>
<tr>
<td>Engineering, General Technology (EGT)</td>
<td>161</td>
</tr>
<tr>
<td>Engineering, Technician (ENG TEK)</td>
<td>163</td>
</tr>
<tr>
<td>English (ENGLISH)</td>
<td>164</td>
</tr>
<tr>
<td>English as a Second Language (ESL)</td>
<td>168</td>
</tr>
<tr>
<td>English as a Second Language—credit (E.S.L.)</td>
<td>160</td>
</tr>
<tr>
<td>English as a Second Language—non-credit (ESL NC)</td>
<td>168</td>
</tr>
<tr>
<td>Environmental Design (ENV)</td>
<td>168</td>
</tr>
<tr>
<td>Environmental Science (ENV SCI)</td>
<td>168</td>
</tr>
<tr>
<td>Family and Consumer Studies (FAM &amp;CS)</td>
<td>169</td>
</tr>
<tr>
<td>Finance (FINANCE)</td>
<td>169</td>
</tr>
<tr>
<td>Fire Technology (FIRETEK)</td>
<td>169</td>
</tr>
<tr>
<td>French (FRENCH)</td>
<td>171</td>
</tr>
<tr>
<td>Geography (GEOG)</td>
<td>171</td>
</tr>
<tr>
<td>Geology (GEOLOGY)</td>
<td>172</td>
</tr>
<tr>
<td>Health (HEALTH)</td>
<td>172</td>
</tr>
<tr>
<td>Health Occupations (HLTHOCC)</td>
<td>175</td>
</tr>
<tr>
<td>History (HISTORY)</td>
<td>172</td>
</tr>
<tr>
<td>Humanities (HUMAN)</td>
<td>175</td>
</tr>
<tr>
<td>Industrial Design (IND DSN)</td>
<td>176</td>
</tr>
<tr>
<td>International Trade (INTBUS)</td>
<td>176</td>
</tr>
<tr>
<td>Japanese (JAPAN)</td>
<td>177</td>
</tr>
<tr>
<td>Journalism (JOURNAL)</td>
<td>177</td>
</tr>
<tr>
<td>Kinesiology (KIN)</td>
<td>179</td>
</tr>
<tr>
<td>Kinesiology - Athletics (KIN ATH)</td>
<td>183</td>
</tr>
<tr>
<td>Kinesiology - Majors (KIN MAJ)</td>
<td>184</td>
</tr>
<tr>
<td>Learning Foundations (LRNFDTN)</td>
<td>185</td>
</tr>
<tr>
<td>Learning Skills (LRNSKIL)</td>
<td>186</td>
</tr>
<tr>
<td>Library Science (LIB SCI)</td>
<td>185</td>
</tr>
<tr>
<td>Management (MGMT)</td>
<td>190</td>
</tr>
<tr>
<td>Manufacturing and Industrial Technology (MIT)</td>
<td>191</td>
</tr>
<tr>
<td>Marketing (MARKET)</td>
<td>186</td>
</tr>
<tr>
<td>Mathematics (MATH)</td>
<td>186</td>
</tr>
<tr>
<td>Microbiology (MICRO)</td>
<td>190</td>
</tr>
<tr>
<td>Music (MUSIC)</td>
<td>191</td>
</tr>
<tr>
<td>Nursing (NURSING)</td>
<td>198</td>
</tr>
<tr>
<td>Oceanography (OCEANO)</td>
<td>201</td>
</tr>
<tr>
<td>Older Adults (OLD ADL)</td>
<td>202</td>
</tr>
<tr>
<td>Philosophy (PHILOS)</td>
<td>202</td>
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<tr>
<td>Photography (PHOTO)</td>
<td>202</td>
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<td>Physical Science (PHYS SC)</td>
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<td>203</td>
</tr>
<tr>
<td>Physiology (PHYSIOL)</td>
<td>204</td>
</tr>
<tr>
<td>Political Science (POL SCI)</td>
<td>204</td>
</tr>
<tr>
<td>Psychology (PSYCH)</td>
<td>205</td>
</tr>
<tr>
<td>Public Relations (PUB REL)</td>
<td>206</td>
</tr>
<tr>
<td>Real Estate (REAL ES)</td>
<td>206</td>
</tr>
<tr>
<td>Service Learning (SERVLRN)</td>
<td>207</td>
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<tr>
<td>Sociology (SOC)</td>
<td>207</td>
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<td>Spanish (SPANISH)</td>
<td>207</td>
</tr>
<tr>
<td>Statistics (STAT)</td>
<td>209</td>
</tr>
<tr>
<td>Supervision (SUPV)</td>
<td>209</td>
</tr>
<tr>
<td>Theater (THEATER)</td>
<td>209</td>
</tr>
<tr>
<td>Tutoring (TUTOR)</td>
<td>211</td>
</tr>
<tr>
<td>Vocational Education (VOC ED)</td>
<td>211</td>
</tr>
</tbody>
</table>

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**Letter:** letter graded; **P/NP:** pass/no-pass graded; **Repeatable:** may be repeated; **Lec/Lab:** hours per week of lecture/lab; **TBA:** maximum total hours to be arranged; **DE:** distance education (online and/or hybrid); **NC:** non-credit; **DA/NDA:** degree/non-degree applicable; **CSU/UC:** transferability to the listed institution; **LACCD/CSUGE/IGETC:** general education area applicable; **C-ID:** CSU course ID equivalency; **Prerequisite:** required prerequisite (prior completion with a minimum grade of “C” or “P”); **Corequisite:** required corequisite (concurrent enrollment)
# Course Index (by Abbreviation)

<table>
<thead>
<tr>
<th>Abbreviation (Subject)</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG (Accounting)</td>
<td>131</td>
</tr>
<tr>
<td>ADM JUS (Administration of Justice)</td>
<td>132</td>
</tr>
<tr>
<td>ANATOMY (Anatomy)</td>
<td>133</td>
</tr>
<tr>
<td>ANIMATN (Animation)</td>
<td>134</td>
</tr>
<tr>
<td>ANT (Art)</td>
<td>136</td>
</tr>
<tr>
<td>APH (Art History)</td>
<td>136</td>
</tr>
<tr>
<td>ART (Art)</td>
<td>136</td>
</tr>
<tr>
<td>ASTRON (Astronomy)</td>
<td>140</td>
</tr>
<tr>
<td>BIOLOGY (Biology)</td>
<td>140</td>
</tr>
<tr>
<td>BSICSKL (Basic Skills)</td>
<td>141</td>
</tr>
<tr>
<td>BUS (Business)</td>
<td>141</td>
</tr>
<tr>
<td>CAOT (Computer Applications of Office Technologies)</td>
<td>142</td>
</tr>
<tr>
<td>CH DEV (Child Development)</td>
<td>145</td>
</tr>
<tr>
<td>CHEM (Chemistry)</td>
<td>148</td>
</tr>
<tr>
<td>CLN ART (Culinary Arts)</td>
<td>149</td>
</tr>
<tr>
<td>CO INFO (Computer Information Systems)</td>
<td>150</td>
</tr>
<tr>
<td>CO SCI (Computer Science)</td>
<td>152</td>
</tr>
<tr>
<td>CO TECH (Computer Technology)</td>
<td>153</td>
</tr>
<tr>
<td>COMM (Communication Studies)</td>
<td>155</td>
</tr>
<tr>
<td>COUNSEL (Counseling)</td>
<td>156</td>
</tr>
<tr>
<td>CUST (Custodian)</td>
<td>156</td>
</tr>
<tr>
<td>DANCE (Dance)</td>
<td>157</td>
</tr>
<tr>
<td>DANCETQ (Dance Techniques)</td>
<td>157</td>
</tr>
<tr>
<td>DEV COM (Developmental Communication)</td>
<td>157</td>
</tr>
<tr>
<td>DRAFT (Drafting)</td>
<td>158</td>
</tr>
<tr>
<td>E D A (Emergency Department Assistant)</td>
<td>159</td>
</tr>
<tr>
<td>E.S.L. (English as a Second Language—credit)</td>
<td>160</td>
</tr>
<tr>
<td>ECON (Economics)</td>
<td>161</td>
</tr>
<tr>
<td>EGT (Engineering, General Technology)</td>
<td>161</td>
</tr>
<tr>
<td>ELECTRN (Electronics)</td>
<td>161</td>
</tr>
<tr>
<td>ENG GEN (Engineering, General)</td>
<td>162</td>
</tr>
<tr>
<td>ENG TEK (Engineering, Technician)</td>
<td>163</td>
</tr>
<tr>
<td>ENGLISH (English)</td>
<td>164</td>
</tr>
<tr>
<td>ENV (Environmental Design)</td>
<td>168</td>
</tr>
<tr>
<td>ENV SCI (Environmental Science)</td>
<td>168</td>
</tr>
<tr>
<td>ESL (English as a Second Language)</td>
<td>168</td>
</tr>
<tr>
<td>ESL NC (English as a Second Language—non-credit)</td>
<td>168</td>
</tr>
<tr>
<td>FAM &amp;CS (Family and Consumer Studies)</td>
<td>169</td>
</tr>
<tr>
<td>FINANCE (Finance)</td>
<td>169</td>
</tr>
<tr>
<td>FIRETEK (Fire Technology)</td>
<td>169</td>
</tr>
<tr>
<td>FRENCH (French)</td>
<td>171</td>
</tr>
<tr>
<td>GEOG (Geography)</td>
<td>171</td>
</tr>
<tr>
<td>GEOLOGY (Geology)</td>
<td>172</td>
</tr>
<tr>
<td>HEALTH (Health)</td>
<td>172</td>
</tr>
<tr>
<td>HISTORY (History)</td>
<td>172</td>
</tr>
<tr>
<td>HLTHOCC (Health Occupations)</td>
<td>175</td>
</tr>
<tr>
<td>HUMAN (Humanities)</td>
<td>175</td>
</tr>
<tr>
<td>IND DSN (Industrial Design)</td>
<td>176</td>
</tr>
<tr>
<td>INTBUS (International Trade)</td>
<td>176</td>
</tr>
<tr>
<td>JAPAN (Japanese)</td>
<td>177</td>
</tr>
<tr>
<td>JOURNAL (Journalism)</td>
<td>177</td>
</tr>
<tr>
<td>KIN (Kinesiology)</td>
<td>179</td>
</tr>
<tr>
<td>KIN ATH (Kinesiology – Athletics)</td>
<td>183</td>
</tr>
<tr>
<td>KIN MAJ (Kinesiology – Majors)</td>
<td>184</td>
</tr>
<tr>
<td>LIB SCI (Library Science)</td>
<td>185</td>
</tr>
<tr>
<td>LRFNFTN (Learning Foundations)</td>
<td>185</td>
</tr>
<tr>
<td>LRSNLKIL (Learning Skills)</td>
<td>186</td>
</tr>
<tr>
<td>MARKET (Marketing)</td>
<td>186</td>
</tr>
<tr>
<td>MATH (Mathematics)</td>
<td>186</td>
</tr>
<tr>
<td>MGMT (Management)</td>
<td>190</td>
</tr>
<tr>
<td>MICRO (Microbiology)</td>
<td>190</td>
</tr>
<tr>
<td>MIT (Manufacturing and Industrial Technology)</td>
<td>191</td>
</tr>
<tr>
<td>MUSC (Music)</td>
<td>191</td>
</tr>
<tr>
<td>NURSING (Nursing)</td>
<td>198</td>
</tr>
<tr>
<td>OCEANO (Oceanography)</td>
<td>201</td>
</tr>
<tr>
<td>OLD ADL (Older Adults)</td>
<td>202</td>
</tr>
<tr>
<td>PHILOS (Philosophy)</td>
<td>202</td>
</tr>
<tr>
<td>PHOTO (Photography)</td>
<td>202</td>
</tr>
<tr>
<td>PHYS SC (Physical Science)</td>
<td>202</td>
</tr>
<tr>
<td>PHYSICS (Physics)</td>
<td>203</td>
</tr>
<tr>
<td>PHYSIOL (Physiology)</td>
<td>204</td>
</tr>
<tr>
<td>POL SCI (Political Science)</td>
<td>204</td>
</tr>
<tr>
<td>PSYCH (Psychology)</td>
<td>205</td>
</tr>
<tr>
<td>PUB REL (Public Relations)</td>
<td>206</td>
</tr>
<tr>
<td>REAL ES (Real Estate)</td>
<td>206</td>
</tr>
<tr>
<td>SERVLRN (Service Learning)</td>
<td>207</td>
</tr>
<tr>
<td>SOC (Sociology)</td>
<td>207</td>
</tr>
<tr>
<td>SPANISH (Spanish)</td>
<td>207</td>
</tr>
<tr>
<td>STAT (Statistics)</td>
<td>209</td>
</tr>
<tr>
<td>SUPV (Supervision)</td>
<td>209</td>
</tr>
<tr>
<td>THEATER (Theater)</td>
<td>209</td>
</tr>
<tr>
<td>TUTOR (Tutoring)</td>
<td>211</td>
</tr>
<tr>
<td>VOC ED (Vocational Education)</td>
<td>211</td>
</tr>
</tbody>
</table>

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ACCTG (Accounting)

ACCTG 1: Introductory Accounting I
- 5 units, Letter, 5 lec, DE
- DA, CSU/UC, C-ID ACCT 110
- This is the study of accounting as an information system, examining why it is important and how it is used by investors, creditors, and others to make decisions. The course covers the accounting information system, including recording and reporting of business transactions with a focus on the accounting cycle, the application of generally accepted accounting principles, the financial statements, and statement analysis. Includes issues relating to asset, liability, and equity valuation, revenue and expense recognition, cash flow, internal controls, and ethics.

ACCTG 2: Introductory Accounting II
- 5 units, Letter, 5 lec, DE
- DA, CSU/UC, C-ID ACCT 120
- Prerequisite: ACCTG 1 or 21 and 22
- This is the study of how managers use accounting information in decision-making, planning, directing operations and controlling. Focuses on cost terms and concepts, cost behavior, cost structure and cost-volume-profit analysis. Includes issues relating to cost systems, cost control, profit planning, and performance analysis in manufacturing and service environments.

ACCTG 3: Intermediate Accounting I
- 3 units, Letter, 3 lec, DE
- DA, CSU
- Prerequisite: ACCTG 2 or 21 and 22
- This Course emphasizes the application of generally accepted accounting principles in the preparation and use of financial statements for decision making purposes. Special emphasis is placed on the recognition and measurement of revenues, cash, receivables, inventories, property, plant and equipment, depreciation and depletion, and intangibles.

ACCTG 11: Cost Accounting
- 3 units, Letter, 3 lec
- DA, CSU
- Prerequisite: ACCTG 2
- This course examines managerial cost accumulation concepts and techniques for product and service costing, planning and control. Emphasis is on the use of cost accounting information for decision making and the preparation, analysis, and use of cost accounting information. Topics include process costing, job order costing, variable costing, direct costing, standard costing, budgeting and profit planning, and activity based costing.

ACCTG 15: Tax Accounting I
- 3 units, Letter, 3 lec
- DA, CSU
- This is a practical course covering the federal income tax process, federal income tax laws that apply to individuals, and the application of tax principles to specific problems. Topics include gross income and exclusions, business deductions and itemized deductions, losses, certain tax credits and property transactions.

ACCTG 16: Tax Accounting II
- 3 units, Letter, 3 lec
- DA, CSU
- Prerequisite: ACCTG 1 or 15
- A continued study of income tax regulations and procedures is made. Accounting methods, installment sales, partnerships and corporate income tax procedures are studied.

ACCTG 21: Bookkeeping and Accounting I
- 3 units, Letter, 3 lec
- DA, CSU/UC
- This course is the first half of accounting I and it is an introduction to financial accounting and accounting information systems. It includes recording, summarizing, and reporting of business transactions in various journals and ledgers, preparation of trial balance and financial statement, revenues and expense recognition; assets, liability, and capital accounts.

ACCTG 22: Bookkeeping and Accounting II
- 3 units, Letter, 3 lec
- DA, CSU/UC
- Prerequisite: ACCTG 21
ADM JUS (Administration of Justice)

ADM JUS 1: Introduction to Administration of Justice
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, C-ID AJ 110
- This course examines the characteristics of the philosophy, history, theories of the criminal justice system. This course focuses on examining crime measurement, theoretical explanation of crime, responses to crime components of the criminal justice system and the current challenges. It examines cross-cultural roles, functions, and interrelationships among criminal justice agencies context and emphasis is placed on the structure, function of the United States police, courts, corrections and the social impact on crime. A research paper in APA or ASA format is required.

ADM JUS 2: Concepts of Criminal Law
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, C-ID AJ 120
- Advisory Prerequisite: ADM JUS 1
- This course deals with the structure of law, definitions, and the most frequently used sections of the California Penal Code. Topics include origins of federal and state laws, interpretation and application of laws, identifying elements of property crimes and criminal liability.

ADM JUS 3: Legal Aspects of Evidence
- 3 units, Letter, 3 lec
- DA, CSU, C-ID AJ 124
- This course includes the kinds and degrees of evidence and the rules governing the admissibility of evidence in court.

ADM JUS 5: Criminal Investigation
- 3 units, Letter, 3 lec
- DA, CSU, C-ID AJ 140
- This course includes fundamentals of investigation, crime scene search and recording, collection and preservation of physical evidence, scientific aids, modus operandi, sources of information, interviews and interrogation, and surveillance of criminal activity, follow-up and case preparation.

ADM JUS 6: Patrol Procedures
- 3 units, Letter, 3 lec
- DA, CSU
- This course includes the responsibilities, techniques, and methods of police patrol procedures.

ADM JUS 8: Juvenile Procedures
- 3 units, Letter, 3 lec
- DA, CSU, C-ID AJ 220
- Advisory Prerequisite: eligibility for ENGLISH 101
- This course includes the organization, functions, and jurisdiction of the juvenile agencies, the processing and detention of juveniles, juvenile case disposition, juvenile status and court procedures.

ADM JUS 14: Report Writing for Peace Officers
- 3 units, Letter, 3 lec
- DA, CSU
- Involved in this course are the study of and practice in various types of technical writing commonly used in police agencies, the appropriateness of different styles in different contexts and the conceptualization of the material, and the utilization of machine tabulation in reports and methods of reporting criminal statistics.

ADM JUS 16: Recruitment Selection Process
- 3 units, Letter, 3 lec, DE
- DA, CSU
- This course provides an in-depth coverage of the legal selection process designed to assist student with employment in a law enforcement agency. Written and oral exam techniques and the agility exam are covered. The background investigation process is examined in detail.

ADM JUS 37: California Criminal Procedures I
- 3 units, Letter, 3 lec, DE
- DA, CSU, C-ID AJ 122
- This course includes a study of the history and organization of the court system, jurisdiction, arrest, search and seizure, bail, complaints and extradition.

ADM JUS 42: Advanced Criminal Law
- 3 units, Letter, 3 lec
- DA, CSU
- An in-depth study of the substantive law commonly encountered by the municipal, county, or state police officer or investigator or other criminal justice employee. The scope of the course includes misdemeanor and felony violations of the criminal statutes.

ADM JUS 67: Community Relations I

Student learning outcomes may appear in any or all of the following online locations: linked to the course outline at https://ecd.laccd.edu/Default.aspx, and/or listed at http://www.lahc.edu/facultystaff/slo/courseassessment.html, and/or https://effectiveness.lahc.edu/cpe/haps/SitePages/2015-18%20SLO-SAO%20Assessment.aspx. If so, those listed on the last site supersede all others.
• 3 units, Letter, 3 lec
• DA, CSU/UC, C-ID AJ 150
• This course explores the relationship between all aspects of the justice system and the community it serves. Principal emphasis is placed upon the professional image of members of the justice system and the development of positive relationships with the community including the challenges and prospects of administering justice within a diverse multicultural population. Topics may include the consensus and conflicting values in culture, religion, ethnicity, working with the homeless, illegal aliens, diverse populations and law.

ADM JUS 75: Introduction to Corrections
• 3 units, Letter, 3 lec
• DA, CSU, C-ID AJ 200
• This course surveys the total correctional cycle and the relationships of its components, including historical, theoretical and philosophical explanations of criminal behavior; statistics and research findings; employment opportunities; and employment requirements. This course will also examine the basic nature of correctional work; aims and objectives of correctional administration; probation and parole; skills; knowledge and attitudes required for employment in this field.

ADM JUS 319: Research Methods & Statistics in Criminal Justice
• 3 units, Letter, 3 lec, 54:00 TBA, DE
• DA, DE, CSU
• Introduction to research methodologies used most often in the study of crime and criminal behavior, police/court systems, and correctional institutions, policies, and programs. Students will acquire the knowledge to conceptualize a research problem and develop a number of complementary design, measurement, and data collection approaches to bring evidence to bear on a criminal justice policy issue. This course may be scheduled at times to be arranged (TBA) for a minimum of 54:00 hours.

ADM JUS 750: Ethics and the Criminal Justice System
• 3 units, Letter, 3 lec, DE
• DA, CSU
• This course explores ethical dilemmas, value definitions, and their application to decision making, by police, court, probation, parole, corrections, and private security personnel. Remediation strategies relating to unethical behavior by individuals and groups will also be addressed in this course.

ANATOMY 1: Introduction to Human Anatomy
• 4 units, Letter, 3 lec/3 lab
• DA, CSU/UC, LACCD A, CSUGE B2/B3, IGETC 5B/5C, C-ID BIOL 110B
• Pre-requisite or corequisite: CHEM 65; Advisory Pre-requisite: ENGLISH 28
• This course in human anatomy is planned for the student of art, pre-physical education, and pre-nursing. Subjects emphasized are the surface structures, bones, joints, muscles, organs of the human body, and the dissection of higher vertebra. Demonstrations are made through the use of models, the human skeleton, and human cadavers. Completion of Anatomy 1 with physiology constitutes one option for fulfilling requirements in the R. N. program. Not open to credit to students who have completed Physiology 8 and 9 with a grade of “C” or better.

ANATOMY 1L: Introduction to Human Anatomy
• 1 unit, Letter, 3 lab
• DA, CSU, LACCD A, CSUGE B3
• Pre- or corequisite: CHEM 65
• Corequisite: PHYSIOL 1U
• This course provides a basic understanding of the physiological processes with a focus on the human body. Basic concepts of cell structure, membrane transport and membrane potential are integrated within the concept of homeostasis involving various body systems: nervous, sensory, endocrine, muscular, cardiovascular, immune, respiratory, excretory, digestive and respiratory.

ANATOMY 1U: Introduction to Human Anatomy
• 3 units, Letter, 3 lec
• DA, CSU
• This course in human anatomy is planned for the student of art, pre-physical education, and pre-nursing. Subjects emphasized are the surface structures, bones, joints, muscles, organs of the human body, and the dissection of higher vertebra. Demonstrations are made through the use of models, the human skeleton, and human cadavers. Completion of Anatomy 1 with physiology constitutes one option for fulfilling requirements in the R. N. program. Not open to credit to students who have completed Physiology 8 and 9 with a grade of “C” or better.
ANIMATN (Animation)

ANIMATN 212: Character Animation and Design
- 3 units, Letter, 2 lec/4 lab
- DA, CSU
- This course provides foundational character animation concepts. The concepts include key positions, breaking down movement, acting, takes, accents, gestures, dialogue and facial expressions.

Effective Spring 2017

ANTHRO (Anthropology)

ANTHRO 101: Human Biological Evolution
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD, CSUGE B2, IGTC 5B, C-ID ANTH 110
- Introduction to the anthropological study of human evolution. Topics include the mechanisms of evolutionary change, genetics, human variation, and the reconstruction of human evolutionary history through an examination of the fossil record and through the use of comparative studies of our closest biological relatives, the living monkeys and apes.

ANTHRO 102: Human Ways of Life: Cultural Anthro
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD B2, CSUGE D, IGTC 4, C-ID ANTH 120
- This course attempts to define culture and to survey the variety of man's cultures at all levels of socio-cultural development from the small-scale, technologically simple cultures to the large-scale technologically complex ones. Topics described and analyzed include the social institutions, such as kinship, marriage, family, religion, politics, language, and economics in a cross-cultural perspective.

ANTHRO 103: Archaeology: Reconstructing the Human Past
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD B2, CSUGE D, IGTC 4, C-ID ANTH 150
- Advisory Prerequisite: ENGLISH 101
- This course covers the objectives and methods of modern archaeology; important archaeological discoveries throughout the world; contributions of archaeology toward understanding and preserving of human culture.

ANTHRO 104: Human Language and Communication
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD B2, CSUGE D, IGTC 4, C-ID ANTH 130
- Advisory Prerequisite: ENGLISH 101
- As an introduction to linguistic Anthro, this course will cover the study of language, culture, and society from an anthropological perspective. Language will be presented as a form of social interaction in which participants do things with and through everyday talk. Topics include the biological basis of communication and speech, the relationship between language and culture, the structure of language, language origins, language through time, language variation, language in social context, the ethnography of communication, nonverbal communication and writing, and linguistic Anthro in the contemporary world. Special topics may include pidgins and creoles, language death and revival, and the relationship between language, identity, and power.

ANTHRO 111: Laboratory in Human Biological Evolution
- 2 units, Letter, 1 lec/2 lab, DE
- DA, CSU/UC, CSUGE B3
- Prerequisite: ANTHRO 101
- This course will enable students to apply key concepts and techniques in physical Anthro. Through the understanding and use of scientific methodology, students will experience how to solve problems related to genetics, human variation, the living primates, and human paleontology.

ANTHRO 121: Anthro of Religion, Magic and Witchcraft
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD B2, CSUGE D, IGTC 4
- This course considers the origins and varieties of religious beliefs and practices cross-culturally. Topics include mythology, symbolism, shamanism, altered states of consciousness, magic, divination, witchcraft, and the question of cults.

ARC (Architecture)

ARC 115: Architectural Practice
- 2 units, Letter, 2 lec
- DA, CSU
- This course covers the role of an Architect in professional practice, including employment, legal and administrative procedures, and relationship to other design and construction professions. Licensing requirements and the operation of a professional office are also studied.
ARC 121: Freehand Drawing I
- 2 units, Letter, 1 lec/3 lab
- DA, CSU/UC
- Students will study drawing and sketching using pencil, ink, and charcoal, mostly of perspective drawings of architectural forms. This course includes studies of composition, form, value, and scale.

ARC 132: Architectural History I: Prehistory to the Middle Ages
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD C, CSUGE C1, IGETC 3A
- This course covers the development of architecture from prehistoric times to the beginning of the Renaissance, focusing on geographical, geological, climatic, religious social and historical aspects. Note this course satisfies GE Requirements in Humanities.

ARC 133: Architectural History II: Late Middle Ages to Modern
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD C, CSUGE C1, IGETC 3A
- This course covers the development of architecture from Renaissance to modern architecture of today and tomorrow, focusing on geographical, geological, climatic, religious social and historical aspects. Note this course satisfies GE Requirements in Humanities.

ARC 151: Materials of Construction
- 3 units, Letter, 3 lec
- DA, CSU
- This course investigates principal building materials: wood, steel, concrete, and masonry, and their uses in the architecture and construction field. Non-structural materials such as glass, roofing, plastics, and paint are covered as well as sustainable strategies and materials.

ARC 160: Computers for Designers
- 3 units, Letter, 1 lec/5 lab
- DA, CSU
- This course is an introduction to Photoshop and Illustrator, geared toward architects, environmental and industrial designers. Emphasis on how designers can optimize and understand the role of digital medium in today’s design industry.

ARC 161: Introduction to Computer-Aided Architectural Design
- 2 units, Letter, 1 lec/3 lab, DE
- DA, CSU
- This course introduces AutoCAD drafting geared toward architects, Covering all basic commands, drawing organization, and residential projects.

ARC 162: Computer-Aided Design and Drafting
- 3 units, Letter, 1 lec/5 lab
- DA, CSU
- Prerequisite: ARC 161
- This course is a continuation of ARC 161 presenting studies of AutoCAD for architects focusing on advanced concepts such as dynamic blocks and annotative text and dimensioning. Includes basic 3-dimensional modeling in AutoCAD and Rhino.

ARC 164: Design Software for Architecture
- 2 units, Letter, 1 lec/3 lab
- DA, CSU
- This course introduces Revit and BIM concepts. Creation of a 3-dimensional model and resulting 2-dimensional drawings such as plan, section, elevation.

ARC 172: Architectural Drawing I
- 3 units, Letter, 2 lec/4 lab
- DA, CSU
- In this course techniques of architectural drafting, symbols, dimensioning, and methods of representation, including the fundamentals needed to prepare a complete set of working drawings for a simple wood frame structure.

ARC 173: Architectural Drawing II
- 3 units, Letter, 2 lec/4 lab
- DA, CSU
- Prerequisite: ARC 172; Prerequisite or Corequisite: ARC 161
- In this course students will study further development of drafting skills centered around the documentation of a two-story wood frame structure including floor plans, elevations, sections, details, plot plan, and topography. Covers the fundamental use of materials in construction with emphasis on building codes.

ARC 201: Architectural Design I
- 3 units, Letter, 1 lec/5 lab
- DA, CSU/UC
- Prerequisite: ARC 172 and ENV 102
- In this course students will work in a design lab studio exploring an architectural design problem, focused on analysis, layout, aesthetics, interpretation, sustainability and the nature of materials. Methods of presentations are studied as well as design approaches.

ARC 202: Architectural Design II
- 3 units, Letter, 1 lec/5 lab
- DA, CSU/UC
- Prerequisite: ARC 201

Letter: letter graded; P/NP: pass/no-pass graded; Repeatable: may be repeated; Lec/Lab: hours per week of lecture/lab; TBA: maximum total hours to be arranged; DE: distance education (online and/or hybrid); NC: non-credit; DA/NDA: degree/non-degree applicable; CSU/UC: transferability to the listed institution; LACCD/CSUGE/IGETC: general education area applicable; C-ID: CSU course ID equivalency; Prerequisite: required prerequisite (prior completion with a minimum grade of “C” or “P”); Corequisite: required corequisite (concurrent enrollment)
Prerequisite: ARC 201
Students in this course will work in a design lab studio exploring an architectural design problem, focused on analysis, function, site, urban environment, aesthetics, culture and sustainability. Methods of presentations are studied as well as design approaches.

**ARC 221: Architectural Rendering**
- 2 units, Letter, 1 lec/3 lab
- DA, CSU
- Prerequisite: ARC 160 and 161
- In this course students will study a variety of digital media including Rhino, AutoCAD, Illustrator, InDesign, and Photoshop used in the creation of advanced rendering and illustration of architectural projects. Graphic layouts, montage, and interchange between various formats are explored.

**ARC 223: Portfolio Development**
- 1 unit, Letter, 2 lab
- DA, CSU
- Prerequisite: ARC 160 and 161 and ENV 102
- Students in the course will create a professional architectural portfolio suitable for employment interviews or submission to transfer universities. Synthesize previous projects and skills into a cohesive graphic package.

**ARC 261: Computer-Aided Design for Architecture I**
- 3 units, Letter, 1 lec/5 lab
- DA, CSU
- This course is an introduction to Rhino modeling software, including 3-dimensional modeling of objects and environments, rendering and materials.

**ARC 262: Computer-Aided Design for Architecture II**
- 3 units, Letter, 1 lec/5 lab
- DA, CSU
- Prerequisite: ARC 261
- In this course students will further develop Rhino modeling software skills and techniques, focused on advanced modeling and rendering techniques.

**ARC 271: Architectural Drawing III**
- 3 units, Letter, 1 lec/5 lab
- DA, CSU
- Prerequisite: ARC 173
- In this course students study the design and construction of masonry buildings are studied together with a further development of wood framing. Analysis is made of long span techniques and construction. Air conditioning equipment, specification writing, and cost estimating are introduced.

**ARC 272: Architectural Drawing IV**
- 3 units, Letter, 1 lec/5 lab
- DA, CSU
- Prerequisite: ARC 173
- In this course students study the design and construction of steel buildings are studied with wood as a secondary system. Special code requirements and drawing conventions as they relate to steel construction are emphasized.

**ARC 291: Strength of Architectural Materials I**
- 3 units, Letter, 3 lec
- DA, CSU
- This course introduces basic principles of architectural structures and materials, including various structural systems used in buildings. The structural design and sizing of columns, beams and their relationships in building structures are developed.

**ART**

**ART 100: Introduction to Studio Art for Non-Art Majors**
- 3 units, Letter, 2 lec/2 lab
- DA, CSU/UC, LACCD C, CSUGE C1, IGETC 3A
- This course is designed to improve the creative process for non-art majors. Through a series of academic investigations, appraisals, creative experiments and skill development, students will attain the ability to assess their world through critically examining their perceptions of how the brain works and how to express ideas through artistic means.

**ART 101: Survey of Art History I**
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD C, CSUGE C1, IGETC 3A
- Prerequisite: ENGLISH 28; or Advisory Prerequisite: ENGLISH 101
- Survey of Art History from the Prehistoric through Gothic periods with attention given to the historical background and the analysis of art works of each period.

**ART 102: Survey of Art History II**
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD C, CSUGE C1, IGETC 3A, C-ID ARTH 120
- Prerequisite: ENGLISH 28
- A study of the historical development of art from the Renaissance period to the 21st Century and the Contemporary scene with emphasis on the cultural changes which influence the evolution of styles.

**ART 103: Art Appreciation I**
ART 109: The Arts of Africa, Oceania, and Ancient America
- 3 units, Letter, 3 lec, DE
- DA, CSU, C-ID ARTH 140
- Survey of visual culture within select regions in Africa, Oceania, and indigenous North America.

Effective Spring 2017

ART 111: History of Contemporary Art
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD C, CSUGE C1, IGETC 3A/3B
- This survey course examines the various art movements beginning with the cubist and advancing through today’s modern art scene.

ART 120: Entrepreneurial Practices in the Arts
- 3 units, Letter, 3 lec
- DA, CSU
- This course is designed to give students of art an understanding of the processes, procedures and regulations required for developing and maintaining a business in art production. General business practices combined with student specific discipline requirements will be addressed.

Effective Spring 2017

ART 201: Drawing I
- 3 units, Letter, 2 lec/2 lab
- DA, CSU/UC, LACCD C, CSUGE C1, IGETC 3A, C-ID ARTS 110
- This course explores various drawing approaches in black and white media with emphasis upon the development of observation and skill in graphic representation.

ART 202: Drawing II
- 3 units, Letter, 2 lec/2 lab
- DA, CSU/UC, C-ID ARTS 205
- Prerequisite: ART 201 and 501
- This course is a continuation of Drawing I with continued emphasis on technical, observational and analytical aspects of drawing with the addition of color media as well as mixed drawing media. Projects are designed to test conceptual skills.

ART 204: Life Drawing I
- 3 units, Letter, 2 lec/2 lab
- DA, CSU/UC
- Prerequisite: ART 201
- This is a beginning course in drawing the figure from life. Drawings with various time limitations are done to explore the relationships of movement, form, and space as they pertain to the human body. Emphasis is placed on proportion, structure and anatomy. This course is recommended for all art majors.

ART 205: Life Drawing II
- 3 units, Letter, 2 lec/2 lab
- DA, CSU/UC
- Prerequisite: ART 204
- This is an intermediate course in drawing the human figure. Emphasis is placed on developing advanced knowledge of human anatomy and acquiring enhanced skill in rendering its essential structure.

ART 206: Life Drawing III
- 3 units, Letter, 2 lec/2 lab
- DA, CSU/UC
- Prerequisite: ART 205
- This is an advanced course in drawing the human figure. Emphasis is placed on developing an advanced knowledge of human anatomy and acquiring advanced skill in rendering its essential structure.

ART 207: Life Drawing IV
- 3 units, Letter, 2 lec/2 lab
- DA, CSU/UC
- Prerequisite: ART 206
- This is an advanced course in drawing the human figure. Emphasis is placed on developing an advanced knowledge of human anatomy and acquiring advanced skill in rendering its essential structure.

ART 300: Introduction to Painting
- 3 units, Letter, 2 lec/2 lab
- DA, CSU/UC, C-ID ARTS 210
- Prerequisite: ART 201 and 501
- This course is an introduction to various painting materials, media and techniques. The course is also a survey of painting methods both contemporary and traditional.

ART 301: Watercolor Painting I
- 3 units, Letter, 2 lec/2 lab
- DA, CSU/UC
- Prerequisite: ART 300
• In this course students will be exposed to various tools and media associated with watercolor painting. Project will stress the development of personal style and developing eye recognition of various watercolor techniques.

**ART 302: Watercolor Painting II**
- 3 units, Letter, 2 lec/2 lab
- DA, CSU/UC
- Prerequisite: ART 301
- This course provides continued experience with selected aqueous media; watercolor and gouache, technical control, organizational and compositional skills are emphasized.

**ART 303: Watercolor Painting III**
- 3 units, Letter, 2 lec/2 lab
- DA, CSU/UC
- Prerequisite: ART 302
- A continuation of various transparent watercolor techniques with strong emphasis on the development of concepts and friskit techniques.

**ART 304: Acrylic Painting I**
- 3 units, Letter, 2 lec/2 lab
- DA, CSU/UC
- Prerequisite: ART 300
- This course will provide students an overview of acrylic painting techniques with an emphasis on materials used in acquiring these skills.

**ART 305: Acrylic Painting II**
- 3 units, Letter, 2 lec/2 lab
- DA, CSU/UC
- Prerequisite: ART 304
- A continuation of Acrylic Painting I with emphasis on composition.

**ART 306: Acrylic Painting III**
- 3 units, Letter, 2 lec/2 lab
- DA, CSU/UC
- Prerequisite: ART 305
- A continuation of Acrylic Painting II with emphasis on various concepts, styles and techniques.

**ART 310: Beginning Oil Painting**
- 2 units, Letter, 1 lec/3 lab
- DA, CSU/UC
- Prerequisite: ART 300
- This course presents an overview of basic oil painting techniques and materials. Composition, color, and form are studied through a range of projects in historical context to bring the individual in touch with contemporary ideas in the field of oil painting.

**ART 311: Intermediate Oil Painting**
- 2 units, Letter, 1 lec/3 lab
- DA, CSU/UC
- Prerequisite: ART 310
- A continuation of various historical techniques in oil painting. An extension of Beginning Oil Painting focusing on a broader range of contemporary issues. Historical oil painting techniques are explored.

**ART 312: Advanced Oil Painting**
- 2 units, Letter, 1 lec/3 lab
- DA, CSU/UC
- Prerequisite: ART 311
- A continuation of Intermediate Oil Painting through various styles and techniques. A further exploration of the medium in the direction of more personal means of expression.

**ART 501: Beginning Two-Dimensional Design**
- 3 units, Letter, 2 lec/2 lab
- DA, CSU/UC, C-ID ARTS 100
- Advisory Corequisite: ART 201
- This course presents an introduction to the concepts, applications, and historical references related to two-dimensional art and composition, including the study of the basic principles and elements of line, shape, texture, value, color and spatial illusion. Development of a visual vocabulary for creative expression through lecture presentations, studio projects, problem solving, and written assignments.

**ART 502: Beginning Three-Dimensional Design**
- 3 units, Letter, 2 lec/2 lab
- DA, CSU/UC, C-ID ARTS 101
- Prerequisite: ART 501
- This course covers the principles of three-dimensional design. Explorations are made in materials and media involving considerations to space. Applied design problems in three dimensions as well as creative sculptured forms and assemblages are included.

**ART 503: Intermediate Design**
- 3 units, Letter, 2 lec/2 lab
- DA, CSU/UC
- Prerequisite: ART 501; Advisory Prerequisite: ART 201
- A studio art course focused on further studies of the elements of art and the principles of design. These include line, shape, value, texture, color, space, and composition.

**ART 521: Art Gallery Techniques**
• 3 units, Letter, 2 lec/2 lab, 72:00 TBA
• DA, CSU
• Art 521 covers the basics of art gallery management including, but not limited to, curatorial strategies, exhibition design, proper handling of artworks and their installation, gallery preparation and maintenance, gallery lighting, production and distribution of press releases, announcements, exhibitions lists, and related gallery literature. Students learn by working side-by-side with art professionals during preparation and installation. This course may be scheduled at times to be arranged (TBA) for a minimum of 72:00 hours.

ART 531: Art Gallery Techniques II
• 3 units, Letter, 2 lec/2 lab, 72:00 TBA
• DA
• Prerequisite: ART 521; Advisory Prerequisite: ART 501 or 502. Student may be required to operate stationary and hand-held power tools.
• This is an intermediate course about art gallery management including, but not limited to, curatorial strategies, exhibition design, proper handling of artworks and their installation, gallery preparation and maintenance, gallery lighting, production and distribution of press releases, announcements, exhibitions lists, and related gallery literature. Students learn by working side-by-side with art professionals during preparation and installation.

ART 600: Typography
• 3 units, Letter, 2 lec/2 lab
• DA, CSU
• Typography is a study of letterforms with emphasis on their use in graphic communication where the focus is placed on style, spacing, proportion and their applied use in Graphic Design.

Effective Summer 2017

ART 633: Introduction to Computer Graphics
• 3 units, Letter, 2 lec/2 lab
• DA, CSU
• This is an introductory course in computer graphic design processes employed by commercial artists to create visually powerful designs using both Adobe Illustrator and PhotoShop applications.

ART 637: Presentation Graphics
• 3 units, Letter, 2 lec/2 lab
• DA, CSU
• This course introduces presentation graphics and web page design and site management. The characteristics of web page design and navigation structures are analyzed. Emphasis is on innovative ways by which to conceptualize, design and create interactive websites, as well as, creating engaging graphical presentations that match the presentation to its intended audience.

ART 638: Computer-Aided Art Laboratory
• 1 unit, Letter, 2 lab, 36:00 TBA
• DA, CSU
• This course is designed to reinforce lectures presented in each art class. Emphasis is placed on applying design principles to projects using selected computer applications. This course may be scheduled at times to be arranged (TBA) for a minimum of 36:00 hours.

ART 639: Introduction to Digital Imaging
• 3 units, Letter, 2 lec/2 lab
• DA, CSU, C-ID ARTS 250
• This is an introductory course in computer still image manipulation. The topics presented will include image editing application of filter, integration of text, and the combination of scanned images.

ART 640: Portfolio Development
• 3 units, Letter, 2 lec/2 lab
• DA, CSU
• This course will help students assess the needs of their chosen professions, assess their strengths and develop an e-portfolio which will best represent them to perspective employers or transfer institutions.

ART 644: Advanced Digital Imaging
• 3 units, Letter, 2 lec/2 lab
• DA, CSU
• Prerequisite: ART 639
• In this course students learn advanced digital imaging/Photoshop techniques which will incorporate the use of computers and photographic digital software to alter, enhance, and create new images that can be output to print and digital media. Detailed instruction in the application of Adobe Photoshop will be covered. Development of concept and design, and the use of photographic images are emphasized. Creation of specialized projects will integrate digital image manipulation, compositing/collaging, retouching, editing and other specialized Photoshop techniques.

ART 706: Clay Sculpture I
• 2 units, Letter, 1 lec/3 lab, 72:00 TBA
• DA, CSU/UC

Letter: letter graded; P/NP: pass/no-pass graded; Repeatable: may be repeated; Leve/Lab: hours per week of lecture/lab; TBA: maximum total hours to be arranged; DE: distance education (online and/or hybrid); NC: non-credit; DA/NDA: degree/non-degree applicable; CSU/UC: transferability to the listed institution; LACCD/CSUGE/IGETC: general education area applicable; C-ID: CSU course ID equivalency; Prerequisite: required prerequisite (prior completion with a minimum grade of “C” or “P”); Corequisite: required corequisite (concurrent enrollment)
- This course provides the student an exploration of ceramic sculpture in three dimensions and relief. Creative experimentation is pursued with form, line, and space. Reference is made to the history of and contemporary issues involving clay sculpture. Individual creativity stressed. This course may be scheduled at times to be arranged (TBA) for a minimum of 72:00 hours.

**ART 707: Clay Sculpture II**
- 2 units, Letter, 1 lec/3 lab
- DA, CSU/UC
- Prerequisite: ART 706
- This course is a continuation of ART 706 using clay as a medium in three dimensions and relief. Group criticism is included regarding the aesthetics of clay sculpture.

**ART 712: Ceramics Workshop**
- 2 units, Letter, 4 lab
- DA, CSU/UC
- Prerequisite: ART 713
- This course is designed for students who wish to continue study in ceramics through an approved program with a ceramics instructor.

**ART 713: Beginning Ceramics I**
- 2 units, Letter, 4 lab
- DA, CSU/UC
- This course provides a general introduction to the materials and processes of ceramic art. Instruction in basic hand construction methods is provided. Focus is placed upon developing skills in forming and decorating.

**ART 714: Beginning Ceramics II**
- 2 units, Letter, 1 lec/3 lab
- DA, CSU/UC
- Prerequisite: ART 713
- This course provides a further study of ceramics its materials, design, and production. More emphasis is put on glazes and kiln firing.

**ASTRON (Astronomy)**

**ASTRON 1: Elementary Astronomy**
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD A, CSUGE B1, IGETC 5A
- Advisory Corequisite: ASTRON 5
- This course introduces astronomical methods used to determine the nature of our universe. Course work includes use of astronomical instruments in a laboratory setting. A planetarium is used to study the solar system, stars, patterns and constellations.

**ASTRON 5: Fundamentals of Astronomy Laboratory**
- 1 unit, Letter, 3 lab
- DA, CSU/UC, CSUGE B3, IGETC 5C
- Prerequisite or Corequisite: ASTRON 1
- This course introduces laboratory experiments used in the study of astronomy. A planetarium is used to study the solar system, star patterns, and constellations.

**BIOLOGY**

**BIOLOGY 3: Introduction to Biology**
- 4 units, Letter, 3 lec/3 lab
- DA, CSU/UC, LACCD A, CSUGE B2/B3, IGETC 5B/5C
- Advisory Corequisite: ENGLISH 21
- In this survey course for non-majors, students learn general biological principles, activities, and the relationships of living organisms to each other and the world they live in with emphasis on their correlations to the human organism. The course includes a study of the nutritional, medical, and genetic aspects of the modern world.

**BIOLOGY 5: Introduction to Human Biology**
- 4 units, Letter, 3 lec/3 lab
- DA, CSU/UC, LACCD A, CSUGE B2/B3, IGETC 5B/5C
- A lecture/laboratory course that introduces the student to basic biological principles and their relationship to humans. Also, a foundation course for students who will enter the Health Sciences. May fulfill requirements in programs such as Physicians’ Assistant, Human Services, Social Services, Home Health Care, and other Health related fields.

**BIOLOGY 33: Medical Terminology**
- 3 units, Letter, 3 lec, DE
- DA, CSU
- This course develops a comprehensive medical vocabulary applicable to all specialties of medicine, through learning Greek and Latin prefixes, suffixes and word roots. Training in the spelling, pronunciation, and definition of medical terms and abbreviations is provided, as well as the use of a medical dictionary.

**BIOLOGY 101: Biodiversity and Environmental Biology**

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Student learning outcomes may appear in any or all of the following online locations: linked to the course outline at [https://ecd.laccd.edu/Default.aspx](https://ecd.laccd.edu/Default.aspx), and/or listed at [http://www.lahc.edu/facultystaff/slo/courseassessment.html](http://www.lahc.edu/facultystaff/slo/courseassessment.html), and/or [https://effectiveness.lahc.edu/cpc/haps/SitePages/2015-18%20SLO-SAO%20Assessment.aspx](https://effectiveness.lahc.edu/cpc/haps/SitePages/2015-18%20SLO-SAO%20Assessment.aspx). If so, those listed on the last site supersede all others.
• 5 units, Letter, 4 lec/3 lab
• DA, CSU/UC, LACCD A, CSUGE B2/B3, IGETC 5B/5C
• Prerequisite or Corequisite: CHEM 101
• This is the first course of a three-course lecture and laboratory sequence for Biology majors, including Biol 101, 102, and 103. It includes the scientific method, cell structure and function, biodiversity, including major taxa and their ecological and morphological relationships, behavioral, population community and ecosystem ecology, and distribution and adaptations of organisms. It includes field trips and library research. The degree of rigor and the amount of independent learning are designed to meet the preparation needs of students pursuing upper division biology, medicine, dentistry, public health, veterinary medicine, etc. A materials fee is required.

BIOLOGY 102: Molecular Cell Biology and Evolution
• 5 units, Letter, 4 lec/3 lab
• DA, CSU/UC
• Prerequisite: BIOLOGY 101 and CHEM 101
• This is the second course of a three-course lecture and laboratory sequence for Biology majors, including Biol 101, 102, and 103. Introduction to biological molecules, cell function, including transport, enzymes, and biochemical pathways; cell cycle, cell division, life cycles, Mendelian genetics, the chromosomal and molecular bases of inheritance, flow of genetic information and mutations; evidence and mechanisms of evolution. The degree of rigor and the amount of independent learning are designed to meet the preparation needs of students pursuing upper division biology, medicine, dentistry, public health, veterinary medicine, etc. A materials fee is required.

BIOLOGY 103: Molecular Genetics and Physiology
• 5 units, Letter, 4 lec/3 lab
• DA, CSU/UC
• Prerequisite: BIOLOGY 102 and CHEM 102
• This is the third course of a three-course lecture and laboratory sequence for Biology majors, including Biol 101, 102, and 103. An introduction to the molecular basis of genetic expression in viruses, prokaryotes, and eukaryotes, and regulation of this gene expression; techniques important in recombinant DNA technology and molecular genetics analysis; developmental patterns and physiological principles and adaptations. The degree of rigor and the amount of independent learning are designed to meet the preparation needs of students pursuing upper division biology, medicine, dentistry, public health, veterinary medicine, etc. A materials fee is required.

BSICSKL (Basic Skills)

BSICSKL 6CE: Review of Basic English
• 0 units, Non-credit, Repeatable, 1.5 lec
• NC, NDA
• This course will reinforce grammar rules and usage. The course reviews parts of speech, sentence structure, and effective paragraph models and strategies.

BSICSKL 23CE: College and Scholastic Assessment Preparation
• 0 units, Non-credit, Repeatable, 12 lab
• NC, NDA
• This course is designed to prepare students to be assessed and/or to take standardized or proficiency exams in the content areas of Mathematics and English. This course provides an overview and review of these areas and is not intended to provide in-depth instruction.

BUS (Business)

BUS 1: Introduction to Business
• 3 units, Letter, 3 lec, DE
• DA, CSU/UC, LACCD B2, CSUGE D, C-ID BUS 110
• This survey course introduces the various technical specialties used in a business including: organization, entrepreneurship, international business, marketing, finance, human resource management, production, business law, and risk management and insurance. The student is exposed to many different aspects of the world of e-business throughout the course and can evaluate potential careers.

BUS 5: Business Law I
• 3 units, Letter, 3 lec
• DA, CSU/UC
• This course covers the fundamental principles of law as they apply in the business world by examining legal rights and remedies, business torts and crimes, contracts, agency, employment, and negotiable instruments.

BUS 6: Business Law II
• 3 units, Letter, 3 lec
• DA, CSU/UC
• This course presents the relationship of law to business. Topics included are sales, product liability, secured transactions, consumer protection, debtors
and creditors, partnerships, corporations, government regulation and real property. Practice in the application of legal principles to business transactions is provided.

**BUS 31: Business English**
- 3 units, Letter, 3 lec, DE
- DA, CSU
- This course covers word choice, sentence and paragraph construction, punctuation, spelling and vocabulary are studied within the context of modern business communications.

**BUS 32: Business Communications**
- 3 units, Letter, 2 lec/2 lab, DE
- DA, CSU, C-ID BUS 115
- Prerequisite: BUS 31 and ENGLISH 101
- Students will develop the ability to write effective business memorandums, letters, e-mail messages, employment documents, and short reports. This course stresses the problem-solving approach to create messages that inform, persuade, and convey negative news. The program emphasizes the concepts of effective writing style such as organization, coherence, and unity as well as the principles of grammar and punctuation in written business documents.

**BUS 38: Business Computations**
- 3 units, Letter, 3 lec, DE
- DA, CSU
- This course covers basic mathematics as it applies to business problems. The student will examine questions related to banking, discounts, payroll, interest, investments, taxes and financial statements.

**BUS 60: Business Document Processing**
- 1 unit, Letter, 3 lab, DE
- DA
- This course teaches touch computer keyboarding and preparation of business letters, memos, and reports. It includes an introduction to computer word processing. It is required for all Business majors. This course is not open for credit for Office Administration majors.

**BUS 130: Introduction to Supply Chain Management**
- 3 units, Letter, 3 lec, DE
- DA, CSU
- This course is an overview of the entire supply chain and its key elements. It covers basic concepts and terminology used in demand planning, inventory planning, material planning, distribution planning, fulfillment planning, and related components of a supply chain.

**BUS 185: Directed Study - Business**
- 1 unit, P/NP, 1 lec
- DA, CSU
- This course allows students to pursue directed study in Business Administration on a contract basis under the direction of a supervising instructor.

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**CAOT (Computer Applications of Office Technologies)**
also see VOC ED (Vocational Education)

**CAOT 1: Computer Keyboarding and Document Applications I**
- 3 units, Letter, 2 lec/3 lab, DE
- DA, CSU
- In this beginning computer keyboarding course, students will learn how to key by touch while developing speed and accuracy with the goal of achieving 30 words per minute by the end of the semester. Students also will learn how to use Microsoft Word to format letters, memos, tables, and reports.

**CAOT 2: Computer Keyboarding and Document Applications II**
- 3 units, Letter, 2 lec/3 lab, DE
- DA, CSU
- Corequisite: CAOT 64, 185, or 285; Advisory Prerequisite: CAOT 1
- This intermediate course offers instruction in letter placement and tabulation in addition to further development of speed and review of computer keyboarding techniques. Students should achieve a typing speed of at least 45 net words per minute.

**CAOT 7: Machine Transcription**
- 3 units, Letter, 2 lec/2 lab, DE
- DA
- Prerequisite: BUS 31; Advisory Prerequisite: CAOT 1 or ability to type 30 words-per-minute
- This course provides instruction in operating transcribing machines. English fundamentals are thoroughly reviewed. Techniques of producing mailable letters from machine dictation are stressed.

**CAOT 9: Computer Keyboarding Improvement**
- 1 unit, Letter, 3 lab, DE
- DA, CSU
• Prerequisite: ability to type 25 words per minute using correct keyboarding technique complete a beginning keyboarding course
• This course provides computer keyboarding procedures, speed, and accuracy through timed writings, corrective drills, and production problems. Students may enroll for two semesters. This course may be taken along with CAOT 002 if the student needs additional speed and/or accuracy building.

CAOT 21: Medical Secretarial Procedures I
• 5 units, Letter, 5 lec, DE
• DA
• Prerequisite: CAOT 2; Advisory Corequisite: CAOT 64; Advisory Prerequisite: BIOLOGY 33 and BUS 31
• This is a beginning medical transcriptions course where students learn medical terminology: anatomy and physiology, disease processes, pharmaceutical, pathological and laboratory, and related medical terms. Emphasis is on developing speed and accuracy in transcribing dictated medical documents including chart notes, history and physical reports, consultations, office procedure notes, x-ray reports, progress notes, and letters.

CAOT 22: Medical Secretarial Procedures II
• 5 units, Letter, 5 lec, DE
• DA
• Prerequisite: CAOT 2 and 21; Advisory Prerequisite: CAOT 64; Advisory Prerequisite: BUS 31, BIOLOGY 33, CAOT 34
• This is an advance course where students improve their skill in typing medical documents, case histories, medical reports, history and physicals. Additionally, students learn about medical ethics and sensitivity training for the medical office, privacy laws, telephone etiquette, handling of confidential documents, scheduling appoints in a variety of medical facilities, and medical insurance.

CAOT 23: Legal Office Procedures I
• 5 units, Letter, 5 lec, DE
• DA
• Prerequisite: CAOT 2
• This course offers specialized training is offered to develop the skills required in the modern law office. Correspondence and legal documents are transcribed from dictation into a computer for printout.

CAOT 30: Office Procedures
• 3 units, Letter, 3 lec, DE
• DA, CSU

CAOT 61: Introduction to Office Machines
• 1 unit, Letter, 2 lab, DE
• DA
• This course is designed to teach basic business functions using software to develop proficiency on the computer ten-key pad by touch, emphasizing speed and accuracy.

CAOT 64: Computer Applications and Office Technologies Laboratory
• 1 unit, P/NP, 2 lab, DE
• DA, CSU

CAOT 33: Records Management and Filing
• 2 units, Letter, 1 lec/2 lab, DE
• DA
• In this course students learn standard indexing and filing rules for manual and electronic filing systems as well as records management procedures.

CAOT 34: Business Terminology
• 2 units, Letter, 2 lec
• DA, CSU
• This course will enrich office vocabulary and improve spelling with particular emphasis on words used in business communication.

CAOT 47: Applied Office Practice
• 2 units, Letter, 5 lab
• DA
• This course provides practice of office skills in a campus office. Placements are made according to the skills possessed by the student and requirements of the office.

CAOT 048: Customer Service
• 3 units, Letter, 3 lec
• DA, CSU
• This course is designed to raise awareness, prompt thinking, give step-by-step suggestions for improvement, and provide information on how an organization can deliver service excellence. The information is beneficial whether one is new to dealing with others in a business setting or is more experienced with internal customers (e.g., coworkers or other employees) and external customers (e.g., consumers, vendors, or other end users of products). Emphasis is placed on communication, diversity, technology, time management, stress management, and customer retention. Effective Fall 2017

CAOT 61: Introduction to Office Machines
• 1 unit, Letter, 2 lab, DE
• DA
• This course is designed to teach basic business functions using software to develop proficiency on the computer ten-key pad by touch, emphasizing speed and accuracy.
Corequisite: any CAOT course
This laboratory course will provide students enrolled in all Office Administration skills courses additional work time to reinforce skills being developed.

CAOT 67: Microsoft Outlook for the Office
- 2 units, Letter, 1 lec/2 lab
- DA
- Students learn to use the features of Microsoft Outlook in the business setting. This course includes sending and receiving e-mail messages as well as managing contacts and mail. It allows students to learn and use (1) Outlook's Calendar for scheduling appointments, planning meetings, and scheduling events; (2) Outlook's Tasks feature; and (3) Outlook's Notes feature.

CAOT 78: Microcomputer Acctg Applications for the Electronic Office
- 3 units, Letter, 2 lec/3 lab, DE
- DA, CSU
- Acquaints students with the use of the microcomputer for bookkeeping and accounting applications in the electronic office. Students receive hands-on experience in analyzing business transactions, keeping records, preparing financial statements, and generating financial management reports using a microcomputer software package.

CAOT 79: Word Processing Applications
- 3 units, Letter, 2 lec/3 lab, DE
- DA, CSU
- Advisory Prerequisite: CAOT 84
- Students develop further skill in preparing a variety of business documents on a personal computer. Includes advanced techniques using Microsoft Word. Covers formats for letters, memos, reports, tables, outlines, form documents, graphics, desktop publishing, and merged documents. Prepares students for certification exam.

CAOT 82: Microcomputer Software Survey in the Office
- 3 units, Letter, 2 lec/3 lab, DE
- DA, CSU
- Advisory Corequisite: CAOT 1
- Introduces commercially available software for business offices. Provides hands-on introduction to system, Word processing, database, spreadsheet, and electronic mail software. No previous computer experience required.

CAOT 84: Microcomputer Office Applications: Word Processing
- 3 units, Letter, 2 lec/3 lab, DE
- DA, CSU
- Advisory Prerequisite: CAOT 1
- This course provides information and hands-on training on the use of microcomputer word processing applications. Students will learn how to create, edit, and manipulate various types of documents. Students will create, format, edit, save, and print documents including letters, memos, tables, and reports. Shared documents and mail-merge are also presented.

CAOT 85: Microcomputer Office Applications: Spreadsheet
- 3 units, Letter, 1 lec/4 lab, DE
- DA, CSU
- This course provides a detailed study of business applications using Microsoft Excel or a similar software. Topics include the commands, formats, and functions of the software with emphasis on its use as a problem solving and financial analysis tool. Students will learn to create macros, customize toolbars and menus, and integrate Excel with other applications. Covers the creation, editing, formatting and printing of worksheets. Emphasizes preparing computerized worksheets, using formulas and functions to analyze data, prepare graphs, and simplify office accounting procedures. Fulfills CAOT AA degree and Certificate requirements.

CAOT 86: Microcomputer Office Applications: Database
- 3 units, Letter, 2 lec/3 lab, DE
- DA, CSU
- Advisory Corequisite: CAOT 1
- This course provides students with in-depth, hands-on training with office database applications. Design, implement and manage relational databases. Extract information from a database and output it in customized forms, reports, mailings and web pages. Prepares students for certification exam in Access.

CAOT 087: Excel Concepts for Business Applications
- 2 units, Letter, 1 lec/2 lab, DE
- DA, CSU
- Advisory prerequisite: CAOT 085
- This course is designed to raise awareness, prompt thinking, give step-by-step suggestions for improvement, and provide information on how an organization can deliver service excellence. The information is beneficial whether one is new to dealing with others in a business setting or is more experienced with internal customers (e.g., coworkers or other employees) and external customers (e.g., consumers, vendors, or other end users of products). Emphasis is placed on communication, diversity,
technology, time management, stress management, and customer retention. Effective Fall 2017

CAOT 88: Microcomputer Office Applications: Desktop Publishing
• 3 units, Letter, 2 lec/3 lab, DE
• DA, CSU
• This course provides hands-on experience with desktop software. Creation of advertisements, flyers, brochures, business forms, reports, newsletters, and presentations using accepted principles of design. Selection and use of desktop publishing software.

CAOT 110: Microcomputer Office Applications: Presentation Design
• 3 units, Letter, 2 lec/3 lab, DE
• DA, CSU
• Advisory Corequisite: CAOT 1
• Provides an overview of presentation design principles. Uses presentation software to create presentations incorporating presentation software templates, fonts, graphics, transitions, sound, and animation. Students will learn to outline presentations, create dynamic slides, and develop slide shows based on business topics. Prepares students for certification exam.

CAOT 129: Technology in Global Logistics
• 1 unit, Letter, 1 lec, DE
• DA
• This course introduces the technology that is used within global logistics. The emphasis is on state-of-the-art technologies and practices found within the mobile workforce and dynamic worksite environments that enable global commerce. Topics include handheld devices used in sales, inventory, and real-time tracking, GIS (Geographic Information Systems) used in distribution, GPS (Global Positioning Satellites) used in transportation, an introduction to global value networks, and a survey of global supply chain logistics careers.

CAOT 185: Directed Study – Computer Applications and Office Technologies
• 1 unit, Letter, 1 lec
• DA, CSU
• Corequisite: Any CAOT course
• This course provides additional skill development work in conjunction with one or more courses in CAOT.

CH DEV (Child Development)

CH DEV 1: Child Growth and Development
• 3 units, Letter, 3 lec
• DA, CSU/UC, LACCD B2/E1, CSUGE D/E, IGETC 4, C-ID CDEV 100
• Students are introduced to the theory of human development focusing on growth from conception through adolescence. The course content focuses on the physical, cognitive, and social-emotional domains, and ways in which biological and diverse environments influence growth. Students identify typical and atypical development and apply strategies to promote healthy child development in their personal and/or professional lives.

CH DEV 2: Early Childhood: Principles and Practices
• 3 units, Letter, 3 lec
• DA, CSU, C-ID ECE 120
• Introduction to early childhood education theoretical, historical and contemporary models of principles and developmentally appropriate practices will be explored. This course includes teaching strategies, professional practices, advocacy/ethics, adult-child interactions, programs, diversity and environments supporting physical, social/emotional, cognitive and language development of young children.

CH DEV 3: Creative Experiences for Children I
• 3 units, Letter, 3 lec
• DA, CSU
• This course explores the philosophy of developing creative activities for preschool and middle years children through hands-on experiences using numerous media.

CH DEV 4: Creative Experiences for Children II
• 3 units, Letter, 3 lec
• DA, CSU, C-ID ECE 130
• Students learn and develop the knowledge and skills related to providing appropriate curriculum and environments for young children from birth to age 6. Students examine a teacher's role in supporting
development and engagement for all young children. Planning, implementation and evaluation of curriculum includes but is not limited to: music and movement, creative representation, science, motor skills, math readiness, and emergent literacy.

CH DEV 5: Puppetry I
• 3 units, Letter, 3 lec
• DA, CSU
• This course is ideal for those seeking a medium especially suited for teaching children. Puppets are used to voice quality scripts to instruct children in the areas of physical and social development, emotional expression, and creative drama. Practical techniques are learned to plan and perform creative puppet shows. Emphasis is on construction and manipulation of various genres of puppets using developmentally appropriate literature for children.

CH DEV 10: Health, Safety and Nutrition
• 3 units, Letter, 3 lec
• DA, CSU, C-ID ECE 220
• This course provides students and teachers with a fundamental understanding of children's health, safety, and nutrition needs and guides the implementation of effective classroom practices. Emphasis is placed on the pivotal role that teachers play in identifying children's health needs, creating and maintaining high-quality, safe learning environments, meeting children’s essential nutritional needs, collaborating with families, and providing comprehensive health education in culturally and developmentally appropriate ways. Course is designed to actively engage learners, connecting theoretical and real life experience.

CH DEV 11: Child, Family and Community
• 3 units, Letter, 3 lec
• DA, CSU, LACCD E1, CSUGE E, C-ID CDEV 110
• This course asks students to define their personal ethics within the context of a contemporary society. Students analyze the relationships that exist among the home, school, and community. Racial, ethnic, and language differences affecting the structure and status of the family are investigated. Principles of an anti-bias curriculum will be discussed. Resources and referral agencies available within the local community will be identified.

CH DEV 12: Parent-Teacher-Child Interaction
• 3 units, Letter, 3 lec
• DA, CSU
• This course familiarizes students with positive discipline techniques and other guidance models to be used with children from early childhood through adolescence. Communication techniques used in parent-teacher conferences are explored to give the student confidence in working with parents/guardians.

CH DEV 22: Practicum in Child Development I
• 4 units, Letter, 2 lec/6 lab
• DA, CSU, C-ID ECE 210
• Prerequisite: CH DEV 1, 2, 3 or 4, health exam and TB test
• Course provides supervised experience in a variety of Early Childhood Programs including infant centers, private preschools, State and Federally funded child development centers, special education centers, family daycare providers and school age programs. The student will relate all previous theory and curriculum.

CH DEV 23: Practicum in Child Development II
• 4 units, Letter, 2 lec/6 lab
• DA, CSU
• Prerequisite: CH DEV 22
• This course provides advanced supervised practicum in a variety of Early Childhood Education programs including infant centers, private preschools, State and Federally funded child development centers, special education centers, family daycare homes, and school age programs. The student will relate all previous theory and curriculum courses to practical application in the classroom.

CH DEV 30: Infant and Toddler Studies I
• 3 units, Letter, 3 lec
• DA, CSU
• This course explores social, emotional, cognitive, and physical development from birth through 3 years. It provides information on principles of caregiving, teaching techniques, setting up the environment, and observing and recording infant/toddler behavior with an emphasis on cultural competency and development.

CH DEV 31: Infant and Toddler Studies II
• 3 units, Letter, 3 lec
• DA, CSU
• This course is a study of infant and toddler development, brain research and a relationship based approach to responsive program planning. Skill building in assessment, intervention, and inclusion will be developed. Direct observation in infant and toddler programs are required. Creating developmentally appropriate curriculum is emphasized.
CH DEV 34: Observing and Recording Children's Behavior
- 3 units, Letter, 3 lec
- DA, CSU, C-ID ECE 200
- Prereq: The Department of Social Services Child Care Licensing Division and the Department of Health require all individuals working with children in a paid or voluntary position to have a negative Mantoux or chest x-ray every two years
- This course explores appropriate use of assessment and observation strategies to document development, growth, play, and learning to join with families and professionals in promoting children's success. Recording strategies, rating systems, portfolios, and multiple assessment tools are explored.

CH DEV 36: Literature for Early Childhood
- 1 unit, Letter, 1 lec
- DA, CSU
- This course is an overview of literature suitable for children from birth through eight years. Students analyze a wide variety of books to address contemporary issues. Techniques of selection and presentation methods are explored.

CH DEV 38: Administration & Supervision of Early Childhood Programs I
- 3 units, Letter, 3 lec
- DA, CSU
- Prerequisite: CH DEV 1
- This course provides an understanding of the principles and practices necessary to run an Early Childhood Education Program. State California licensing regulations, fiscal planning and management, personnel management, child abuse recognition and reporting requirements, and brochure development are some of the important topics covered. Professionalism and quality standards are emphasized.

CH DEV 39: Administration & Supervision of Early Childhood Programs II
- 3 units, Letter, 3 lec
- DA, CSU
- Prerequisite: CH DEV 1
- This course provides an in depth study of finances, including grant and proposal writing. Licensing requirements for a wide variety of children's programs will be explored. Risk management and disaster preparedness for children's programs will be covered. Other topics covered include advocacy, staff development, professionalism as well as current trends in child development.

CH DEV 42: Teaching in A Diverse Society
- 3 units, Letter, 3 lec
- DA, CSU, C-ID ECE 230
- This course will examine the development of social identities in diverse societies including theoretical and practical implications affecting young children, families, programs, teaching, education and schooling. Culturally relevant and linguistically appropriate anti-bias methods and techniques will be explored to support all children in becoming competent members of a diverse society. Course involves self-reflection of one's own understanding of educational principles and practices in integrating another approach to philosophy, objectives and goals to better perform teaching practices/styles and the development of inclusive program environments.

CH DEV 45: Programs for Children With Special Needs
- 3 units, Letter, 3 lec
- DA, CSU
- This course examines specific classifications and special characteristics of exceptional children. Information on legislation for exceptional children is explored. IDEA, the IEP process, inclusion, early identification, and curricular approaches are examined. Students explore a variety of disabilities from a child development perspective including definition and educational implications.

CH DEV 47: Adult Supervision/Early Childhood Mentoring
- 2 units, Letter, 2 lec
- DA, CSU
- This course presents principles and practices in staff relations and the supervision and evaluation of staff in early childhood program. The study of methods of clinical supervision and performance evaluation, leadership styles, group dynamics, conflict resolution, staff development, staff roles and responsibilities are explored.

CH DEV 75: Child Safety
- 1 unit, Letter, 1 lec
- DA
- This course offers a first aid and cardiopulmonary resuscitation (CPR) training program giving individuals the knowledge and skills necessary to prevent, recognize, and provide basic care for injuries and sudden illnesses until advanced medical personnel arrive. American Red Cross CPR and First Aid certificates are awarded.
CH DEV 185: Directed Study - Child Development
• 1 unit, Letter, 1 lec
• DA, CSU
• This course allows students to pursue Directed Study in Child Development on a contract basis under the direction of a supervising instructor.

CH DEV 911: Cooperative Education - Child Development
• 1 unit, Letter, 1 lec
• DA, CSU
• Prerequisite: student must have at least 7 units per semester, which includes Cooperative Education, during the semester in which s/he is enrolled.
• Child Development is approved for Cooperative Education, Work Experience, and Internships. See listing under Cooperative Education.

CH DEV 921: Cooperative Education - Child Development
• 2 units, Letter, 2 lec
• DA, CSU
• Prerequisite: student must have at least 7 units per semester, which includes Cooperative Education, during the semester in which s/he is enrolled.
• Child Development is approved for Cooperative Education, Work Experience, and Internships. See listing under Cooperative Education.

CH DEV 931: Cooperative Education - Child Development
• 3 units, Letter, 3 lec
• DA, CSU
• Prerequisite: student must have at least 7 units per semester, which includes Cooperative Education, during the semester in which s/he is enrolled.
• Child Development is approved for Cooperative Education, Work Experience, and Internships. See listing under Cooperative Education.

CHEM 65: Introductory General Chemistry
• 4 units, Letter, 3 lec/3 lab
• DA, CSU/UC, LACCD A, CSUGE B1/B3, IGETC 5A/5C
• Prerequisite: MATH 123C or 125
• This course introduces basic principles of inorganic chemistry plus basic concepts of solutions, gases and dimensional analysis. It is a Prerequisite: for chemistry 066 intended for allied health majors. It is also recommended as a Prerequisite: for chemistry 101.

CHEM 66: Organic and Biochemistry for Allied Health
• 5 units, Letter, 3 lec/6 lab
• DA, CSU/UC, LACCD A, CSUGE B1/B3
• Prerequisite: CHEM 65
• This course covers the organic and biochemical principles found in physiology and metabolic processes. Topics include organic and biochemistry with emphasis on the role of chemistry in health and disease, as well as molecular diseases and metabolic abnormalities.

CHEM 101: General Chemistry I
• 5 units, Letter, 3 lec/6 lab
• DA, CSU/UC, LACCD A, CSUGE B1/B3, IGETC 5A/5C, C-ID CHEM 110
• Prerequisite: CHEM 65
• First of two courses that introduces theory and laboratory topics dealing with general principles of chemistry. Chemical calculations are emphasized as well as laboratory precision and accuracy utilizing quantitative techniques.

CHEM 102: General Chemistry II
• 5 units, Letter, 3 lec/6 lab
• DA, CSU/UC, CSUGE B1/B3, IGETC 5A/5C
• Prerequisite: CHEM 101
• Second of two courses that introduces theory and laboratory topics dealing with general principles of chemistry. Chemical calculations are emphasized as well as laboratory precision and accuracy utilizing quantitative techniques.

CHEM 211: Organic Chemistry for Science Majors I
• 5 units, Letter, 3 lec/6 lab
• DA, CSU/UC, CSUGE B1/B3, IGETC 5A/5C
• Prerequisite: CHEM 102
• This course introduces organic chemistry emphasizing the structure, stereochemistry and reactions of carbon compounds. Laboratory work covers preparation and isolation of organic compounds and the determination of their physical and chemical properties.

CHEM 212: Organic Chemistry for Science Majors II
• 5 units, Letter, 3 lec/6 lab
• DA, CSU/UC, CSUGE B1/B3, IGETC 5A/5C
• Prerequisite: CHEM 102
• This course introduces organic chemistry emphasizing the structure, stereochemistry and reactions of carbon compounds. Laboratory work covers preparation and isolation of organic compounds and the determination of their physical and chemical properties.
CLN ART 113: Culinary Skills I
- 3 units, Letter, 2 lec/4 lab
- DA, CSU
- Corequisite: CLN ART 114, 115, 116, and 117
- This course covers career opportunities in the culinary fields, world cultures and food trends, kitchen organization, sanitation and safety, nutrition, basic knife techniques, basic culinary terminology, ingredient function, product identification, and the theory of food preparation and production.

CLN ART 114: Aromatics
- 2 units, Letter, 6 lab
- DA, CSU
- Corequisite: CLN ART 113, 115, 116, and 117
- This course presents an in depth study of history and purposes of herbs and spices in the context of world flavor profile. Emphasis is on developing a sense of taste for herbs, spices, blends and condiments, and, determining when and how much to use.

CLN ART 115: Food Fabrication
- 2 units, Letter, 1 lec/3 lab
- DA, CSU
- Corequisite: CLN ART 113, 114, 116, and 117
- In this course students will learn to fabricate meats, game, fish, shellfish, and poultry into portion size cuts. Emphasis on hotel and restaurant cuts, quality and yield grading, and costing the fabricated cuts.

CLN ART 116: Product Identification and Purchasing
- 2 units, Letter, 1 lec/3 lab
- DA, CSU
- Corequisite: CLN ART 113, 114, 115, and 117
- In this course participants focus primarily on meats, fish, poultry, vegetables, fruits, herbs, spices, groceries, dairy, paper, and other products. Students will learn how to recognize foods by their appearance, smell, texture, and taste. Course will cover purchasing cycle and quantity/quality controls.

CLN ART 117: Food Sanitation and Safety
- 3 units, Letter, 2 lec/3 lab
- DA, CSU
- Corequisite: CLN ART 113, 114, 115, and 116
- This course introduces food, environmental sanitation and safety in the food production area. Focus on food-borne illnesses, origins, food handling, receiving and storage practices, pest management, and other safety procedures in the food service industry. Course fulfills ServSafe Certification.

CLN ART 123: Culinary Skills II
- 3 units, Letter, 1 lec/6 lab
- DA, CSU
- Prerequisite: CLN ART 113, 114, 115, 116, and 117; Corequisite: CLN ART 124, 125, and 126
- This course reinforces knowledge, skills and techniques of basic cooking. Vegetable, starch, stock, soup and sauce cookery are investigated and produced. This course will also develop skills and techniques used in preparing, plating, and serving main course dishes.

CLN ART 124: Menu Planning and Nutrition
- 3 units, Letter, 2 lec/3 lab
- DA, CSU
- Prerequisite: CLN ART 113, 114, 115, 116, and 117; Corequisite: CLN ART 123, 125, and 126
- This course emphasizes menu planning for a variety of commercial and institutional foodservice operations. Layout and design of the printed menus are studied. Basic nutrition principles and theories for various groups are investigated. Healthy foods, pleasing to the eyes and the palate, will be prepared to cater to the growing number of health-minded customers.

CLN ART 125: Breakfast and Lunch Cookery
- 3 units, Letter, 1 lec/6 lab, 126:00 TBA
- DA, CSU
- Prerequisite: CLN ART 113, 114, 115, 116, and 117; Corequisite: CLN ART 123, 124, and 126
- In this course students acquire basic skills needed to prepare breakfast and lunch in a foodservice operation. The basic methods of preparation for eggs, quick breads, grains, breakfast beverages, potatoes, meats, and fish are emphasized. The organization and maintenance of a smooth workflow on the line are studied. A variety of contemporary lunch items are prepared and served in a casual operation. Emphasis is on quality food presentation, quantity food production, and timing. This course may be scheduled at times to be arranged (TBA) for a minimum of 126:00 hours.

CLN ART 126: Baking Skills
- 3 units, Letter, 2 lec/3 lab
- DA, CSU
- Prerequisite: CLN ART 113, 114, 115, 116, and 117; Corequisite: CLN ART 123, 124, and 125
- This course emphasizes the basic principles of baking. Students create yeast dough, quick breads, doughnuts, fritters, pancakes and waffles, pies,
cakes, cookies, custards, puddings, mousses, and soufflés. Functions of primary ingredients used in baking are also studied.

CLN ART 133: Advance Garde Manger
- 3 units, Letter, 1 lec/6 lab
- DA, CSU
- Prerequisite: CLN ART 123, 124, 125, and 126; Corequisite: CLN ART 134, 135, and 136
- Introduction to the preparation of canapes, hot and cold hor's d'oeuvre, appetizers, pates, galantines, terrines, ballotines, and mousse. Curing and smoking techniques for meats, seafood, and poultry items are practiced. Modern ways of decorating and arranging food platters for practical and show purposes are shown. Fruit, vegetables, tallow, salt and ice Carving techniques, and center pieces will be prepared.

CLN ART 134: Classic and Contemporary Cuisine
- 3 units, Letter, 1 lec/6 lab
- DA, CSU
- Prerequisite: CLN ART 123, 124, 125, and 126; Corequisite: CLN ART 133, 135, and 136
- In this course students will learn to prepare classic and contemporary cuisine in a fine dining restaurant setting. Correct application of culinary skills, plate presentation, organization, and timing in the production of prix-fixe and a la carte menu will be practiced. Escoffier's guidelines and contemporary chef's philosophy of food are explored and examined in light of today's understanding of food, nutrition, and presentation.

CLN ART 135: Dining Room and Beverage Management
- 3 units, Letter, 1 lec/6 lab
- DA, CSU
- Prerequisite: CLN ART 123, 124, 125, and 126; Corequisite: CLN ART 133, 134, and 136
- This course covers extensive and practical dining room and beverage service. Hands on skills with service mise en place, proper service techniques, suggestive selling, and different service styles. The course also includes Customer Service Certification from NRAEF ManageFirst.

CLN ART 136: Restaurant Management
- 3 units, Letter, 2 lec/3 lab
- DA, CSU
- Prerequisite: CLN ART 123, 124, 125, and 126; Corequisite: CLN ART 133, 134, and 135
- This course provide extensive coverage of restaurant management and systems. Students will develop knowledge in the management of customers, operations, and employees. Student will identify the crucial elements in the successful operation of a restaurant and show their interrelationships.

CO INFO (Computer Information Systems)

CO INFO 1: Principles of Business Computer Systems
- 3 units, Letter, 3 lec/1 lab, DE
- DA, CSU/UC, C-ID BUS 140, ITIS 120
- This course introduces the principles and operation of computer systems used in business. Topics in this course include information systems, database management systems, networking, e-commerce, ethics and security, computer systems hardware and software components. Application of these concepts and methods through hands-on projects developing computer-based solutions to business problems.

CO INFO 003: Operating Systems
- 3 units, Letter, 2 lec/2 lab
- DA, CSU
- Advisory Prerequisite: CO INFO 001
- This course provides students with the technical foundation in current operating system technologies. It covers PC architecture, preventive maintenance and troubleshooting. It covers operating system installation, configuration, administration and performance optimization. This course also gives students a solid grounding in the fundamentals of computer security like access control, file and folder permission, auditing and encryption. Students will learn how to harden operating systems to repel attacks. This course prepares students to perform operating system support tasks including operating system batch and Windows script file programming. Effective Fall 2017

CO INFO 7: Introduction to Multimedia
- 3 units, Letter, 3 lec
- DA, CSU
- Prerequisite: CO INFO 1; Advisory Corequisite: CO INFO 23 or 64
- This course discusses the capabilities and limitations of multi media technology, the planning process, the multimedia building blocks, the authoring process, and the distribution an playback of the application.

CO INFO 8: Microcomputer Applications
- 3 units, Letter, 3 lec
- DA, CSU
- Prerequisite: CO INFO 1; Advisory Corequisite: CO INFO 23 or 64
- This course discusses the capabilities and limitations of multi media technology, the planning process, the multi media building blocks, the authoring process, and the distribution an playback of the application.

Student learning outcomes may appear in any or all of the following online locations: linked to the course outline at https://ecd.laccd.edu/Default.aspx, and/or listed at http://www.lahc.edu/facultystaff/slo/courseassessment.html, and/or https://effectiveness.lahc.edu/cpc/haps/SitePages/2015-18%20SLO-SA0%20Assessment.aspx. If so, those listed on the last site supersede all others.
• Prerequisite: CO INFO 1; Advisory Corequisite: CO INFO 23 or 64
• Provides in-depth hands-on training with Microsoft Office applications; Word, Excel, Access and Power Point. Covers concepts and operations needed to prepare for the certification exams in these products.

CO INFO 9: Network System Manager
• 4 units, Letter, 3 lec/3 lab
• DA, CSU
• Advisory Prerequisite: CO INFO 1
• This course introduces the components of Local Area Networks. It is designed to provide information and training in the use of LANs, their terminology and topologies.

CO INFO 14: Introduction to Computer Communications
• 3 units, Letter, 3 lec, DE
• DA, CSU
• Prerequisite: CO INFO 1
• This course provides broad coverage of Internet and networking technology such as; how the Internet works, connection methods, hardware and software installation and troubleshooting, protocols, infrastructure, security, e-commerce. Introduces web page creation with HTML, authoring tools, graphics, style sheets, and programming.

CO INFO 15: Data Base Programming for Microcomputers
• 3 units, Letter, 3 lec, DE
• DA, CSU
• Prerequisite: CO INFO 1
• This is a hands-on course in the design, implementation and maintenance of databases using SQL and the Management Studio. Students will learn and use SQL queries to retrieve and modify data and calculate summaries. Covers the essential skills needed to develop databases for Microsoft SQL Server.

CO INFO 16: Spreadsheet Applications for Computers
• 3 units, Letter, 3 lec
• DA, CSU
• Prerequisite: CO INFO 1; Advisory Corequisite: CO INFO 23 or 64
• This course provides students with in-depth, hands-on training with Excel spreadsheet software. Topics include formatting, formulas, functions, charting, drawing, workbooks, lists, what-if analysis, Pivot tables, Pivot Charts, interfacing with the Web and automating workbooks. Prepare students for certification exam in Excel.

CO INFO 21: Business Computer Programming I
• 3 units, Letter, 3 lec
• DA, CSU
• Prerequisite: CO INFO 1; Advisory Corequisite: CO INFO 23 or 64
• This is a beginning course using Visual Basic. It covers program design and event driven, object-orient programming concepts. Topics specific to VB include objects and events, from design, control structures, arrays, (procedures and functions), file access and Web programs.

CO INFO 23: Programming Laboratory
• 1 unit, P/NP, 2 lab
• DA, CSU
• Corequisite: CO INFO 1
• This computer lab course requires the student to maintain concurrent enrollment in a Computer Information Systems lecture course. All computer lab assignments for this course will originate from the lecture class the student is enrolled. This course fulfills the computer lab requirement for Computer Information Systems courses.

CO INFO 24: Accounting On Microcomputers
• 2 units, Letter, 1 lec/3 lab
• DA, CSU
• Prerequisite: CO INFO 1
• In this course students will learn to setup and use a commercial accounting software package to maintain accounting and financial records for a business. Software modules covered include general ledger, accounts receivable, accounts payable, inventory, payroll, and job costing.

CO INFO 31: Accounting On Microcomputers
• 3 units, Letter, 3 lec
• DA, CSU
• Prerequisite: CO INFO 001
• This course provides complete coverage of the key business and technology elements of electronic commerce. It introduces students to both the theory and practice of conducting business over the Internet and World Wide Web. Topics include Technology Infrastructure, Selling & Marketing on the Web, Business-to-Business Strategies, Virtual Communities & Web portals, Web Server Hardware and software, Electronic Commerce Software and Electronic Commerce Security.

Effective Fall 2017
CO INFO 37: E-Commerce Essentials
• 3 units, Letter, 3 lec
• DA, CSU
• Prerequisite: CO INFO 001
• This course provides complete coverage of the key business and technology elements of electronic commerce. It introduces students to both the theory and practice of conducting business over the Internet and World Wide Web. Topics include Technology Infrastructure, Selling & Marketing on the Web, Business-to-Business Strategies, Virtual Communities & Web portals, Web Server Hardware and software, Electronic Commerce Software and Electronic Commerce Security.

Effective Fall 2017

CO INFO 64: Microcomputer Laboratory
• 1 unit, P/NP, 2 lab
• DA, CSU
• Corequisite: CO INFO 4, 7, 8, 14, 15, 16, or 21
• This computer lab course requires the student to maintain concurrent enrollment in a Computer Information Systems lecture course. All computer lab assignments for this course will originate from the lecture class the student is enrolled. This course fulfills the computer lab requirement for Computer Information Systems courses.

CO INFO 70: Cisco Networking Academy I
• 3 units, Letter, 2 lec/3 lab
• DA, CSU
• Pre- or co-requisite: CO INFO 001
• The first in a four course sequence that qualifies the student to take the CISCO CCNA Certification Test; and covers Fundamentals of Computer Internet-working, Safety Technology, Protocols, Network Theory and Standards, Cabling, Electrical Considerations, OSI Models, IP Addressing and basic networking Hardware.

Effective Spring 2017

CO INFO 71: Cisco Networking Academy II
• 3 units, Letter, 3 lec
• DA, CSU
• Prerequisite: CO INFO 70
• This is the second course in a four course sequence that qualifies the student to take the CISCO CCNA Certification Test; and covers router fundamentals, beginning router setup and configuration, routed and routing protocols, WAN fundamentals, network troubleshooting and network management.

Effective Spring 2017

CO INFO 72: Cisco Networking Academy III
• 3 units, Letter, 3 lec
• DA, CSU
• Prerequisite: CO INFO 71
• This is the third course in a four course sequence that qualifies the student to take the CISCO CERTIFICATION TEST; and covers advanced router set-up and configurations, LAN switching theory and VLANs, advanced LAN and LAN switched design, Novell IPX, and Threaded case studies.

Effective Spring 2017

CO INFO 73: Cisco Networking Academy IV
• 3 units, Letter, 3 lec
• DA, CSU
• Prerequisite: CO INFO 72
• This is the fourth course in a four course sequence that qualifies the student to take the CISCO CCNA Certification Exam; and covers advanced WAN theory and design; WAN Technology, PPP, Frame Relay, ISDN; Application of National SCANS skills in managing a network and network threaded case studies.

Effective Spring 2017

CO SCI (Computer Science)

CO SCI 58: Computer Literacy for the Liberal Arts Student
• 3 units, Letter, 2 lec/2 lab, DE
• DA, CSU/UC, LACCD D2, CSUGE A3
• This course develops critical thinking skills as applied to technological advances. Students will gain computer literacy by using the computer to evaluate issues. Hands-on projects using a current operating system, Internet search and e-mail, word processing, spreadsheet and presentation software are also included.

CO SCI 91: Beginning Basic Programming
• 3 units, Letter, 2 lec/2 lab, DE
• DA, CSU
• Advisory Prerequisite: CO SCI 58
• This course introduces problem-solving methods and programming using Visual Basic. Students will develop skills in writing event-driven, object-oriented programs incorporating decisions, loops, arrays and classes.

CO SCI 92: Hyper-Text Markup Language
• 3 units, Letter, 2 lec/2 lab, DE
• DA, CSU
• Advisory Prerequisite: CO SCI 58
• This course introduces design and development of web sites with HTML. These sites will incorporate
media, links, tables, forms and current standards. Design and layout will be enhanced with cascading style sheets. Interactivity is added with Javascript.

CO SCI 317: Beginning Micro Assembly Language
- 3 units, Letter, 2 lec/2 lab, DE
- DA, CSU/UC, C-ID COMP 142
- Advisory Prerequisite: Co SCI 340
- Students will see how high level language structures are implemented at the machine level. The relationship between the computer architecture and assembly language instructions will examined through projects written in Microsoft Assembly Language. Data and instruction representation, addressing, procedures, loops, decisions, stacks, macros, strings and floating point operations will be expressed in coding activities.

CO SCI 340: Programming in C++
- 3 units, Letter, 2 lec/2 lab, DE
- DA, CSU/UC, C-ID COMP 122
- Advisory Prerequisite: CO SCI 344
- This course provides an introduction to computer science and problem solving with the C++ language. Students will design, implement, test and debug programs. Topics include variables, data types, expressions, control structures, functions, and input/output.

CO SCI 344: Programming in Java
- 3 units, Letter, 2 lec/2 lab, DE
- DA, CSU/UC, C-ID COMP 112
- Advisory Prerequisite: CO SCI 58
- This course provides an introduction to computer science and object-oriented programming using the Java language. Students will design, implement, test and debug programs for various applications. Topics include algorithms, data types, classes, methods, control structures, arrays, and input/output.

CO SCI 360: Introduction to Data Structures
- 3 units, Letter, 2 lec/2 lab, DE
- DA, CSU, C-ID COMP 132
- Prerequisite: CO SCI 340
- In this second semester programming course, students apply software engineering techniques to design and develop larger algorithms and programs using data abstraction and data structures. Prerequisite: Completion of COSCI 340 or equivalent with a grade of ‘C’ or better.

CO SCI 942: Discrete Structure
- 3 units, Letter, 2 lec/2 lab, DE
- DA, CSU/UC, C-ID COMP 152
- Prerequisite: CO SCI 340
- This course is an introduction to the discrete structures used in Computer Science with an emphasis on their applications. Topics covered include: functions, relations and sets, basic logic, proof techniques, basics of counting, graphs, trees, and discrete probability.

CO TECH (Computer Technology)

CO TECH 35: Introduction to Linux +
- 3 units, Letter, 2 lec/3 lab
- DA
- This course introduces the Linux Operating System for the standard PC as outlined by COMPTIA in order to prepare students for Linux + Certification. Topics include Linux operating system, installation and configuration, and essential troubleshooting techniques to maintain a stable operating system or network. Students will develop Linux administrative skills by creating user groups, file systems and networks.

CO TECH 49: Introduction to Dynamic Web Applications
- 3 units, Letter, 2 lec/3 lab
- DA, CSU
- Prerequisite: Co Tech 35
- This course introduces the design of dynamic web application and implementation. Student will receive hands-on experience working with the Linux operating system through open source softwares. Topics include Javascripts, PHP, XML, Apache and MYSQL.

CO TECH 50: Basic DC Electronics
- 4 units, Letter, 3 lec/3 lab
- DA, CSU
- Advisory Corequisite: CO TECH 60
- This is a beginning course for Electronics(EL) and Computer Technology(CT) majors that assumes no prior knowledge in electronics. Topics include Direct Current (DC) circuit analysis, basic test equipment usage, circuit component identification, Ohm's law, Kirchoff's laws, calculations involving series, parallel, and series-parallel circuits. Laboratory exercises are used to develop technical hands-on skills and to reinforce theoretical subject material presented in lecture. A written laboratory report, summarizing experimental results, will be submitted at the end of each lab exercise. Computerized tutorial software is available to assist students in developing their
computational skills on electrical schematics and develop troubleshooting techniques.

**CO TECH 52: Fundamental Computer Direct Current Circuits and Laboratory**
- 4 units, Letter, 3 lec/3 lab
- DA, CSU
- Prerequisite: CO TECH 50
- This course presents the theory and application of direct current (DC) circuit analysis for series, parallel and complex circuits, as applied to computer circuits. Ohms Law, Kirchoff’s and network theorem analysis are emphasized in conjunction with resistive, capacitive, inductive and magnetic properties associated with combinational DC Circuit Analysis. A 3-hour per week laboratory accompanies the 3-hour lecture per week, in order to reinforce lecture and textbook theory and applications. Students prepare technical reports on their laboratory experiences. This course familiarizes students with basic test measuring equipment used in the computer Industry.

**CO TECH 56: Computer Logic and Arithmetic**
- 4 units, Letter, 3 lec/3 lab
- DA, CSU
- Prerequisite: CO TECH 50
- This is a beginning course for Electronic majors(EL) and Computer Technology majors(CT) that assumes no prior knowledge in digital electronics. Topics of coverage will include the following; intro to digital circuitry and lab orientation, basic logic gate construction & applications, Boolean Algebra as applied to logic design, Boolean simplification methods using Veitch and Karnaugh mapping techniques, basic arithmetic operations & circuits, number systems and code conversions, flip flops, synchronous & non-synchronous counters and shift registers. Laboratory exercises are used to develop technical report writing skills and to reinforce theoretical subject material presented in lecture. Tutorial software is available via the internet to assist students in developing their troubleshooting skills on digital electrical schematics.

**CO TECH 60: Computer Mathematics I**
- 5 units, Letter, 5 lec
- DA, CSU
- This course in computer mathematics includes the operation of the calculator, signed numbers, powers of ten notation, operations with algebraic expressions, fractional expressions, functions, quadratic solutions, engineering and scientific notations, graphing and application of mathematics to technical applications.

**CO TECH 61: Computer Mathematics II**
- 5 units, Letter, 5 lec
- DA, CSU
- Prerequisite: CO TECH 60
- This course in computer mathematics covers a review of algebraic concepts, powers of ten and scientific notation, metric system, algebraic expressions, algebraic equations, factoring equations containing fractions, function notations, graphing, special products and factors, exponents and radicals, quadratic equations, logarithmic equations, exponential equations, angles, complex numbers, triangles, trigonometric functions, solution of right triangles, trigonometric identities, phasors, complex operator, phasor algebra and applications of math to electronics.

**CO TECH 74: A+ Certification Preparation/ Intro to Computer Repair I**
- 4 units, Letter, 3 lec/3 lab
- DA, CSU
- This course introduces personal computer(PC), hardware operating system characteristics and basic troubleshooting/repair techniques. Students will develop the ability to assemble/disassemble an operational PC, perform system upgrades, learn and perform reformatting of hard drives(HD’s) and identify/replace malfunctioning hardware and peripheral devices. This is the first course in preparation to A+ certification.

**CO TECH 76: A+ Certification Preparation/ Intro to Computer Repair II**
- 4 units, Letter, 3 lec/3 lab
- DA, CSU
- This course utilizes hands-on training. Students learn to install, update, use, and repair the Windows Operating Systems XP and 7. Students learn how Operating Systems start up, operate, and how they interface with different hardware. Students learn how to set up a Local Area Network to share resources, and how to interface with the Internet. This is the second course in preparation for A+ certification.

**CO TECH 78: Introduction to Network +**
- 4 units, Letter, 3 lec/3 lab
- DA, CSU
- Prerequisite: CO TECH 76
- This course is structured to provide Networking fundamentals outlined by COMPTIA, to prepare students to become NETWORK+ Certified. Topics presented during lectures/labs include: network media and devices, TCP/IP, message packaging and routing, installations, network administration.
security, troubleshooting, fault tolerance and recovery, Internet services.

**CO TECH 80: Introduction to Server**
- 4 units, Letter, 3 lec/3 lab
- DA
- This course introduces Network Server fundamentals as outlined by COMPTIA, in order to prepare students to become Server+ certified. Topics include advanced server hardware SCSI, RAID, multiple CPUs, and I/O subsystems. Activities and complex problems involved in server configurations, maintenance and repair procedures are emphasized.

**CO TECH 81: Introduction to Fiber Optics**
- 1 unit, Letter, 3 lab
- DA
- This course provides students a laboratory experience in fiber optic technology. Topics include: fiber optic connectors and patch panels, splicing techniques, OTDR testing and measurements, techniques and products for fiber optic cabling termination, troubleshooting and documentation for fiber optic systems. “Hands on” laboratory emphasizing correct fiber optic fabrication techniques and the use of test equipment common in the computer and telecommunications industry.

**CO TECH 114: Network Security Fundamentals**
- 3 units, Letter, 2 lec/3 lab
- DA, CSU
- Prerequisite: CO TECH 78
- This course provides instruction and hands-on training in computer basic security principles, methods of establishing security baselines, and the most recent attack/defense techniques and technologies. In addition the course helps students prepare for CompTIA's examination and other professional security certification.

**CO TECH 185: Directed Study - Computer Technology**
- 1 unit, P/NP, 1 lec
- DA, CSU
- This course allow student to pursue Directed Study in Computer Technology on a contract basis under the direction of a supervising instructor.

Effective Spring 2017

**CO TECH 285: Directed Study - Computer Technology**
- 2 units, P/NP, 2 lec
- DA, CSU
- This course allow student to pursue Directed Study in Computer Technology on a contract basis under the direction of a supervising instructor.

Effective Spring 2017

**COMM (Communication Studies)**

**COMM 76: English Speech As A Second Language**
- 3 units, P/NP, 3 lec
- DA, CSU
- This English speech improvement class is for students with foreign language backgrounds and stresses pronunciation, intonation, idiomatic expressions, phrasing, grammar and vocabulary. Includes speaking assignments prepared by students.

Effective Spring 2017

**COMM 101: Public Speaking**
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD D2, CSUGE A1, IGETC 1C, C-ID COMM 110
- Theory and techniques of public speaking in democratic society. 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.

**COMM 102: Oral Communication II**
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD D2, CSUGE A1, IGETC 1C
- Prerequisite: COMM 101
- This course builds upon the foundation of Speech 101 with an emphasis on using multimedia communications and an industry standard presentation tool for efficient business presentations. Students will learn effective content and organizational strategies, as well as, professional visual aids approaches.

Effective Spring 2017

**COMM 104: Argumentation and Debate**
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD D2, CSUGE A3, IGETC 1C, C-ID COMM 120
- Advisory Corequisite: ENGLISH 101

**COMM 111: Voice and Articulation**
Student learning outcomes may appear in any or all of the following online locations: linked to the course outline at https://ecd.laccd.edu/Default.aspx, and/or listed at http://www.lahc.edu/facultystaff/slo/courseassessment.html, and/or https://effectiveness.lahc.edu/cpc/haps/SitePages/2015-18%20SLO-SA0%20Assessment.aspx. If so, those listed on the last site supersede all others.

COMM 121: Interpersonal Communication
- 3 units, Letter, 3 lec
- DA, CSU/UC
- Advisory Corequisite: ENGLISH 28
- This course covers the study and practice of methods of voice development, speech sound production, articulation, pronunciation and prosody.

COMM 122: Intercultural Communication
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD D2, CSUGE A1, IGETC 1C, C-ID COMM 130
- Advisory Corequisite: ENGLISH 101
- Principles of verbal and nonverbal transactions that occur in relationships. Study of theory and research findings and their application to communication in interpersonal relationships in personal and professional contexts

COMM 151: Small Group Communication
- 3 units, Letter, 3 lec
- DA, CSU/UC, C-ID COMM 140
- Advisory Corequisite: ENGLISH 101
- Principles of communication in a variety of group contexts. Theory, application, and evaluation of group communication processes, including problem solving, conflict management, decision making, and leadership.

COMM 190: Communication and New Media
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD B2, CSUGE D, IGETC 4
- Advisory Corequisite: ENGLISH 101
- This course introduces computer-mediated communication. Students examine how the Internet, specifically popular culture, social media, websites, blogs, podcasts, YouTube, and social networks, have reshaped communication practices. The course offers an overview of relevant theories and critical issues while providing students with the opportunity to apply communication skills using new media.

COUNSEL (Counseling)

COUNSEL 1: Introduction to College
- 1 unit, Letter, 1 lec
- DA, CSU/UC
- This course is designed to provide students with skills needed to succeed in college. Emphasis is placed on college policies and procedures, campus services and resources, study skills and time management. Additional topics include: Certificate and associate degree requirements and transfer admission requirements.

COUNSEL 2: Interpersonal Relationships
- 1 unit, Letter, 1 lec
- DA, CSU
- This course enhances interpersonal skills for building effective communication for personal and professional growth. It utilizes group dynamics by enhancing self-esteem through self-awareness, acceptance, ability to listen and workplace habits. An honest appraisal of individual strengths and weaknesses is made in an effort to help remove barriers to social and academic growth.

COUNSEL 4: Career Planning
- 1 unit, Letter, 1 lec, DE
- DA, CSU
- This is an educational and career planning course designed to help the undecided student make a meaningful decision regarding a career goal. The course includes career assessments, various self-appraisal techniques, and information regarding career characteristics and trends. The class includes exploration of career options utilizing career information technology. By providing the students with insight into their interests, abilities, work values, and personality, they will be able to make realistic and informed career choices.

COUNSEL 6: Career Planning for Students With Disabilities
- 1 unit, Letter or P/NP, 1 lec
- DA, CSU
- This course is designed to assist students with disabilities in the exploration and development of career goals with an emphasis on individual interests and lifestyle, values, personality traits and abilities. Topics covered include vocational assessment,
career exploration, resume writing, interview skills, and job-seeking strategies. Workplace accessibility issues and the impact of the Americans with Disabilities Act (ADA) will be discussed.

COUNSEL 17: College Survival Skills Development
- 1 unit, Letter, 1 lec, DE
- DA, CSU/UC
- This course provides the student with a variety of survival skills necessary to be a successful college student. Course includes instruction in using the library, study skills, time management, effective communication, self-esteem, stress management, and developing a healthy lifestyle. Campus services are explored.

COUNSEL 20: Post-Secondary Education: the Scope of Career Planning
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, CSUGE E
- This course provides students with the information to make appropriate educational, career and lifestyle choices. Topics examined include educational programs and their requirements, career resources and the career decision-making process, study skills and the elements of a healthy lifestyle. Students will design their own individualized educational plans.

COUNSEL 22: The Transfer Process
- 1 unit, Letter, 1 lec
- DA, CSU
- This course is an introduction to the transfer process. It is designed to enable students to become active participants in planning their long-term educational and career goals and will provide students with an understanding of the process and the requirements for transferring to a four-year college or university. These goals will enable the student to develop and transfer educational plan. The course will consist of lecture, use of internet resources, guest speakers and student assignments.

COUNSEL 40: College Success Seminar
- 3 units, Letter, 3 lec
- DA, CSU, LACCD E1, CSUGE E
- This course introduces students to the study of the educational, psychological, intellectual, social, and health-related factors that impact lifelong learning, well-being, and success. Students engage topics such as motivation, critical thinking, learning strategies, time management, communication strategies, career exploration and educational planning by means of active learning strategies such as classroom activities and discussions, peer presentations, real world scenarios and collaborative problem solving assignments.

Effective Summer 2017

DANCED (Dance Studies)

DANCED 058: History and Appreciation of Dance
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD C, CSUGE C1, IGETC 3A
- Advisory Prerequisite: ENGLISH 28 and 67
- Students learn a historical perspective of dance from ancient to contemporary theatrical dance forms focusing on the ethnic, cultural and ritual forms of dance as it affects and reflects the world in which people live. Primarily, students focus on how Dance reflects the times, historical, social and political climate of the day. Students consider the impact of dance on the western world and how it has been affected by the different dance traditions world-wide.

DANCED 141: Modern Dance Techniques I
- 1 unit, Letter, 2 lab
- DA, CSU/UC, LACCD E2, CSUGE E
- Students learn basic Modern Dance steps and combinations, terminology, music, and appreciation of dance as a performing art.

DEV COM (Developmental Communications)

DEV COM 20: Fundamentals of Reading and Writing
- 6 units, Letter, 6 lec
- NDA
- Prerequisite: DEV COM 35 or appropriate assessment test score
- This course prepares students for English 021 with an emphasis on the mastery of basic reading, writing, and study skills needed for college transfer and vocational programs.

DEV COM 35: Reading I: Fundamentals
- 3 units, Letter, 3 lec
- NDA
- This course is designed for the improvement of students’ college reading skills. It emphasizes reading fluency, reading comprehension, reading rate, and vocabulary improvement.

DEV COM 37Y: Communications Laboratory
- 1 unit, P/NP, 3 lab
- NDA

Letter: letter graded; P/NP: pass/no-pass graded; Repeatable: may be repeated; Lec/Lab: hours per week of lecture/lab; TBA: maximum total hours to be arranged; DE: distance education (online and/or hybrid); NC: non-credit; DA/NDA: degree/non-degree applicable; CSU/UC: transferability to the listed institution; LACCD/CSUGE/IGETC: general education area applicable; C-ID: CSU course ID equivalency; Prerequisite: required prerequisite (prior completion with a minimum grade of “C” or “P”); Corequisite: required corequisite (concurrent enrollment)
Student learning outcomes may appear in any or all of the following online locations: linked to the course outline at https://ecd.laccd.edu/Default.aspx, and/or listed at http://www.lahc.edu/facultystaff/slo/courseassessment.html, and/or https://effectiveness.lahc.edu/cpc/haps/SitePages/2015-18%20SLO-SAO%20Assessment.aspx. If so, those listed on the last site supersede all others.

DEV COM 37Z: Communications Laboratory
- 2 units, P/NP, 6 lab
- NDA
- Advisory Corequisite: DEV COM 35 or 76
- This is an open entry, variable credit course that offers students self-paced, individualized instruction in reading, vocabulary, and study skills at all levels.

DEV COM 76: English As A Second Language Reading - Conversation II
- 3 units, Letter, 3 lec
- NDA
- Advisory Corequisite: DEV COM 37Y or 37Z
- The primary purpose of this course is the improvement of reading in English. The course includes silent and oral reading, conversation, and correct pronunciation. It prepares the ESL student to meet the challenges of college study and everyday living.

DRAFT (Drafting)

DRAFT 1: General Drafting
- 3 units, Letter, 6 lab
- DA, CSU
- This course provides instruction in the underlying principles and theories of mechanical drafting, the use and care of drawing instruments, geometric construction, freehand technical sketching, multi-view (orthographic) This course also provides basic training in preparation for advanced industrial and drafting courses.

DRAFT 4: Applied Descriptive Geometry
- 4 units, Letter, 2 lec/4 lab
- DA, CSU
- Prerequisite: DRAFT 9
- This course contains a thorough applied descriptive geometry unit which includes advanced auxiliary projection, definitions, and solutions of lines and planes, revolution, intersections, and developments of planes and solids. Contour lines, topography, and vector analysis are introduced. Cam mechanisms are also reviewed.

DRAFT 6: Technology and Society
- 3 units, Letter, 3 lec
- DA, CSU, LACCD B2, CSUGE D
- This course will explore the interrelationships between technology and society. Topics include social factors that impact technology (historical, political, economic, ethical and environmental), and the ways in which technology affects society. This course is appropriate for students in both technical and non-technical majors.

DRAFT 9: Mechanical Drafting
- 3 units, Letter, 6 lab
- DA, CSU
- Prerequisite: DRAFT 1; Pre- or corequisite: DRAFT 16; Corequisite: DRAFT 51
- This course reviews and introduces primary and secondary auxiliary projections respectively. Investigation and application of limits and fits, geometrical tolerance (ANSI Y14.5) studies, bearings and retaining ring designs as incorporated in layouts and ink drawings, technical illustration including axonometric projection and perspectives are also included. Combined graphical and mathematical solutions to design problems are required throughout the course. The student is required to prepare a professional type resume.

DRAFT 16: Blueprint Reading I
- 2 units, Letter, 1 lec/2 lab
- DA, CSU
- This course provides instruction in reading and interpretation of materials detailed on blueprints. Symbols, conventions, dimensions, and language used in production and construction are included.

DRAFT 17: Blueprint Reading II
- 2 units, Letter, 1 lec/2 lab
- DA, CSU
- Prerequisite: DRAFT 16
- This course covers three-dimensional detail prints. Training is given in laying out reference lines and center points on parts involving simple linear and angular dimensions. Advanced terminology and symbol usage are stressed. A limited amount of drawing practice is included.

DRAFT 50: Production Drafting
- 4 units, Letter, 3 lec/3 lab
- DA, CSU
- Prerequisite: DRAFT 1; Pre- or corequisite: DRAFT 16
- This course emphasizes the drafting of industrial production parts. The course incorporates a review of orthographic projection, sectioning, and primary and secondary auxiliary views. Drawings are made of castings, forgings, gears, cams, machine parts, and
assemblies. Special attention is devoted to manufacturing procedures, surface finishes and dimensioning, and tolerance practices used in commercial as well as government and military specifications.

**DRAFT 51: Tooling Drafting**
- 4 units, Letter, 3 lec/3 lab
- DA, CSU
- Prerequisite: DRAFT 1; **Pre- or corequisite: DRAFT 16**
- This course emphasizes the drawing of production tools such as drill jigs, machine fixtures, and dies similar to those used in industry. Special attention is given to the development of production standards required by industry.

**DRAFT 54: Simplified Stress Analysis**
- 4 units, Letter, 3 lec/3 lab
- DA, CSU
- Prerequisite: DRAFT 1; **Pre- or corequisite: DRAFT 16**
- This course provides experience in solving machine and structural design problems. Principles of statics and strength of materials are applied to machine design as well as aircraft and spacecraft structural design. The emphasis is placed on applied stress analysis and properties of metals as found in Mil-Hdbk-5 and S.A.E. handbooks. Students verify their analysis by testing sample parts in the structural test laboratory. Design layouts and models are created by the students.

**DRAFT 55: Computer-Aided Design and Drafting**
- 3 units, Letter, 2 lec/3 lab
- DA, CSU/UC
- Prerequisite: DRAFT 1; **Pre- or corequisite: DRAFT 16**
- This course introduces Computer Aided Drafting and Design (CADD). Students learn to use typical menu oriented systems to prepare drawings on the computer. Students use libraries, store and retrieve drawings utilizing magnetic discs, and produce commercial quality drawings.

**DRAFT 56: Automated Manufacturing**
- 3 units, Letter, 2 lec/3 lab
- DA, CSU
- **Pre- or corequisite: DRAFT 50 or ENG GEN 111;** Prerequisite: DRAFT 50; Corequisite: DRAFT 82
- This course introduces the student to the fundamentals and principles of Computer Numerical Control (CNC) and Computer Aided Manufacturing (CAM) as applied to mills and lathes. The student is introduced to Basic Manual CNC operation and also applies machine (M and G) codes. Basic right angle trigonometry is introduced and applied in this course with emphasis on CNC applications.

**DRAFT 81: Projects Laboratory**
- 1 unit, Letter, 3 lab, 54:00 TBA
- DA, CSU
- Prerequisite: DRAFT 56; **Pre- or corequisite: DRAFT 16; Corequisite: Draft 56**
- This course provides advanced industry simulated problems requiring the application of previous drafting and mathematical skills attained through enrollment in the curriculum. A project paper is required. This course may be scheduled at times to be arranged (TBA) for a minimum of 54:00 hours.

**DRAFT 82: CAD Drafting Laboratory**
- 2 units, Letter, 6 lab
- DA, CSU
- **Pre- or corequisite: DRAFT 16; Corequisite: DRAFT 4, 9, 50, 51, 52, 54, 55, or 56**
- This course this course supplements drafting courses by providing students with computers and other equipment necessary to complete assignments.

**E D A (Emergency Department Assistant)**

**E D A 10A: Emergency Medical Technician IA Ambulance**
- 6 units, Letter, 6 lec
- DA
- Prerequisite: students must present to the instructor either a BLS for the Health Care Provider card from the American Heart Association or CPR for the Professional Rescuer from the American Red Cross, prior to the beginning of class or no later than the first; Corequisite: EDA 10B
- This course is a lecture presentation of emergency pre-hospital care of the sick and injured including anatomy and physiology, observation and assessment techniques, intervention and transportation. EDA 10A must be taken concurrently with EDA 10B. After successful completion of both classes, the student will be able to apply for the certification and to take the EMT certification examination.

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**Letter:** letter graded; **P/NP:** pass/no-pass graded; **Repeatable:** may be repeated; **Lec/Lab:** hours per week of lecture/lab; **TBA:** maximum total hours to be arranged; **DE:** distance education (online and/or hybrid); **NC:** non-credit; **DA/NDA:** degree/non-degree applicable; **CSU/UC:** transferability to the listed institution; **LACCD/CSUGE/IGETC:** general education area applicable; **C-ID:** CSU course ID equivalency; **Prerequisite:** required prerequisite (prior completion with a minimum grade of “C” or “P”); **Corequisite:** required corequisite (concurrent enrollment)
EDA 10B: Emergency Medical Technician IB
Ambulance
- 2 units, P/NP, 4 lab
- DA
- Prerequisite: students must present to the instructor either a BLS for the Health Care Provider card from the American Heart Association or CPR for the Professional Rescuer from the American Red Cross, prior to the beginning of class or no later than the first; Corequisite EDA 10A
- This laboratory course is designed to develop EMT clinical skill. Must have concurrent enrollment with EDA 10A. Through adherence to the D.O.T. (Department of Transportation) Basic Life Support Curriculum, the student will be given the opportunity to develop the necessary skills and abilities required to successfully pass the National Registry EMT certification examination. Upon successful completion of EDA 10A and B, the student may apply for said certification examination. An EMT may gain employment with an ambulance company, hospital tech and/or progress to paramedic training. With few exceptions, EMT is conducted at the basic life support level.

E.S.L. (English as a Second Language – Credit)
also see ESL (English as a Second Language) and ESL NC (English as a Second Language – Non-credit)

E.S.L. 4A: College ESL IV: Writing and Grammar
- 6 units, Letter, 6 lec
- NDA
- Prerequisite: ESL 3A or placement exam
- Students in this intermediate ESL course learn written composition, grammar, and critical reading skills to prepare them for college work. The emphasis is on writing based on critical reading and personal experience. Students will be introduced to summarizing skills. Grammar skills and mechanics are emphasized throughout each lesson. Required: Eight to ten writing assignments, including at least four paragraphs of 200-300 words. Prerequisite: Completion of ESL 3A with credit, or appropriate ESL placement level demonstrated through the assessment process.

E.S.L. 4C: College English As A Second Language IV:
Listening and Speaking
- 3 units, P/NP, 3 lec
- NDA
- This English speech improvement class is for students with foreign language backgrounds and stresses pronunciation, intonation, idiomatic expressions, phrasing, grammar and vocabulary. Includes speaking assignments prepared by students.

E.S.L. 5A: College ESL V: Writing and Grammar
- 6 units, Letter, 6 lec
- NDA
- Prerequisite: E.S.L. 4A or placement exam
- Students in this high-intermediate ESL course learn written composition, grammar, and critical reading skills to prepare them for college work. The emphasis is on writing based on critical reading, interpretation/analysis, and personal experience. Students will develop paraphrasing and summarizing skills. Grammar skills and mechanics are emphasized throughout each lesson. Required: Eight to ten writing assignments, including at least four compositions of 300-500 words. Prerequisite: Completion of ESL 4A with credit, or appropriate ESL placement level demonstrated through the assessment process.

E.S.L. 6A: College ESL VI: Writing and Grammar
- 6 units, Letter, 6 lec
- NDA
- Prerequisite: ESL 5A or placement exam
- Students in this advanced ESL course learn written composition, grammar, and critical reading skills to prepare them for college work. The emphasis is on writing based primarily on critical reading and interpretation/analysis. Students will be introduced to appropriate citation and basic bibliographic conventions in their writing. Advanced grammar skills and mechanics are emphasized throughout each lesson. Required: Eight to ten writing assignments, including at least four essays of 400-600 words. Prerequisite: Completion of ESL 5A with a grade of ‘C’ or better, or appropriate placement level demonstrated through the assessment process.

E.S.L. 84: College English As A Second Language I
- 5 units, Letter, 5 lec
- NDA
- This course is planned for students whose native tongue is not English or who need assistance in using English as a second language. The course stresses the study of idioms, sentence structure, word order, vocabulary, and reading for comprehension. It also provides practice in writing compositions.

E.S.L. 85: College English As A Second Language II
- 5 units, Letter, 5 lec
- DA, CSU
- Prerequisite: E.S.L. 84
- This course is designed for intermediate level students of English as a second language. It includes pronunciation practices, intermediate grammar,
E.S.L. 86: College English As A Second Language III
• 5 units, Letter, 5 lec
• DA, CSU/UC
• Prerequisite: E.S.L. 85
• This course is designed for advanced students of English as a second language. It emphasizes writing practice and the study of vocabulary and syntax.

ECON (Economics)

ECON 1: Principles of Economics I
• 3 units, Letter, 3 lec, DE
• DA, CSU/UC, LACCD B2, CSUGE D, IGETC 4, C-ID ECON 201
• Prerequisite: MATH 115 or 123A and 123B; Advisory Prerequisite: ECON 2 and MATH 123C or 125
• This course is an introduction to the principles of economic analysis and economic policy. Emphasis is placed on the micro, or price and market approach, with special emphasis on the allocation of resources and the distribution of income through the price system. Note: ECON 001 is not a Prerequisite: for ECON 002. Students who plan on taking both are advised to take ECON 002 first.

ECON 2: Principles of Economics II
• 3 units, Letter, 3 lec, DE
• DA, CSU/UC, LACCD B2, CSUGE D, IGETC 4, C-ID ECON 202
• Prerequisite: MATH 115 or 123A and 123B; Advisory Prerequisite: MATH 123C or 125
• This course is an introduction to the principles of economic analysis and economic policy. Emphasis is placed on the macro or national approach, with special attention given to aggregate economics, money, banking and national income. The course explores the problems of unemployment, inflation, and governmental policies related to these problems. Note: ECON 001 is not a Prerequisite: for this course. Students who plan on taking both are advised to take ECON 002 first.

EGT (Engineering - General Technology)

EGT 28: Technology and Society
• 3 units, Letter, 3 lec
• DA, CSU, LACCD B2, CSUGE D

EGT (Electronics)

ELECTRN 4: Fundamentals of Electronics I
• 4 units, Letter, 3 lec/3 lab
• DA, CSU
• This course presents the theory and application of direct current (DC) circuit analysis for series, parallel and complex circuits, as applied to computer circuits. Ohms Law, Kirchoff's and network theorem analysis are emphasized in conjunction with resistive, capacitive, inductive and magnetic properties associated with combinational DC Circuit Analysis. A 3-hour per week laboratory accompanies the 3-hour lecture per week, in order to reinforce lecture and textbook theory and applications. Students prepare technical reports on their laboratory experiences. This course familiarizes students with basic test measuring equipment used in the computer industry.

ELECTRN 5: Fundamentals of Electronics I Laboratory
• 1 unit, Letter, 3 lab
• DA, CSU
• Prerequisite: ELECTRN 4
• This course analyzes the basic laws of electronics through self-paced study laboratory procedures. The student performs laboratory investigations of network theorems using such test equipment as volt-ohm-amperes meters, DVM and D.C power supplies and submits written lab reports. Analytical investigations of R/C and R/L time constant circuits are also included.

ELECTRN 6: Fundamentals of Electronics II
• 4 units, Letter, 3 lec/3 lab
• DA, CSU
• Prerequisite: ELECTRN 4 and 16
• This course presents the theory and application of direct current (DC) circuit analysis for series, parallel and complex circuits. Ohms Law, Kirchoff's and network theorem analysis are emphasized in conjunction with resistive, capacitive, inductive and magnetic properties associated with combinational DC Circuit Analysis. A 3-hour per week laboratory accompanies the 3-hour lecture per week, in order to reinforce lecture and textbook theory and
applications. Students prepare technical reports on their laboratory experiences. This course familiarizes students with basic test measuring equipment.

**ELECTRN 7: Fundamentals of Electronics II Laboratory**
- 1 unit, Letter, 3 lab
- DA, CSU
- Prerequisite: ELECTRN 6
- This laboratory course provides additional self-paced experimental study of alternating current theory in Computer Technology-54. Experiments are performed with such test equipment as signal generators, time-base oscilloscopes, and the impedance bridge, EVM, and AC RMS meters.

**ELECTRN 16: Selected Elements of Electronics Mathematics**
- 5 units, Letter, 5 lec
- DA, CSU
- Prerequisite: ENG TEK 49
- This course in computer mathematics covers a review of algebraic concepts, powers of ten and scientific notation, metric system, algebraic expressions, algebraic equations, factoring equations containing fractions, function notations, graphing, special products and factors, exponents and radicals, quadratic equations, logarithmic equations, exponential equations, angles, complex numbers, triangles, trigonometric functions, solution of right triangles, trigonometric identities, phasors, complex operator, phasor algebra and applications of math to electronics.

**ELECTRN 20: Electronic Circuits I**
- 4 units, Letter, 3 lec/3 lab
- DA, CSU
- Advisory Corequisite: ENG TEK 49
- This course is a 4 unit class that meets for 6 hours/week (3 hrs. lecture, 3 hrs. lab). This is a beginning course for Electronic majors (EL) and Computer Technology majors (CT) that assumes no prior knowledge in electronics. Topics will be for Direct Current (DC) circuit analysis and will include basic test equipment usage, circuit component identification, Ohm's law, Kirchoff's laws, calculations involving series, parallel, and series parallel circuits. Laboratory exercises are used to develop technical hands-on skills and to reinforce theoretical subject material presented in lecture. A written laboratory report, summarizing experimental results, will be submitted at the end of each lab exercise. Computerized tutorial software is available to assist students in developing their computational skills on electrical schematics and develop troubleshooting techniques.

**ELECTRN 22: Electronic Circuits II**
- 4 units, Letter, 3 lec/3 lab
- DA, CSU
- Prerequisite: ELECTRN 6
- This course covers through lecture, discussion, and laboratory) semiconductor devices and their application to computer circuits with emphasis on linear circuits, including heat sink theory and evaluation, and the analysis of rectifier and amplifier circuits (including H-Parameters). Methods of testing and troubleshooting these devices are evaluated using standard lab test equipment (curve tracers, LCR bridge, x-y plotter and AC voltmeters). In addition, technical report writing is emphasized on concepts learned through experimentation.

Effective Spring 2017

**ELECTRN 54: Computer Logic**
- 4 units, Letter, 3 lec/3 lab
- DA, CSU
- This is a beginning course for Electronic majors (EL) and Computer Technology majors (CT) that assumes no prior knowledge in digital electronics. Topics of coverage will include the following; intro to digital circuitry and lab orientation, basic logic gate construction & applications, Boolean Algebra as applied to logic design, Boolean simplification methods using Veitch and Karnaugh mapping techniques, basic arithmetic operations & circuits, number systems and code conversions, flip flops, synchronous & non-synchronous counters and shift registers. Laboratory exercises are used to develop technical report writing skills and to reinforce theoretical subject material presented in lecture. Tutorial software is available via the internet to assist students in developing their troubleshooting skills on digital electrical schematics.

**EMERGENCY MEDICAL TECHNICIAN “EMT”**

See EDA “Emergency Department Assistance

**ENG GEN (Engineering – General)**

**ENG GEN 111: Introduction to Engineering Drafting**
- 3 units, Letter, 1 lec/5 lab
- DA, CSU/UC
- Prerequisite: DRAFT 1 or ENG GEN 912
• This course emphasizes the drafting of industrial production parts. The course incorporates a review of orthographic projection, sectioning, and primary and secondary auxiliary views. Drawings are made of castings, forgings, gears, cams, machine parts, and assemblies. Special attention is devoted to manufacturing procedures, surface finishes and dimensioning, and tolerance practices used in commercial as well as government and military specifications.

ENG GEN 112: Engineering Descriptive Geometry
• 3 units, Letter, 1 lec/5 lab
• DA, CSU/UC
• Prerequisite: DRAFT 9 or ENG GEN 111
• This course contains a thorough applied descriptive geometry unit which includes advanced auxiliary projection, definitions, and solutions of lines and planes, revolution, intersections, and developments of planes and solids. Contour lines, topography, and vector analysis are introduced. Cam mechanisms are also reviewed.

ENG GEN 243: Statics and Strength of Materials (Calculus Based)
• 4 units, Letter, 3 lec/3 lab
• DA, CSU/UC
• Prerequisite: DRAFT 1; Prerequisite or Corequisite: ENG GEN 112
• This course provides experience in solving machine and structural design problems. Principles of statics and strength of materials are applied to machine design as well as aircraft and spacecraft structural design. The emphasis is placed on applied stress analysis and properties of metals as found in Mil-Hdbk-5 and S.A.E. handbooks. Students verify their analysis by testing sample parts in the structural test laboratory. Design layouts and models are created by the students.

ENG GEN 912: Elementary Engineering Drafting
• 3 units, Letter, 1 lec/5 lab
• DA
• This course provides instruction in the underlying principles and theories of mechanical drafting, the use and care of drawing instruments, geometric construction, freehand technical sketching, multi-view (orthographic) This course also provides basic training in preparation for advanced industrial and drafting courses.

ENG TEK 25: Industrial Safety
• 1 unit, P/NP, 1 lec
• DA
• This course emphasizes CAL-Osha Program (California General Industrial Safety Orders) standards and benefits of accident prevention. Loss of productivity, morale, real and intangible costs, relating to accidents are discussed. Students have to write about and discuss a current documented industrial accident.

ENG TEK 35: Programming for Technicians
• 3 units, Letter, 2 lec/3 lab
• DA
• This course introduces the Basic programming language using elementary techniques to simplify the transition to the more sophisticated language Visual Basic. Visual Basic is widely used in many industrial technical applications.

ENG TEK 49: Technical Mathematics II
• 5 units, Letter, 5 lec
• DA
• This course in technical mathematics includes the operation of the calculator, signed numbers, powers of ten notation, operations with algebraic expressions, fractional expressions, functions, quadratic solutions, engineering and scientific notation, graphing, and application of mathematics to technical applications.

ENG TEK 50: Technical Mathematics III
• 5 units, Letter, 5 lec
• DA, CSU
• Prerequisite: ENG TEK 49
• This course in technical mathematics covers a review of algebraic concepts, powers of ten and scientific notation, metric system, algebraic expressions, algebraic equations, factoring equations containing fractions, function notations, graphing, special products and factors, exponents and radicals, quadratic equations, logarithmic equations, exponential equations, angles, complex numbers, triangles, trigonometric functions, solution of right triangles, trigonometric identities, phasors, complex operator, phasor algebra and applications of math to electronics.

ENG TEK 81: Fabrication Techniques
• 1 unit, Letter, 2 lab
• DA, CSU
• This course provides laboratory experience in fabrication principles utilized in the electronics &
ENGLISH

All new students must take an English assessment exam prior to enrolling in any ENGLISH course. The results of the exam will be used to place the student into the following sequence.

ENGLISH 101 satisfies the English competency requirement for graduation and the English composition requirement for both the CSU GE and IGETC plans. Students placed prior to ENGLISH 101 may advance through the sequence by achieving a minimum grade of "C" in each required prerequisite course. (The English Department does not offer credit by examination.)

**Prerequisite: DEV COM 20 or E.S.L. 86 (only if placed into DEV COM, E.S.L. or ESL courses via the English placement exam)**

(ENGLISH 67, which is a lab designed to accompany ENGLISH 21, 28, or 101, is not a required part of the sequence.)

Each of the following transferable courses requires ENGLISH 101 as a prerequisite, but otherwise may be taken in any order:

- ENGLISH 102 College Reading & Composition II
- ENGLISH 203 World Literature I
- ENGLISH 204 World Literature II
- ENGLISH 205 English Literature I
- ENGLISH 206 English Literature II
- ENGLISH 207 American Literature I
- ENGLISH 208 American Literature II
- ENGLISH 209 California Literature
- ENGLISH 213: Dramatic Literature Effective Spring 2017
- ENGLISH 214 Contemporary Literature
- ENGLISH 215 Shakespeare I
- ENGLISH 218 Children’s Literature
- ENGLISH 219 Literature of American Ethnic Groups
- ENGLISH 234 Afro-American Literature
- ENGLISH 239 Women in Literature
- ENGLISH 251: The Short Story Effective Spring 2017

ENGLISH 21: English Fundamentals
- 3 units, P/NP, 3 lec
- NDA
- **Prerequisite: DEV COM 20 or E.S.L. 86 (only if placed into DEV COM, E.S.L. or ESL courses via the English placement exam)**

English 021 is an entry-level course, which emphasizes improvement of writing skills, including correcting grammar errors, punctuation, capitalization, and other mechanics of writing. Students will progress from sentences to paragraphs and essay development in MLA format.

ENGLISH 28: Intermediate Reading and Composition
- 3 units, Letter, 3 lec, DE
- NDA
- **Prerequisite: ENGLISH 21 or 73 or appropriate assessment test score**

English 28 is the final preparatory course in composition and critical reading. Emphasis is placed on a review of grammar, mechanics, and paragraph writing. Students will write essays with various rhetorical patterns and will be introduced to research techniques. It is designed to assist the student in making the transition to English 101.

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Student learning outcomes may appear in any or all of the following online locations: linked to the course outline at https://ecd.laccd.edu/Default.aspx, and/or listed at http://www.lahc.edu/facultystaff/slo/courseassessment.html, and/or https://effectiveness.lahc.edu/cpc/haps/SitePages/2015-18%20SLO-SAO%20Assessment.aspx. If so, those listed on the last site supersede all others.
ENGLISH 31: Composition and Critical Reading
- 5 units, Letter, 5 lec
- NDA
- Prerequisite: ENGLISH 21 or appropriate assessment test score
- English 31 is the final preparatory course in composition and critical reading. Emphasis is placed on a review of grammar, mechanics, and paragraph writing. Students will write essays incorporating various rhetorical modes and will be introduced to research techniques. The course is designed to assist the student in making the transition to English 101.

ENGLISH 73: Beginning College Reading and Writing
- 3 units, P/NP, 2 lec/3 lab
- NDA
- Prerequisite: ENGLISH 21 or appropriate assessment test score.
- English 073 is an entry-level course, which emphasizes improvement of writing skills, including correcting grammar errors, punctuation, capitalization, and other mechanics of writing. Students will progress from sentences to paragraphs and essay development in MLA format.

ENGLISH 100: Accelerated Prep: College Writing
- 3 units, Letter, 3 lec/1 lab, DE
- NDA, CSU
- Prerequisite: DEV COMM 20, or ESL 6A, or placement exam
- This course prepares students for academic reading, critical thinking, and writing expected in transfer and associate-degree classes. Students plan, draft, revise, and edit compositions based on college-level readings that cover topics that challenge students' thinking and provide an intellectual background for the assignments. This course prepares students for English 101. Effective Spring 2017

ENGLISH 101: College Reading and Composition I
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD D1, CSUGE A2, IGETC 1A, C-ID ENGL 100
- Prerequisite: ENGLISH 28 or 31 or appropriate assessment test score
- English 101 is a course in critical reading and prose writing designed to refine the student's skills in thinking logically, reading carefully, and writing effectively. Stress is placed on the organization and composition of objective expository essays, including the research paper.

ENGLISH 102: College Reading and Composition II
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD D2, CSUGE A3, IGETC 1B, C-ID ENGL 120
- Prerequisite: ENGLISH 101
- This course develops reading, writing, and critical thinking skills beyond the level achieved in English 101 and requires the writing of a minimum of 10,000 words in essays and a research paper throughout the semester. It emphasizes logical reasoning, analysis, and strategies of argumentation using literature and literary criticism. Evaluations of texts reveal the multicultural/global aspects of our society, which include traditional and contemporary forms in fiction, poetry, essays, and drama.

ENGLISH 103: Composition and Critical Thinking
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC
- Prerequisite: ENGLISH 101
- This course, which meets the transfer critical thinking requirement, is designed to develop transfer-ready critical thinking, reading, and writing skills beyond the level achieved in English 101. Based on college-level readings, the course will focus on the development of logical reasoning and analytical and argumentative writing skills, and research strategies with a minimum of 10,000 words of student writing submitted over the semester. Students will apply established modes of reasoning, analyze rhetorical strategies, evaluate logical fallacies, and detect propaganda techniques.

ENGLISH 127: Creative Writing
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, C-ID ENGL 200
- Prerequisite: ENGLISH 101
- This course is designed for those who want to learn to write professionally. Students write poems, plays, stories, or essays and present them for informal discussion and criticism by the class and instructor.

Letter: letter graded; P/NP: pass/no-pass graded; Repeatable: may be repeated; Lec/Lab: hours per week of lecture/lab; TBA: maximum total hours to be arranged; DE: distance education (online and/or hybrid); NC: non-credit; DA/NDA: degree/non-degree applicable; CSU/UC: transferability to the listed institution; LACCD/CSUGE/IGETC: general education area applicable; C-ID: CSU course ID equivalency; Prerequisite: required prerequisite (prior completion with a minimum grade of “C” or “P”); Corequisite: required corequisite (concurrent enrollment)
The course offers an opportunity to discover and develop talent and to practice basic professional writing techniques.

**ENGLISH 137: Library Research and Bibliography**
- 1 unit, Letter, 1 lec
- DA, CSU/UC
- Corequisite: ENGLISH 101
- The student will learn to locate, evaluate, interpret, analyze, and organize information from a wide variety of library and internet sources with the object of producing a finished research paper. Students will learn to refine a topic, take notes, outline, document sources, and format a research paper.

**ENGLISH 185: Directed Study - English**
- 1 unit, Letter, 1 lec, 18:00 TBA
- DA, CSU
- Students will work on self-paced, self-directed learning activities that will assist with grammar and writing skills. This course may be scheduled at times to be arranged (TBA) for a minimum of 18:00 hours.

**ENGLISH 203: World Literature I**
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD C, CSUGE C2, IGETC 3B, C-ID ENGL 140
- Prerequisite: ENGLISH 101
- Great works of literature are studied in the context of the cultures that produced them. Mythic, Classical, Hebrew, Greek, Roman, Middle Ages, and the Renaissance writers are read and discussed.

**ENGLISH 204: World Literature II**
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD C, CSUGE C2, IGETC 3B, C-ID ENGL 145
- Prerequisite: ENGLISH 101
- This course looks at masterpieces of world literature following the Renaissance. Selections to be read and studied are from the Neo-Classic, the Romantic, the Realist, and the Modern periods.

**ENGLISH 205: English Literature I**
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD C, CSUGE C2, IGETC 3B, C-ID ENGL 160
- Prerequisite: ENGLISH 101
- This course surveys the literature of England from the Old English period to the late Neo-Classical period.

**ENGLISH 206: English Literature II**
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD C, CSUGE C2, IGETC 3B, C-ID ENGL 165
- Prerequisite: ENGLISH 101
- This course is a continuation of English 205. British Literature of the Romantic, Victorian, and Modern Periods is read and discussed.

**ENGLISH 207: American Literature I**
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD C, CSUGE C2, IGETC 3B, C-ID ENGL 130
- Prerequisite: ENGLISH 101
- This course introduces American writers and writings from colonial times to 1865. Besides working with major writers, students will become acquainted with writers who suggest the diversity of subject and opinion in American literature.

**ENGLISH 208: American Literature II**
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD C, CSUGE C2, IGETC 3B, C-ID ENGL 135
- Prerequisite: ENGLISH 101
- This course is a study of selected writers in the United States from the Civil War to the present.

**ENGLISH 209: California Literature**
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD C, CSUGE C2, IGETC 3B
- Prerequisite: ENGLISH 101
- California Literature presents selected works by writers observing California life: Dana, Twin, Jackson, Norris, London, Steinbeck. These readings from sources as varied as Indian legend and Hollywood memoir demonstrate such aspects of the study of literature as conflict, characterization, and theme.

**ENGLISH 211: Fiction**
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD C, CSUGE C2, IGETC 3B
- Prerequisite: ENGLISH 101
- This course is a literary survey of the English and American novel from the beginning of the 18th century to the present.

**ENGLISH 213: Dramatic Literature**
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD C, CSUGE C2, IGETC 3B
- Prerequisite: ENGLISH 101
- This is a survey course of dramatic literature selected from significant periods of achievement from the classical period to the present day. Students interpret, evaluate and analyze, in depth, a range of plays that have shaped dramatic literature from the time of the early Greek dramatists to our present day dramatists. Effective Spring 2017

Student learning outcomes may appear in any or all of the following online locations: linked to the course outline at https://ecd.laccd.edu/Default.aspx, and/or listed at http://www.lahc.edu/facultystaff/slo/courseassessment.html, and/or https://effectiveness.lahc.edu/cpc/haps/SitePages/2015-18%20SLO-SA%20Assessment.aspx. If so, those listed on the last site supersede all others.
ENGLISH 214: Contemporary Literature
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD C, CSUGE C2, IGETC 3B
- Prerequisite: ENGLISH 101
- Representative examples of post-World War II literature are studied in this course, including Salinger, Cheever, O'Connor, Updike, Oates, Atwood, and others. Works will be examined in light of their literary attributes and their reflection of the complexities of contemporary life, values, and thought.

ENGLISH 215: Shakespeare I
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD C, CSUGE C2, IGETC 3B
- Prerequisite: ENGLISH 101
- This is an introductory look at the Shakespeare canon, including a brief look at the theatrical background. The course will concentrate on eight major plays and poetry.

ENGLISH 218: Children's Literature
- 3 units, Letter, 3 lec, DE
- DA, CSU, LACCD C, CSUGE C2
- Prerequisite: ENGLISH 101
- This survey course analyzes picture books, folk tales, fantasy and modern realism written for children from preschoolers to teens.

ENGLISH 219: The Literature of American Ethnic Groups
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD D2, CSUGE C2
- Prerequisite: ENGLISH 101
- Through various readings students will visit diverse cultures in order to grasp content and meaning of the work, to look beyond plot to infer what a given author’s views are regarding people’s actions, what motivates them, and how they deal with other human beings and with conflicts that confront them as it relates to ethnicity.

ENGLISH 223: Creative Nonfiction
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD C, CSUGE C2, IGETC 3B
- Prerequisite: ENGLISH 101
- Students will read and write different genres of Creative Nonfiction (biography, profiles, editorials, cultural criticism, personal narrative, travel, diary, etc.). During the semester, students will learn to recognize and explore the features of creative nonfiction, and through the writing process, discover how to apply creative writing techniques to nonfiction subjects in both traditional and new media formats.

At the end of the course, students will have produced a portfolio of work and submitted an article for publication or e-published. Effective Fall 2017

ENGLISH 234: African-American Literature I
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD C, CSUGE C2, IGETC 3B
- Prerequisite: ENGLISH 101
- This survey course examines the literary history of African-Americans through studying oral traditions, novels, short stories, poems, dramas, and essays written by African-Americans, revealing the dynamics of American culture as interpreted by African-Americans seeking to define themselves and other Americans.

ENGLISH 239: Women in Literature
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD C, CSUGE C2, IGETC 3B
- Prerequisite: ENGLISH 101
- English 239 examines the roles of women in various cultures and literary periods in novels, short stories, poetry, drama, and essays.

ENGLISH 240: Literature and the Motion Picture I
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD C, CSUGE C2, IGETC 3B
- Prerequisite: ENGLISH 101
- This is a course in comparative media which emphasizes the differences between films and the writings on which they are based.

ENGLISH 251:
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD C, CSUGE C2, IGETC 3B
- Prerequisite: ENGLISH 101
- English 251 provides a study of the short story as a literary genre, with emphasis on close, informed reading and literary analysis, both written and in class discussion. The course looks at the rich short story tradition. It explores ideas and techniques of this genre through the works of a broad range of writers from diverse backgrounds and representing a variety of literary movements. Effective Spring 2017

ENGLISH 260: Detective and Crime Fiction
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD C, CSUGE C2, IGETC 3B
- Prerequisite: ENGLISH 101
- This class examines works of detective and crime fiction as literature. The course will explore critical questions of relevance to the genre, such as how specific works reflect societal anxieties and whether detective fiction is an essentially American genre. Effective Fall 2017
ENGLISH 270: Science Fiction - Fantasy
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCDD C, CSUGE C2, IGETC 3B
- Prerequisite: ENGLISH 101
- This class looks at science fiction and fantasy as literature. Starting with their roots in myth and folk literature and some of the early works of science fiction, the course will explore these literary genres with emphasis on philosophical, political, social, and scientific issues.

Effective Fall 2017

ENGLISH 271: Graphic Fiction
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCDD C, CSUGE C2, IGETC 3B
- Prerequisite: ENGLISH 101
- This class looks critically at comics and graphic novels as literature. The class will begin chronologically with the origin of comics and move to current graphic novels. In addition, the class will explore character, plot, dialogue, setting and other storytelling elements using various literary lenses such as New Criticism, Feminism, and other focuses to analyze the futures and fantasies created by graphic fiction writers and illustrators.

Effective Fall 2017

ENGLISH 385: Directed Study - English
- 3 units, Letter, 3 lec
- DA, CSU
- This course allows students to pursue directed study in English on a contract basis under the direction of a supervising instructor.

ENV (Environmental Design)

ENV 101: Foundations of Design I
- 3 units, Letter, 1 lec/5 lab
- DA, CSU/UC
- This course introduces design laboratory studio for students pursuing architecture, environmental or other design fields focusing on the study of elements, form, and space. Sustainable design topics, drawing and model-making techniques are covered.

ENV 102: Foundations of Design II
- 3 units, Letter, 1 lec/5 lab
- DA, CSU
- Prerequisite: ENV 101
- This course serves as a design laboratory studio for students pursuing architecture, environmental or other design fields focusing on the study of organization, circulation, proportion and scale.

ENV SCI (Environmental Science)

ENV SCI 1: The Human Environment: Physical Processes
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCDD A, CSUGE B1, IGETC 5A
- This course introduces students to fundamentals of the physical environment of the Earth. Students will be familiar with the basics of the geologic, oceanic, and atmospheric environmental processes. Topics emphasized will include geologic hazards, natural resources, and environmental pollution.

Effective Fall 2017

ENV SCI 2: The Human Environment: Biological Processes
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCDD A, CSUGE B2, IGETC 5B
- This course presents an overview of global environmental concerns, conservation history, and environmental ethics is presented. Ecology, population biology and their application to environmental problems is reviewed. Pollution and its effects on ecosystems are discussed. Management of natural resources is explored.

ESL (English as a Second Language)

also see E.S.L. (English as a Second Language – Credit) and ESL NC (English as a Second Language – Non-credit)

ESL 3A: College ESL III: Writing and Grammar
- 6 units, Letter, 6 lec
- NDA
- This course is designed for ESL students at the high beginning – low intermediate level. The course assists students in improving their writing skills to prepare for college work. Emphasis is placed on sentence structure, paragraph development, and specific composition-related grammatical problems.

ESL NC (English as a Second Language - Non-Credit)

also see E.S.L. (English as a Second Language – Credit) and ESL (English as a Second Language)

ESL NC 5C: English As A Second Language
- 0 units, Non-credit, Repeatable, 2 lec
• NC, NDA
• The English as a second language basic skills course is designed as a forum for students to develop listening, speaking, and grammar skills. An emphasis will be placed on the production and comprehension of simple phrases and basic sentence structures.

ESL NC 40CE:
Writing/Grammar/Reading/Vocabulary/Listening/Speaking I
  • 0 units, Non-credit, Repeatable, 5 lec
  • NC, NDA
  • This competency-based, open-entry ESL course teaches beginning English speaking, listening, reading and writing skills to non-native speakers of English. The focus of instruction is on the speaking and understanding necessary to satisfy routine social demands and limited work requirements. Students learn to comprehend frequently used words in context, use learned phrases and sentences to communicate needs, understand basic grammar structures and read simplified material.

Effective Spring 2017

ESL NC 41CE:
Writing/Grammar/Reading/Vocabulary/Listening/Speaking II
  • 0 units, Non-credit, Repeatable, 5 lec
  • NC, NDA
  • This competency-based, open-entry ESL course teaches high beginning English speaking, listening, comprehension, reading and writing to non-native speakers of English. This course develops communicative competence in listening, speaking, reading and writing skills in English. To develop these skills, a sequence of grammatical structures is integrated in the context of everyday situations.

Effective Spring 2017

ESL NC 42CE:
Writing/Grammar/Reading/Vocabulary/Listening/Speaking III
  • 0 units, Non-credit, Repeatable, 5 lec
  • NC, NDA
  • This open-entry, competency-based course is designed to develop communicative competence in listening, speaking, reading, and writing for the immediate needs of adult non-native English learners at the intermediate low level.

Effective Spring 2017

FAM &CS (Family and Consumer Studies)

FAM &CS 21: Nutrition

• 3 units, Letter, 3 lec
• DA, CSU/UC, LACCD E1, CSUGE E
• The relationship between diet and health is emphasized. The functions, sources, and interrelationships of nutrients are explored. Current topics including heart disease, diabetes, cancer, osteoporosis, weight management, and sports nutrition are investigated. Nutritional status and body fat composition are assessed by computer analysis.

FINANCE

FINANCE 2: Investments
  • 3 units, Letter, 3 lec, DE
  • DA, CSU
  • This is a first course in investments. It focuses on both individual securities and portfolios. The course will give students the information they need to plan, implements and manage a successful investment program. It provides students with a solid foundation of basic concepts, tools and techniques of popular investments vehicles-common stocks, bonds, preferred stocks, convertible securities and mutual funds.

FINANCE 8: Personal Finance and Investments
  • 3 units, Letter, 3 lec, DE
  • DA, CSU
  • This course provides the student with financial fundamentals to manage personal income and expenditures. It outlines the indicators in everyday communications that helps the individual make sound financial decisions to structure reasonable financial goals and plans. Emphasis on budgeting, credit, home ownership, risk management and the individual's personal balance sheet and net worth.

FIRETEK (Fire Technology)

FIRETEK 201: Fire Protection Organization
  • 3 units, Letter, 3 lec, 54:00 TBA, DE
  • DA, CSU
  • This course provides an overview to fire protection; career opportunities in fire protection and related fields; philosophy and history of fire protection/service; 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. This course may be scheduled at times to be arranged (TBA) for a minimum of 54:00 hours.

**FIRETEK 202: Fire Prevention**
- 3 units, Letter, 3 lec, DE
- DA, CSU
- This course provides fundamental information regarding the history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use of fire codes, identification and correction of fire hazards, and the relationships of fire prevention with built-in fire protection systems, fire investigation, and fire and life-safety education.

**FIRETEK 203: Fire Protection Equipment and Systems**
- 3 units, Letter, 3 lec, DE
- DA, CSU
- This course provides information relating to the features of design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection and portable fire extinguishers.

**FIRETEK 204: Building Construction for Fire Protection**
- 3 units, Letter, 3 lec, DE
- DA, CSU
- This course provides the components of building construction that relate to fire and life safety. The focus of this course is on firefighter safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at emergencies.

**FIRETEK 205: Fire Behavior and Combustion**
- 3 units, Letter, 3 lec, DE
- DA, CSU
- Prerequisite: FIRE TEK 201
- This course covers the theory and fundamentals of how and why fires start, spread, and are controlled. An in-depth study of fire chemistry and physics, of the fire characteristics of materials; of extinguishing agents; and of fire control techniques.

**FIRETEK 207: Wildland Fire Control**
- 3 units, Letter, 3 lec, DE
- DA, CSU
- This course provides information relating to the incident command system and how it is used to control order and assign resources on wildland fires. The course will survey the methods used to suppress wildland fires, including the use of water, fire retardants, hand crews, bulldozers, aircraft and back firing.

**FIRETEK 209: Fire Tactics and Strategy**
- 3 units, Letter, 3 lec, DE
- DA, CSU
- This course is an introduction to structural fire fighting methods. The course will provide students with the knowledge and information regarding the basic for procedures and policies for attacking a variety of structural fires. Included is information on the incident command system which is used to direct large scale fire operations.

**FIRETEK 210: Fire Company Organization and Procedure**
- 3 units, Letter, 3 lec, DE
- DA, CSU
- This course is the study of the practical application of records, reports, and company training; the history and authority of the fire company; equipment and building maintenance; work organization; discipline and morale.

**FIRETEK 213: Fire Investigation**
- 3 units, Letter, 3 lec, DE
- DA, CSU
- This course is intended to provide the student with the fundamentals and technical knowledge needed for proper fire scene interpretations, including recognizing and conducting origin and cause, preservation of evidence and documentation, scene security, motives of the firesetter, and types of fire causes.

**FIRETEK 216: Fundamentals of Personal Fire Safety & Emergency Action**
- 3 units, Letter, 3 lec, DE
- DA, CSU
- This course introduces the basic concepts of occupational health and safety as it relates to emergency service organizations. Topics include risk evaluation and control procedures for fire stations, training sites, emergency vehicles, and emergency situations involving fire, EMS, hazardous materials, and technical rescue. Upon completion of this course, students should be able to establish and manage a safety program in an emergency service organization.

**FIRETEK 217: Fire Apparatus**
- 3 units, Letter, 3 lec, DE
- DA, CSU
- Prerequisite: FIRE TEK 201
This course covers the principles of care, maintenance and operation of fire department vehicles. Subjects include internal combustion engines, power development and transmission, torque and horsepower, electrical and brake systems, carburation, engine tune-up and troubleshooting, characteristics of fuels and lubricants, and safe emergency and non-emergency driving procedures.

**FRENCH**

**FRENCH 1: Elementary French I**
- 5 units, Letter, 5 lec, DE
- DA, CSU/UC, LACCD C, CSUGE C2, IGETC 3B

**FRENCH 2: Elementary French II**
- 5 units, Letter, 5 lec, DE
- DA, CSU/UC, LACCD C, CSUGE C2, IGETC 3B

**FRENCH 003: Intermediate French I**
- 5 units, Letter, 5 lec, DE
- DA, CSU/UC, LACCD C, CSUGE C2, IGETC 3B

**FRENCH 025: French and Francophone Short Story in Translation**
- 3 units, Letter, 3 lec

**FRENCH 026: Understanding French Culture Through Film**
- 3 units, Letter, 3 lec

**FRENCH 10: French Civilization**
- 3 units, Letter, 3 lec

**GEOG (Geography)**

**GEOG 1: Physical Geography**
- 3 units, Letter, 3 lec

**GEOG 2: Cultural Elements of Geography**
- 3 units, Letter, 3 lec
Student learning outcomes may appear in any or all of the following online locations: linked to the course outline at https://ecd.laccd.edu/Default.aspx, and/or listed at http://www.lahc.edu/facultystaff/slo/courseassessment.html, and/or https://effectiveness.lahc.edu/cpc/haps/SitePages/2015-18%20SLO-SA0%20Assessment.aspx. If so, those listed on the last site supersede all others.

GEOG 7: World Regional Geography
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD B2, CSUGE D
- This course examines the physical and cultural environments of Europe, Latin America, Middle east, Africa, Asia, and the Pacific. Physical landscapes, climates, population, cultural patterns, livelihoods, and international connections are all explored.

GEOG 15: Physical Geography Laboratory
- 2 units, Letter, 1 lec/2 lab
- DA, CSU/UC, CSUGE B3, IGETC 5C
- Prerequisite or Corequisite: GEOG 1; Advisory Prerequisite: ENGLISH 28
- This course uses maps, lab manual diagrams and exercises, aerial photos, plants, soils, and rocks, to examine Earth-sun relationships, the science of maps, weather and climate, biological adaptations, and types of landforms.

GEOLOGY

GEOLOGY 1: Physical Geology
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD A, CSUGE B1, IGETC 5A, C-ID GEOL 100
- This introductory course surveys the materials and structure of the Earth, and the processes which modify it. Major topics to be studied include rocks and their mineral composition, plate tectonics, volcanoes and earthquakes. Also studied will be the agents of erosion; the work of rivers, glaciers, wind, land slides, and the oceans. Field trips to geological sites of southern California are made.

GEOLOGY 6: Physical Geology Laboratory
- 2 units, Letter, 1 lec/2 lab
- DA, CSU/UC, CSUGE B3, IGETC 5C, C-ID GEOL 100
- Prerequisite: GEOLOGY 1
- This course supplements Geology 1 by providing practical experience in the identification of rocks, reading topographic and geologic maps, analysis of seismic data, rock structures, coastal features, and landslides, and study of fossils. Field trips to geological sites of southern California are made.

HEALTH

HEALTH 2: Health and Fitness
- 3 units, Letter, 2 lec/2 lab, DE
- DA, CSU/UC, LACCD E1, CSUGE E
- This course explores physical fitness as related to cardio-pulmonary capacity, nutrition, stress and addictive substances. The course involves laboratory assessment of each student's fitness status, lecture and experiences in a variety of selected fitness activities. Based on these experiences students are expected to develop an individualized physical fitness program.

HEALTH 6: Nutrition for Healthful Living and Fitness Activities
- 3 units, Letter, 2 lec/2 lab
- DA, CSU/UC, LACCD E1, CSUGE E
- Basic nutrition theories, information for healthful food purchasing, the relationship of nutrition to disease, general health concerns of women and the exchange weight-loss plan are discussed. Benefits of exercise and techniques for body conditioning are learned. Class time includes participation in fitness activities including aerobic, developmental, and flexibility exercises.

HEALTH 11: Principles of Healthful Living
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD E1, CSUGE E
- This course includes the teaching of personal, family and community health, encompassing: the effects of alcohol, tobacco, dangerous drugs and narcotics on the human body; nutrition and physical fitness; mental health; and common disease. It encompasses much of the same content as Health 010 explores the subject in greater depth.

HEALTH 12: Safety Education and First Aid
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, CSUGE E, C-ID KIN 101
- This course covers the standard Personal Safety and Advanced Emergency Care of the American National Red Cross. The prevention of common accidents and the care of emergencies in the home, school, and the community are also studied.

HISTORY

HISTORY 1: Introduction to Western Civilization I
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD B2, CSUGE D, IGETC 4, C-ID HIST 170

Student learning outcomes may appear in any or all of the following online locations: linked to the course outline at https://ecd.laccd.edu/Default.aspx, and/or listed at http://www.lahc.edu/facultystaff/slo/courseassessment.html, and/or https://effectiveness.lahc.edu/cpc/haps/SitePages/2015-18%20SLO-SA0%20Assessment.aspx. If so, those listed on the last site supersede all others.
This course surveys the political, economic, social, religious, and intellectual activities of Western Civilization from the pre-history period through the fifteenth century. The study includes the ancient Middle East, Egypt, Greece, Rome, the Middle Ages, and the Renaissance and Reformation.

**HISTORY 2: Introduction to Western Civilization II**
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD B2, CSUGE D, IGTC 4, C-ID HIST 180
- This course surveys Western Civilization from the Protestant Reformation to the present. Major topics include the political, economic, and social organization of Europe with emphasis upon the rise of the nation state and industrialization. European imperialism in the nineteenth and twentieth centuries is also examined.

**HISTORY 5: History of the Americas I**
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD B1
- This course examines the social, political, and economic developments of the Americas from the pre-Columbian era through the period of U.S. and Latin American independence. Emphasis is placed on the Native American cultures, European-Indian encounters, colonial settlements, imperial rivalries, and the independence movements in the western hemisphere.

**HISTORY 6: History of the Americas II**
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD B1, CSUGE D, IGTC 4
- This course studies the economic, political, and social development of the Western Hemisphere in the nineteenth century to the present. This course meets the California State University requirements for United States history.

**HISTORY 11: Political and Social History of the United States I**
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD B1/B2, CSUGE D, IGTC 4, C-ID HIST 130
- This course surveys the political, social, and economic history of the United States from the Colonial era to 1876 with emphasis on the origin and implementation of the U.S. Constitution. This course meets the California State University requirements for United States History.

**HISTORY 12: Political and Social History of the United States II**
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD B1/B2, CSUGE D, IGTC 4
- This is the second semester course in United States History. It includes the political, cultural, and social development of the United States from 1876 to the present. This course meets California State University requirements for United States History.

**HISTORY 12H: Political and Social History of the United States II**
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD B1/B2, CSUGE D, IGTC 4
- This is the second semester course in United States History. It includes the political, cultural, and social development of the United States from 1876 to the present. This course meets California State University requirements for United States History. Students must be admitted into the Honors program. See instructor or Honors Program Transfer Counselor for more information. The LAHC Honors Program is designed to encourage the development of talent and ability in highly motivate students as they begin their academic studies and prepare to transfer to a four-year college or university.

**Effective Spring 2017**

**HISTORY 19: History of Mexico**
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD B2, CSUGE D, IGTC 4
- This course examines the cultural, social, political, and economic history of Mexico from the pre-Columbian era to the present.

**HISTORY 20: History of California and the Pacific Coast**
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD B2, CSUGE D, IGTC 4F
- This course surveys the history of the Pacific Coast from pre-History to the present.

**HISTORY 21: History of the Russian People**
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD B2, CSUGE D, IGTC 4
- The course examines the development of Russia with emphasis on the nineteenth century to the present.

**HISTORY 41: The African American in the History of the U.S. I**
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD B1/B2, CSUGE D, IGTC 4

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**Letter**: letter graded; **P/NP**: pass/no-pass graded; **Repeatable**: may be repeated; **Lec/Lab**: hours per week of lecture/lab; **TBA**: maximum total hours to be arranged; **DE**: distance education (online and/or hybrid); **NC**: non-credit; **DA/NDA**: degree/non-degree applicable; **CSU/UC**: transferability to the listed institution; **LACCD/CSUGE/IGETC**: general education area applicable; **C-ID**: CSU course ID equivalency; **Prerequisite**: required prerequisite (prior completion with a minimum grade of “C” or “P”); **Corequisite**: required corequisite (concurrent enrollment)
This course surveys of United States history from the origins in Africa through the Civil War with special emphasis on the contributions of African-Americans. A study of the United States Constitution is also included. This course meets California State University requirements for United States history.

**HISTORY 42: The African American in the History of the U.S. II**
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD B1/B2, CSUGE D, IGETC 4
- History 41 is not a Prerequisite: for this course. Credit is allowed in only one of History 12, 42, or 44. This course surveys U.S. History from Reconstruction to the present time with special emphasis on the contributions of African-Americans. This course meets the California State University requirement for United States History.

**HISTORY 43: The Mexican-American in the History of the United States I**
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD B1/B2, CSUGE D, IGETC 4
- This course surveys U.S. History from the pre-Hispanic era through the Civil War focusing on the contributions of Mexican-Americans. This course meets California State University requirements for United States History and the Constitution.

**HISTORY 44: The Mexican American in the History of the United States II**
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD B1/B2, CSUGE D, IGETC 4
- History 43 is not a Prerequisite: for this course. Credit is allowed in only one of History 44, 42, or 12. This course surveys United States history from 1876 to the present with emphasis on the contributions of Mexican-Americans. The course meets the California State University requirement for United States History.

**HISTORY 52: The Role of Women in the History of the U.S.**
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD B1/B2, CSUGE D, IGETC 4
- This course is a survey of women's roles throughout U.S. History focusing on the influence of race, ethnicity, and status on women's experience. This course meets the California State University requirement for United States History.

**HISTORY 58: The Asian American in the History of the United States**
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD B1/B2, CSUGE D, IGETC 4
- This is an introductory history of Asians in the United States from the mid nineteenth century to the present. The course emphasizes the experiences of Asian immigrants and Asian Americans within the broader context of immigration and race relations throughout American history. An interdisciplinary approach will be taken to address the issues facing Asian Americans including gender, race, identity, politics, socialization, assimilation, and popular culture.

**HISTORY 74: Asian Civilization**
- 3 units, Letter, 3 lec
- This course surveys the social, political, and economic evolution of Asia from the pre-history period to the present. Regions studied in the course include South, Southeast and East Asia.

**HISTORY 81: A History of Working People in the United States I**
- 3 units, Letter, 3 lec
- This course studies the history of American labor from the colonial era through Reconstruction from the perspective of America's multicultural working people. Emphasis is also placed upon the defining role of the American Constitution and its impact upon labor.

**HISTORY 82: A History of Working People in the United States II**
- 3 units, Letter, 3 lec, DE
- This course focuses on working people in the history of the United States from Reconstruction to the present. Issues of class, gender, and race within the context of work and the influence of organizations and collective action will be emphasized. The defining role of the American Constitution and its impact upon labor will also be examined.

**HISTORY 86: Introduction to World Civilization I**
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD B2/C, CSUGE C2/D, IGETC 3B/4, C-ID HIST 150
- This course surveys world civilization from the pre-history period up to 1500 and includes a comparative study of the social, economic, and political formation and cultural interactions. Major topics include the development of major civilizations, migration and settlement patterns, religion, philosophy, and technology.
HISTORY 87: Introduction to World Civilization II
• 3 units, Letter, 3 lec, DE
• DA, CSU/UC, LACCD B2/C, CSUGE C2/D, IGETC 3B/4, C-ID HIST 160
• This course surveys world civilization from 1500 to the present time. Major topics include the development of the nation-state, economic systems, global conquests, nationalism, and revolutionary movements in the twentieth and twenty-first centuries.

HISTORY 385: Directed Study - History
• 3 units, Letter, 3 lec, DE
• DA, CSU/UC
• This course allows students to pursue Directed Study in History on a contract basis under the direction of a supervising instructor.

HLTHOCC 64: Cultural and Legal Topics for Health Care Professionals
• 1 unit, Letter, 1 lec
• DA
• Prerequisite: student must complete H-Pact orientation; Advisory Corequisite: ENGLISH 21
• This course provides an overview of the concepts of health and illness, cultural diversity and legal issues that affect the health care professional.

HLTHOCC 65: Fundamentals for the Health Care Professional
• 2.5 units, Letter, 2.5 lec
• DA
• Prerequisite: student must complete H-Pact orientation; Advisory Corequisite: ENGLISH 21
• This course explores career options in the health care industry, healthy behavior for health care workers, work ethics, professional resumes and interviewing skills and personality traits of a health care professional. There will be an externship during which area employers will introduce students to direct and indirect patient care opportunities.

HUMAN (Humanities)

HUMAN 1: Cultural Patterns of Western Civilization
• 3 units, Letter, 3 lec
• DA, CSU/UC, LACCD C, CSUGE C2, IGETC 3B
• This course introduces the general concepts of Humanities. Mythology, music, history, philosophy, painting, drama, sculpture and architecture are studied and compared in relation to their background, medium, organization and style. The course surveys in depth the classical heritage of Greece and Rome. Emphasis is placed upon the awareness of cultural heritage, values and perspectives as revealed in the arts.

HUMAN 6: Great People, Great Ages
• 3 units, Letter, 3 lec
• DA, CSU/UC, LACCD C, CSUGE C2, IGETC 3B
• Advisory Corequisite: ENGLISH 28

Letter: letter graded; P/NP: pass/no-pass graded; Repeatable: may be repeated; Lecl/Lab: hours per week of lecture/lab; TBA: maximum total hours to be arranged; DE: distance education (online and/or hybrid); NC: non-credit; DA/NDA: degree/non-degree applicable; CSU/UC: transferability to the listed institution; LACCD/CSUGE/IGETC: general education area applicable; C-ID: CSU course ID equivalency; Prerequisite: required prerequisite (prior completion with a minimum grade of “C” or “P”); Corequisite: required corequisite (concurrent enrollment)
This course presents a cultural survey of the lives and contributions of selected individuals such as Martin Luther, Louis XIV and others whose impact helped shape the eras in which they lived. The course will explore both the lives and eras with an appreciation of both their historical importance and their individual contributions to our cultural heritage.

HUMAN 17: Film Appreciation
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD C, CSUGE C2, IGETC 3B
- This course is a survey of motion pictures and changing social attitudes in film from the silent era to the present. Film appreciation, dealing with the ability of popular movies to crystallize society’s myths, fantasies, and realities, is presented within a historical, social context. Movie heroes and heroines and their relationship to culture will be studied by viewing representative feature films.

HUMAN 60: People and Their World: Technology and the Humanities
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD C, CSUGE C2, IGETC 3B
- The purpose of this course is to involve the student in a study of the urban environment and society. The approach of the course is interdisciplinary, involving such disciplines as: art, music, literature, drama, philosophy, technology, and history. The emphasis is on exploring the interaction of the individual and society. The interrelationship of humanities and technology within modern society is discussed for the student to gain a better understanding of the modern world and its culture.

IND DSN 101: Materials, Processes, Fabrication
- 2 units, Letter, 1 lec/3 lab
- DA, CSU
- This course is an introduction to digital design and methods of fabrication including materials, equipment and processes for students entering the advanced manufacturing or industrial design fields. Students will be introduced to analog and digital formats, including 2-D CAD, 3-D CAD and parametric modeling. Exploration of materials and fabrication techniques in a hands on lab environment to create prototypes.

IND DSN 201: Industrial Design I
- 3 units, Letter, 1 lec/5 lab
- DA, CSU/UC
- Prerequisite: ENV 102
- This course explores product design and the nature and limitations of materials using two and three-dimensional form making. Design projects involve fundamental design principles and procedures, drawing techniques, and presentation methods as they relate to industrial design. Special emphasis is placed on the justification for design, user interface and manufacture.

IND DSN 202: Industrial Design II
- 3 units, Letter, 1 lec/5 lab
- DA, CSU
- Prerequisite: ENV 201
- This course explores product design and the nature and limitations of materials using two and three-dimensional form making. Design projects involve fundamental design principles and procedures, drawing techniques, and presentation methods as they relate to industrial design. Special emphasis is placed on the justification for design, user interface and manufacture.

IND DSN 262: Advanced Parametric Modeling
- 3 units, Letter, 1 lec/5 lab
- DA, CSU
- Prerequisite: DRAFT 50 or ENG GEN 111
- This course covers advanced surfacing topics in Solidworks parametric software including lofts, sweeps, boundary and freeform surfaces. Preparation for injection molding and presentation quality rendering is also covered.

INTBUS (International Trade)

INTBUS 1: International Trade
- 3 units, Letter, 3 lec, DE
- DA, CSU
- This course covers the accelerating global economy and internationalization of business. It reviews international economics, finance, and trade affecting international business decisions and operations. Includes multinational enterprises, legal, political, and socio-cultural issues, survey of global strategic management. Covers the basics of starting and operating an import or export business.

INTBUS 3: Export Procedures I
- 3 units, Letter, 3 lec, DE
- DA, CSU
- Prerequisite: INT BUS 1
- In this course the student identifies, defines, and explains that which is required by the United States
regulatory agencies to export from the United States. Emphasis will be placed on how to determine if a commodity is acceptable for export and how to prepare the proper documentation required by the country of destination.

**INTBUS 4: Import Procedures I**
- 3 units, Letter, 3 lec
- DA, CSU
- Advisory Corequisite: INT BUS 1
- In this course the student learns how to identify, define, and explain the United States regulatory agencies requirements to import to the United States. Emphasis will be placed on how to determine what duties commodities might be subject to and how to prepare and present to the Bureau of Customs the shipment and its document.

**INTBUS 006: International Marketing I**
- 3 units, Letter, 3 lec
- DA, CSU
- Students analyze the challenges of marketing consumer and industrial products in the global marketplace and the most effective approaches to these challenges. The top potential exports for different countries and the most promising markets through the use of current market data and actual case studies of international marketing companies are explored.

**INTBUS 022: International Management**
- 3 units, Letter, 3 lec
- DA, CSU
- Students examine international management principles with an overview of global and multinational organizations. The issues of international human resource, operational topics, marketing decisions, strategic planning, and cross-cultural issues are analyzed.

**INTBUS 601: Introduction to Global Trade and Logistics**
- 3 units, Letter, 3 lec
- DA, CSU
- Students examine international management principles with an overview of global and multinational organizations. The issues of international human resource, operational topics, marketing decisions, strategic planning, and cross-cultural issues are analyzed.

**JAPAN 001: Elementary Japanese I**
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD C, CSUGE C2, IGETC 3B, 6A
- This course develops basic Japanese language proficiency in the four language skills—listening, speaking, reading, and writing—and introductory cultural knowledge. The course provides an active learning environment to obtain skills and includes some cultural activities to enhance learning.

**JAPAN 21: Fundamentals of Japanese I**
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD C, CSUGE C2, IGETC 6A
- This course covers a half of Japanese 1 and is designed for the acquisition of basic skills in listening, speaking, reading, and writing, as well as the understanding of the culture relevant to language functions. Instruction will balance all four skills to provide a solid foundation for further language study. The class will be conducted through interactive pair and group activities, lectures, and assignments. This course is NOT recommended for native speakers of Japanese nor students who have completed two years of high school Japanese with a grade of B or better.

**JAPAN 22: Fundamentals of Japanese II**
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD C, CSUGE C2, IGETC 6A
- Prerequisite: JAPAN 21
- This course is continuation of the first half of Japanese I and is designed for further development of basic skills in listening, speaking, reading, and writing, as well as the understanding of the culture relevant to language functions. Instruction will balance all four skills to provide a solid foundation for further language study. The class will be conducted through interactive pair and group activities, lectures, and assignments. Students who have completed two years of high school Japanese with a grade of B or better may enroll. Native speakers of Japanese who have completed compulsory education in Japan may not enroll.

**JOURNAL (Journalism)**

**JOURNAL 101: Collecting and Writing News**
- 3 units, Letter, 3 lec
- DA, CSU, C-ID JOUR 110
• This introductory course stresses instruction in the gathering of information and in its presentation. Extensive writing experience is emphasized. Critical evaluation of news reporting includes instruction and practice in the avoidance of faulty interpretation of facts, in the critical presentation of information and in the recognition of propaganda appeals and libel. Newspaper, radio and television news are surveyed. Adherence to writing style and standards of the profession are emphasized.

JOURNAL 105: Mass Communications
• 3 units, Letter, 3 lec
• DA, CSU/UC, LACCD D2, CSUGE A3
• This course provides an examination of America’s mass communications systems and how they affect human behavior in relation to social, political and economic institutions. There is further discussion on the structure and function in print and electronic communications including film, print, television, radio, the recording industry, public relations and the Internet.

Effective Fall 2017

JOURNAL 108: Advanced News Writing
• 3 units, Letter, 3 lec
• DA, CSU
• This is a course for journalism majors, freelance writers and anyone who wants to learn to write articles for media. Emphasis is placed on writing articles features, editorials, or reviews suitable for publication. Students also receive practice in editing and the use of illustrations.

Effective Fall 2017

JOURNAL 202: Article Writing
• 3 units, Letter, 3 lec
• DA, CSU
• Prerequisite: JOURNAL 101
• Students practice the principles of journalism through writing specialized types of newspaper and online stories. Mastery of fundamental reporting techniques, interpretative writing skills, editorial writing, and feature writing are emphasized. This course is required for all journalism majors.

Effective Fall 2017

JOURNAL 217: Publication Laboratory
• 2 units, Letter, 6 lab
• DA, CSU
• Advisory Corequisite: JOURNAL 101
• Student reporters, editors, photographers and other visual student journalists learn newspaper production and website techniques through the publication of the campus newspaper and website, as well as other student-produced publications. Reporters will focus on basic reporting and writing for the campus newspaper and website and other student-run publications, while photographers focus on gathering images for publications. Other visual journalists will focus on beginning layout and design or cartooning and illustration.

JOURNAL 217-1: Publication Laboratory I
• 2 units, Letter, 6 lab
• DA, CSU
• Advisory Corequisite: JOURNAL 101
• In this beginning level course, students learn introductory newspaper production techniques through the publication of the campus newspaper, including newspaper design, layout, graphic techniques, and materials. Student reporters, editors, photographers and other visual journalists receive practical instruction in basic production and publication. Deadlines and real-world working conditions are stressed.

JOURNAL 217-2: Publication Laboratory II
• 2 units, Letter, 6 lab
• DA, CSU
• Prerequisite: JOURNAL 217-1
• In this intermediate level course, students learn to identify relevant editorial topics and produce content for the opinion/editorial section, through the publication of the campus newspaper. Reporters, photographers and cartoonists learn to collaborate at the intermediate level in order to produce effective staff editorials and editorial cartoons or other images. Students also produce content for the news section, and learn to create style sheets and dummy pages for the graphic design of the op/ed section. Students adhere to strict deadlines.

JOURNAL 217-3: Publication Laboratory III
• 2 units, Letter, 6 lab
• DA, CSU
• Prerequisite: JOURNAL 217-2
• In this advanced course, students learn newspaper production techniques, and adapt print work to the Internet. Advanced students produce stories for the print edition of the campus newspaper and also contribute content to the newspaper's digital site. Students focus on introductory vertical reporting skills that may include photography, videography, broadcast editing, broadcast reporting and print reporting. Students learn to generate ideas for photo essays, graphics centerpieces and bar charts.

Student learning outcomes may appear in any or all of the following online locations: linked to the course outline at https://ecd.laccd.edu/Default.aspx, and/or listed at http://www.lahc.edu/facultystaff/slo/courseassessment.html, and/or https://effectiveness.lahc.edu/cpc/haps/SitePages/2015-18%20SLO-SAO%20Assessment.aspx. If so, those listed on the last site supersede all others.
Student reporters focus on series and investigative reporting techniques.

JOURNAL 217-4: Publication Laboratory IV
- 2 units, Letter, 6 lab
- DA, CSU
- Prerequisite: JOURNAL 217-3
- Students learn professional-level newspaper production techniques through the publication of the campus newspaper, with an emphasis on mobile journalism and social media. At the professional level, students write for the campus newspaper and practice the skills necessary to work across social media, broadcast and print platforms. At the professional level, all students publish blogs, and create online portfolios.

JOURNAL 218: Practical Editing
- 3 units, Letter, 1 lec/6 lab
- DA, CSU
- This course provides practical instruction and practice in writing and editing the student newspaper and companion website.

JOURNAL 220: Magazine Production
- 3 units, Letter, 2 lec/3 lab
- DA, CSU
- Prerequisite: JOURNAL 101
- Students will learn the theory and practice of planning and producing a print magazine. This includes pre-press production, budgeting, writing, editing and publishing a magazine that includes social media, photography and broadcast components. Unity of design and artistic principles are stressed to produce compelling pages. Students also focus on the selection and use of typographic fonts in layout and design. Students learn to create production schedules, and to work closely with the printer to stay on budget to produce the most compelling edition possible of the Collegian Times.

Effective Fall 2017

JOURNAL 258: Blogging and Social Media
- 3 units, Letter, 1 lec/6 lab
- DA, CSU
- This course provides practical instruction and practice in developing, producing, writing and marketing blogs as part of the student online campus publications. Online editions are evaluated and critiqued in regularly scheduled student staff meetings.

Effective Fall 2017

JOURNAL 385: Directed Study - Journalism
- 3 units, Letter, 3 lec
- DA, CSU
- Maximum number of units for any combination of Directed Study 185, 285 and 385 is three (3).
- This course allows students to pursue directed study in English on a contract basis under the direction of a supervising instructor.

PUB REL 001: Principles of Public Relations
- 3 units, Letter, 3 lec
- DA, CSU
- Students evaluate public relations as a growing profession. Students look at the job opportunities for the practitioner, internal and external PR and investigate relationships with the media, organizing and executing campaigns and tie-ins with marketing. The use of social media, photography, graphics and video/audio components for campaigns is studied.

Effective Fall 2017

KIN (Kinesiology)

formerly PHYS ED (Physical Education); also see KIN ATH (Kinesiology – Athletics) and KIN MAJ (Kinesiology – Majors)

KIN 10: Kinesiology - Physical Fitness
- 1 unit, Letter, 2 lab
- DA, CSU/UC, LACCD E2, CSUGE E
- This course is designed for the conscientious student who is unable to attend conventional class hours but wants to improve physical efficiency by using a scientific approach to physical fitness. Students will be tested on ergometric cycles, heart rate monitoring equipment, and blood pressure recorder, etc. Grading can be based on re-testing results. Work is done on a contract basis.

KIN 45: Adapted Fitness
- 1 unit, Letter, 0.5 lec/2.5 lab, 45:00 TBA
- DA, CSU/UC, LACCD E2, CSUGE E
- This course is designed to meet the needs of students with disabilities requiring restricted or modified activities. Individualized exercise programs will be performed by students with instruction covering the basic elements of physical fitness and training principles. Students with disabilities must provide a physicians prescription for exercises. This course may be scheduled at times to be arranged (TBA) for a minimum of 45:00 hours.

KIN 46: Adapted Strength Training
- 1 unit, Letter, 0.5 lec/2.5 lab, 45:00 TBA
- DA, CSU/UC, LACCD E2, CSUGE E
- This course is designed to meet the needs of students with disabilities who require restricted or modified activities. Individualized exercise programs will be performed by students with instruction covering the basic elements of physical fitness and training principles. Students with disabilities must provide a physicians prescription for exercises. This course may be scheduled at times to be arranged (TBA) for a minimum of 45:00 hours.
Activities are designed to enhance fitness, self-esteem, and social interaction. The main focus of the class is skill development. Students with disabilities must provide a physicians prescription for exercises.

KIN 185: Directed Study—Kinesiology
- 1 unit, Letter, 3 lab
- DA, CSU, LACCD E2, CSUGE E
- Prerequisite: instructor permission
- Student pursues directed study on a contract basis under the direction of a supervising instructor. A fitness log is required.

KIN 217: Self-Defense Skills
- 1 unit, Letter, 2 lab
- DA, CSU/UC, LACCD E2, CSUGE E
- This is an activity course designed to include theory, techniques, and practice of self-defense skills. The course includes information for prevention and avoidance of danger, rape, becoming a victim and basic self-defense skills.

KIN 217-1: Self Defense Skills I
- 1 unit, Letter, 0.5 lec/1.5 lab
- DA, CSU/UC, LACCD E2, CSUGE E
- Prerequisite: KIN 217 or 217-1
- This course instructs the student in self-defense and personal safety skills for men and women against deadly dangerous and other physical attacks at an introductory level. The course includes discussion of safety precautions and the promotion of mental and physical well-being.

KIN 217-2: Self-Defense Skills II
- 1 unit, Letter, 0.5 lec/1.5 lab
- DA, CSU/UC
- Prerequisite: KIN 217 or 217-1
- This course instructs the student in self-defense and personal safety skills for men and women against deadly dangerous and other physical attacks at a beginning karate and martial arts skills level. The course includes discussion of safe defense and protection strategies and the promotion of mental and physical well-being.

KIN 229: Body Conditioning Skills
- 1 unit, Letter, 2 lab
- DA, CSU/UC, LACCD E2, CSUGE E
- This course will familiarize the student with procedures for evaluating fitness levels and will allow the student to experience the cognitive, affective and psycho motor levels of learning a variety of exercise.
programs and techniques which will improve the students' level of physical fitness.

**KIN 229-1: Body Conditioning Skills I**
- 1 unit, Letter, 2 lab
- DA, CSU/UC, LACCD E2, CSUGE E
- **Prerequisite: KIN 229**
- This course will introduce students to cardiovascular and strength training activities using different modes of training. Students will assess their fitness levels to help improve their physical fitness levels.

**KIN 229-2: Body Conditioning Skills II**
- 1 unit, Letter, 2 lab
- DA, CSU/UC, LACCD E2, CSUGE E
- **Prerequisite: KIN 229 or KIN 229-1**
- This course combines cardiovascular exercise, strength training and flexibility to further improve students fitness levels. Students will use fitness assessments to develop an individualized conditioning program to meet their needs.

**KIN 245: Body Dynamics Skills**
- 1 unit, Letter, 2 lab
- DA, CSU
- Emphasis is on physical fitness through a non-traditional strength training. Students will leave with and extensive exercise library using non traditional equipment (fit balls, bends, medicine balls, etc.)

**KIN 245-1: Body Dynamics Skills I**
- 1 unit, Letter, 2 lab
- DA, CSU/UC, LACCD E2, CSUGE E
- Emphasis is on physical fitness through a non-traditional strength training. Students will leave with and extensive exercise library using non traditional equipment (fit balls, bends, medicine balls, etc.)

**KIN 245-2: Body Dynamics Skills II**
- 1 unit, Letter, 2 lab
- DA, CSU/UC, LACCD E2, CSUGE E
- **Prerequisite: KIN 245 or 245-1**
- Emphasis is on physical fitness through a non-traditional strength training. Students will leave with and extensive exercise library using non traditional equipment (fit balls, bends, medicine balls, etc.)

**KIN 250-1: Weight Training Skills I**
- 1 unit, Letter, 2 lab, 45:00 TBA
- DA, CSU/UC, LACCD E2, CSUGE E
- Students develop muscular strength and endurance using weight machines and free weights. They employ proper training techniques necessary to maintain personal fitness throughout the lifespan.

**KIN 250-2: Weight Training Skills II**
- 1 unit, Letter, 2 lab, 45:00 TBA
- DA, CSU/UC, LACCD E2, CSUGE E
- **Prerequisite: KIN 250-1**
- Students develop resistance training experience and become involved in a higher level of exercise. They will be exposed to a wide variety of machine as well as free weight exercises and will then design a program based on individual needs.

**KIN 251: Yoga Skills**
- 1 unit, Letter, 2 lab
- DA, CSU/UC, LACCD E2, CSUGE E
- This course is designed to improve both strength and flexibility through mind and body integration. The course focuses on the physical and breathing exercises of Yoga. It will assist with the development of flexibility and strength in the skeletal, muscular, and nervous systems, improve circulation, reduce stress, and increase energy levels. Various styles of Hatha Yoga will be studied and practiced. This course will give the student both the knowledge and the practice to move toward improved health and reduce stress levels.

**KIN 251-1: Yoga Skills - I**
- 1 unit, Letter, 2 lab
- DA, CSU/UC, LACCD E2, CSUGE E
- Students learn the physical practice of Yoga, connecting body, mind and spirit. The students are introduced to its origins, asanas (positions) and terminology.

**KIN 251-2: Yoga Skills - II**
- 1 unit, Letter, 2 lab
- DA, CSU/UC, LACCD E2, CSUGE E
- **Prerequisite: KIN 251 or 251-1**
- This course is designed to improve both strength and flexibility through mind and body integration. The course focuses on the physical and breathing exercises of Yoga. It will assist with the development of flexibility and strength in the skeletal, muscular, and nervous systems, improve circulation, reduce stress, and increase energy levels. Various styles of Hatha Yoga will be studied and practiced. This course will give the student both the knowledge and the practice to move toward improved health and reduce stress levels.

**KIN 258: Golf Skills**
- 1 unit, Letter, 2 lab
- DA, CSU/UC, LACCD E2, CSUGE E

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**Letter**: letter graded; **P/NP**: pass/no-pass graded; **Repeatable**: may be repeated; **Lec/Lab**: hours per week of lecture/lab; **TBA**: maximum total hours to be arranged; **DE**: distance education (online and/or hybrid); **NC**: non-credit; **DA/NDA**: degree/non-degree applicable; **CSU/UC**: transferability to the listed institution; **LACCD/CSUGE/IGETC**: general education area applicable; **C-ID**: CSU course ID equivalency; **Prerequisite**: required prerequisite (prior completion with a minimum grade of “C” or “P”); **Corequisite**: required corequisite (concurrent enrollment)
This course offers instruction and practice in the fundamental skills and basic techniques of golf. Students are given instruction in etiquette, rules and strategy of golf.

**KIN 268-1: Golf Skills I**
- 1 unit, Letter, 2 lab
- DA, CSU/UC, LACCD E2, CSUGE E
- This course offers instruction and practice in the fundamental skills and basic techniques of golf. Students are given instruction in etiquette, rules and strategy of golf.

**KIN 268-2: Golf Skills II**
- 1 unit, Letter, 2 lab
- DA, CSU, LACCD E2, CSUGE E
- Prerequisite: KIN 268 or 268-1
- This course offers instruction and practice in the fundamental skills and basic techniques of golf. Students are given instruction in etiquette, rules and strategy of golf.

**KIN 272: Track and Field Skills**
- 1 unit, Letter, 0.5 lec/2.5 lab
- DA, CSU/UC
- Students learn instruction and practice in the events relevant to track and field. Topics include techniques, strategies, fitness conditioning, and rules pertaining to all aspects and events of track and field. Some of the topics include disk throwing, hurdles, sprinting, cross training and injury prevention. Emphasis will be put on proper biomechanics and injury prevention.

**KIN 287: Basketball Skills**
- 1 unit, Letter, 2 lab
- DA, CSU/UC, LACCD E2, CSUGE E
- This course offers instruction and practice on the fundamental skills and basic techniques of basketball.

**KIN 287-1: Basketball Skills I**
- 1 unit, Letter, 2 lab
- DA, CSU/UC, LACCD E2, CSUGE E
- Students practice, at a beginning level, the fundamental skills of basketball (dribbling, shooting, passing) and basic offensive and defensive team strategies through instruction and drills.

**KIN 287-2: Basketball Skills II**
- 1 unit, Letter, 2 lab
- DA, CSU/UC, LACCD E2, CSUGE E
- Prerequisite: KIN 287 or 287-1
- Students practice, at an intermediate level, the fundamental skills of basketball (dribbling, shooting, passing) and improve their ability to perform these skills under game conditions. They learn how to be a contributing team member on offense and defense by setting screens, playing various zone defenses, and running a half-court press.

**KIN 288: Flag/Touch Football Skills**
- 1 unit, Letter, 2 lab
- DA, CSU/UC, LACCD E2, CSUGE E
- This course is designed to teach students skills related to flag football as a team activity.

**KIN 288-1: Flag/Touch Football Skills I**
- 1 unit, Letter, 2 lab
- DA, CSU/UC, LACCD E2, CSUGE E
- This course is designed to teach students skills related to flag football as a team activity. Each level will explore the topic in greater depth.

**KIN 288-2: Flag/Touch Football Skills II**
- 1 unit, Letter, 2 lab
- DA, CSU/UC, LACCD E2, CSUGE E
- Prerequisite: KIN 288 or 288-1
- This course is designed to teach students advanced skills related to flag football as a team activity.

**KIN 291: Volleyball Skills**
- 1 unit, Letter, 2 lab
- DA, CSU/UC, LACCD E2, CSUGE E
- This course is designed to teach beginning to intermediate volleyball skills of passing, setting, spiking, serving and blocking. The course will introduce individual and team offense and defense systems, as well as the rules, proper etiquette, terminology, components of fitness, nutritional and injury prevention strategies for volleyball.

**KIN 291-1: Volleyball Skills I**
- 2 units, Letter, 2 lab
- DA, CSU/UC, LACCD E2, CSUGE E
- Students learn basic volleyball skills and techniques. Skills learned are passing, serving, setting, blocking and hitting. Students learn game strategy and rules of the sport.

**KIN 291-2: Volleyball Skills II**
- 1 unit, Letter, 2 lab
- DA, CSU/UC, LACCD E2, CSUGE E
- Prerequisite: KIN 291-1
- Students learn volleyball skills and techniques. Skills learned are passing, serving, hitting and blocking. The students also learn strategy used for games and the rules of the sport.

**KIN 349: Stress Reduction for Physical Efficiency**

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Student learning outcomes may appear in any or all of the following online locations: linked to the course outline at https://ecd.laccd.edu/Default.aspx, and/or listed at http://www.lahc.edu/facultystaff/slo/courseassessment.html, and/or https://effectiveness.lahc.edu/cpc/haps/SitePages/2015-18%20SLO-SAO%20assessment.aspx. If so, those listed on the last site supersede all others.
• 2 units, Letter, 1 lec/2 lab, DE
• DA, CSU/UC, LACCD E2, CSUGE E
• This course is particularly useful to the athlete, dancer, musician, singer, actor and public speaker, but generally beneficial to anyone interested in improved physical and mental functioning. Alternative forms of physical education for improved body alignment and ease of movement with ability to reduce stress for all individuals is covered.

**KIN 350: Weight Training**

• 1 unit, Letter, 3 lab
• DA, CSU/UC, LACCD E2, CSUGE E
• Weight Training includes an emphasis in the knowledge, understanding and values of building muscle strength and endurance. The course include instruction in the five health related components of fitness (body composition, muscle strength, muscle endurance, flexibility and cardiovascular fitness). The objective is to develop the student's ability to develop his/her own physical fitness program at any time in life based upon sound physiological principles.

**KIN 350-1: Weight Training I**

• 1 unit, Letter, 0.5 lec/2.5 lab
• DA, CSU/UC, LACCD E2, CSUGE E
• An introductory laboratory experience designed for the people who desire an individualized strength program using a combination of nautilus and universal machines. This is suited for men and women of all age groups who are interested in starting exercise to improve their health. This course may be scheduled at times to be announced (TBA) for a minimum of 45:00 hours.

**KIN 350-2: Weight Training II**

• 1 unit, Letter, 0.5 lec/2.5 lab
• DA, CSU/UC, LACCD E2, CSUGE E
• An intermediate training experience for the people who have experience with exercise, using a combination of machines and free weights. This is suited for men and women of all age groups who are interested in muscle toning and muscle building. This course may be scheduled at times to be arranged (TBA) for a minimum of 54:00 hours.

**KIN 355: Directed Study - Kinesiology**

• 3 units, Letter, 3 lec, 54:00 TBA
• DA, CSU, LACCD E2, CSUGE E
• Prerequisite: instructor consultation
• Prerequisite: required corequisite (concurrent enrollment)
• This course allows students to pursue Directed Study in Physical Education on a contract basis under the direction of a supervising instructor. Credit Limit: A maximum of 3 units in Directed Study may be taken for credit. This course may be scheduled at times to be arranged (TBA) for a minimum of 54:00 hours.

**KIN ATH (Kinesiology - Athletics)**

formerly PHYS ED (Physical Education); also see KIN (Kinesiology) and KIN MAJ (Kinesiology – Major)

**KIN ATH 503: Intercollegiate Athletics-Baseball**

• 3 units, Letter, Repeatable, 10 lab, 180:00 TBA
• DA, CSU/UC, LACCD E2, CSUGE E
• Enrollment limited to available seats awarded to those students judged most qualified, based on past performance and/or team tryouts.
• This course covers intercollegiate athletic competitive baseball skills including throwing, fielding, hitting, base running, and baseball game strategies. This course may be scheduled at times to be arranged (TBA) for a minimum of 180:00 hours.

**KIN ATH 504: Intercollegiate Athletics-Basketball**

• 3 units, Letter, Repeatable, 10 lab, 180:00 TBA
• DA, CSU/UC, LACCD E2, CSUGE E
• This course covers fundamental, intermediate and advance principles/theories and skills of Basketball. Instruction, demonstration and practice of basic basketball skills, include passing, dribbling, shooting, rebounding, individual and team offense/defense and basketball intercollegiate competition. This course may be scheduled at times to be arranged (TBA) for a minimum of 180:00 hours.

**KIN ATH 506: Intercollegiate Athletics-Cross Country**

• 3 units, Letter, Repeatable, 10 lab
• DA, CSU/UC
• Enrollment in this course is limited to available seats awarded to those students judged most qualified based on past performance and/or tryouts.
• This the Intercollegiate Athletic competitive cross country team course. It includes endurance workouts, speed training, hill training and weight training. Nutritional concepts are discussed, as well as psychological preparation. This course requires the student athletes to compete as a member of the Cross country team.

**KIN ATH 508: Intercollegiate Athletics-Football**

• 3 units, Letter, Repeatable, 10 lab, 180:00 TBA
• DA, CSU/UC, LACCD E2, CSUGE E
• Enrollment limited to available seats awarded to those students judged most qualified, based on past performance and/or tryouts.
• This course presents intercollegiate athletic competitive football activities. Advanced skills for blocking, tackling, ball carrying (offense and defense), running, change in direction, accelerating and decelerating and placement of hands and fingers on football. This course may be scheduled at times to be arranged (TBA) for a minimum of 180:00 hours.

KIN ATH 511: Intercollegiate Athletics-Soccer
• 3 units, Letter, Repeatable, 10 lab
• DA, CSU/UC, LACCD E2, CSUGE E
• This course spends ten hours or more a week in seasonal soccer intercollegiate varsity and other conditioning activities as directed.

KIN ATH 512: Intercollegiate Athletics-Softball
• 3 units, Letter, Repeatable, 10 lab, 180:00 TBA
• DA, CSU/UC, LACCD E2, CSUGE E
• Fundamental, intermediate and advanced principles/theories and skills of Softball. Instruction, demonstration and practice of basic skills, including throwing, fielding, hitting, base running, and intercollegiate competition. This course may be scheduled at times to be arranged (TBA) for a minimum of 180.00 hours.

KIN ATH 516: Intercollegiate Athletics-Volleyball
• 3 units, Letter, Repeatable, 10 lab, 180:00 TBA
• DA, CSU/UC, LACCD E2, CSUGE E
• Enrollment limited to available seats awarded to those students judged most qualified, based on past performance and/or tryouts.
• This course provides students with intermediate and advanced volleyball skills the opportunity to compete at the intercollegiate level. This course may be scheduled at times to be arranged (TBA) for a minimum of 180:00 hours.

KIN ATH 552: Intercollegiate Sports-Conditioning & Skills Training
• 1 unit, Letter, Repeatable, 3 lab
• DA, CSU/UC, LACCD E2, CSUGE E
• This course is designed for the student athlete. The following areas are emphasized: the analysis and training of athletic skills, the analysis of offensive and defensive systems, physical conditioning, strength training and aerobic conditioning.

KIN ATH 553: Intercollegiate Football-Fitness & Skills Training
• 1 unit, Letter, Repeatable, 3 lab
• DA, CSU/UC, LACCD E2, CSUGE E
• This course is designed for the student athlete. It is intended to provide focused strength and conditioning exercises, emphasize safety and injury prevention and present new rules and game plays for football.

KIN ATH 556: Intercollegiate Basketball-Fitness & Skills Training
• 1 unit, Letter, Repeatable, 3 lab
• DA, CSU/UC, LACCD E2, CSUGE E
• This course is designed for the student athlete and is intended to provide focused strength and conditioning exercises with an emphasis on safety, injury prevention, and new rules and game plays for basketball.

KIN ATH 557: Intercollegiate Baseball-Fitness & Skills Training
• 1 unit, Letter, Repeatable, 3 lab
• DA, CSU/UC, LACCD E2, CSUGE E
• This course is designed for the student athlete. It is intended to provide focused strength and conditioning exercises, emphasize safety and injury prevention and present new rules and game plays for baseball.

KIN MAJ (Kinesiology - Major)

formerly PHYS ED (Physical Education); also see KIN (Kinesiology) and KIN ATH (Kinesiology – Athletics)

KIN MAJ 100: Introduction to Kinesiology
• 3 units, Letter, 3 lec
• DA, CSU/UC, C-ID KIN 100
• This course is an introduction to the interdisciplinary approach to the study of human movement. An overview of the importance of the sub-disciplines in kinesiology will be discussed along with career opportunities and responsibilities in the areas of teaching, coaching, allied health, and fitness professions.

KIN MAJ 103: Introduction to Coaching Athletics
• 3 units, Letter, 3 lec
• DA, CSU/UC
• This course focuses encouragement of sound coaching principles and training methods for men and
women. It presents information to help the coach, the physical education major who will be dealing with athletes, the leader of recreational programs, the physical education instructor, and the player. The concepts, problems, philosophy, and modern-day techniques relating to competitive athletics are discussed.

**KIN MAJ 119: Physical Education - Physical Efficiency**
- **2 units, Letter, 1 lec/2 lab**
- **DA, CSU/UC, LACCD E2, CSUGE E**
- This course includes components of cardiorespiratory, strenght and flexibility activities. Students will identify and apply concepts and applications of exercise science to development of personalized training plan for different fitness levels and age groups.

**KIN MAJ 126: Fundamentals of Athletic Training**
- **3 units, Letter, 2 lec/3 lab**
- **DA, CSU, LACCD E2, CSUGE E**
- This course is designed for future athletic trainers, physical educators, coaches, physical therapists and any one else who plans on working with active individuals who are prone to injury. This course introduces the concepts and practical skills of the athletic training profession, including the prevention, recognition, evaluation, and management of athletic injuries.

**LIB SCI (Library Science)**

**LIB SCI 101: Library Research Methods**
- **1 unit, Letter, 1 lec, 18:00 TBA, DE**
- **DA, CSU/UC**
- This is a practical course in the use of libraries in general and academic libraries in particular. Students will learn efficient use of print and computerized library resources for searching and locating information for class assignments and research papers. This course may be scheduled at times to be arranged (TBA) for a minimum of 18:00 hours.

**LIB SCI 102: Internet Research Methods**
- **1 unit, Letter, 0.5 lec/1 lab, 27:00 TBA, DE**
- **DA, CSU**
- This course will focus on how to find and evaluate information and resource materials on the Internet, using a variety of applications. Principles of information access, development of search strategies, evaluation criteria and processes, and specific search tools will be covered. Issues regarding intellectual property, censorship, and online publishing will be discussed. This course may be scheduled at times to be arranged (TBA) for a minimum of 27:00 hours.

**LRNFDTN (Learning Foundations)**

**LRNFDTN 1: Adapted Keyboarding**
- **1 unit, P/NP, 3 lab**
- **NDA**
- Designed for students with verified disabilities, this class provides individual instruction in keyboarding basics. Assistive technology may also be introduced for successful access to keyboard or screen. Basic reading and writing skills are not addressed in this course.

**LRNFDTN 2: Adaptive Word Processing Operations**
- **1 unit, P/NP, 3 lab**
- **NDA**
- Designed for students with verified disabilities, this class provides individual training in the use of word processing technologies. Students learn skills at an individual, non-competitive pace using assistive hardware and software when needed. Knowledge of keyboarding skills is helpful but not required. Basic reading and writing skills are not addressed in this course.

**LRNFDTN 3: Adaptive Computer Operations**
- **1 unit, P/NP, 3 lab, 54:00 TBA**
- **NDA**
- Designed for students with verified disabilities, this course provides individual assessment of assistive computer needs. Students will learn how to use the latest technologies (hardware and software) to make computer applications accessible. The type of technologies and the extent of the training will depend on the student's disability and needed applications. Knowledge of keyboarding skills is helpful but not required. Basic reading and writing skills are not addressed in this course. This course may be scheduled at times to be arranged (TBA) for a minimum of 54:00 hours.

**LRNFDTN 31: Study Strategies for Students With Learning Differences**
- **3 units, Letter, 3 lec**
- **NDA**
- This course is a special class designed for students with learning disabilities. Non-disabled students may enroll as long as they remain less than half of the total class. This applies when funded through DSPS categorical funds (Title5 Sec. 56028)
• This course will help students with identified disabilities to develop strategies to cope with the demands of the regular classroom environment. Such strategies include organization, self-awareness, time management, note-taking, test-taking, listening, and textbook comprehension skills.

LRNFDTN 70: Fundamentals of Arithmetic Laboratory
• 1 unit, P/NP, 3 lab, 54:00 TBA
• NDA
• This course is designed for students with verified disabilities. Students will receive individualized, small group and computer assisted instruction designed to build skills for entry into basic math classes and other college courses. Based on a diagnostic assessment, assigned modules will provide self-paced instruction related to students' individual problem areas. This course may be scheduled at times to be arranged (TBA) for a minimum of 54:00 hours.

LRNSKIL 1: Reading
• 3 units, P/NP, 9 lab
• NDA
• In this course students will receive individualized, small group and computer assisted instruction based on diagnostic assessment results. Modules in decoding, comprehension and textbook reading skills are prescribed in order to strengthen skills necessary for success in other college classes.

LRNSKIL 1A: Reading
• 1 unit, P/NP, 3 lab, 54:00 TBA
• NDA
• Students will receive individualized, small group and computer assisted instruction based on diagnostic assessment results. Modules in decoding, comprehension and textbook reading skills are prescribed in order to strengthen skills necessary for success in other college classes. This course may be scheduled at times to be arranged (TBA) for a minimum of 54:00 hours.

LRNSKIL 1B: Reading
• 1 unit, P/NP, 3 lab, 54:00 TBA
• NDA
• Students will receive individualized, small group and computer assisted instruction based on diagnostic assessment results. Modules in decoding, comprehension and textbook reading skills are prescribed in order to strengthen skills necessary for success in other college classes. This course may be scheduled at times to be arranged (TBA) for a minimum of 54:00 hours.

LRNSKIL 1C: Reading
• 3 units, P/NP, 3 lec
• NDA
• In this course students will receive individualized, small group and computer assisted instruction based on diagnostic assessment results. Modules in decoding, comprehension and textbook reading skills are prescribed in order to strengthen skills necessary for success in other college classes.

MARKET (Marketing)

MARKET 1: Principles of Selling
• 3 units, Letter, 3 lec, DE
• DA, CSU
• This course presents the fundamentals of salesmanship of ideas, services, and merchandise.
• Emphasis is placed on the building and selling of one's personality, as well as on selling procedures. Practice is given in sales presentations.

MARKET 21: Principles of Marketing
3 units, Letter, 3 lec, DE
• DA, CSU
• This survey course presents basic information including: the marketing environment and the roles of market research, advertising, public relations, planning, pricing and distribution in the marketing process. Practical experience in planning a promotion may be provided.

MARKET 31: Retail Merchandising
• 3 units, Letter, 3 lec
• DA, CSU
• Instruction in the principles and procedures involved in retailing in a global and multicultural environment. Applies the concept of fulfillment of customers wants and needs at a fair profit to department stores, mass merchandizing outlets, independent and chain stores, and non-store retailing, such as e-tailing.
also see STAT (Statistics)

All new students must take a mathematics assessment exam prior to enrolling in any MATH course. The results of the exam will be used to place the student into the following sequence.

MATH 123C or 125 satisfies the mathematics competency requirement for graduation. Students placed prior to MATH 123C or 125 may advance through the sequence by achieving a minimum grade of "C" in each required prerequisite course.
MATH 105: Arithmetic
- 3 units, Letter, 3 lec
- NDA
- This course explores arithmetic concepts from a modern point of view. The course includes mathematics operations using whole numbers, fractions and decimals as well as arithmetic applications in Bus, finance and geometry.

MATH 110: Introduction to Algebraic Concepts
- 5 units, Letter, 5 lec
- NDA
- Prerequisite: MATH 105
- Math 110 discusses abstract ideas necessary for understanding algebra and reviews selected topics in arithmetic relevant to algebra. Math 110 introduces fundamental notions of algebra including signed numbers, simple equations, and modeling. Math 110 includes hands-on laboratories and group work instruction in study skills.

MATH 112: Pre-Algebra
- 3 units, Letter, 3 lec
- NDA
- Prerequisite: MATH 105
- This course presents a review of arithmetic concepts followed by an introduction to elementary algebra topics such as operations with integers, exponents and solution of simple linear equations.

MATH 115: Elementary Algebra
- 5 units, Letter, 5 lec/1 lab
- NDA
- Prerequisite: MATH 110 or 112
- This course is an introduction to the concepts of algebra. Topics include arithmetic operations with signed numbers, properties of real numbers, algebraic expressions, solving linear equations and inequalities, graphing linear equations and inequalities in two variables, solving systems of linear equations and inequalities, exponents, polynomials, factoring, rational expressions, roots, radicals, methods of solving quadratic equations, and setting up and solving a variety of word problems.

MATH 121: Elementary Geometry for College Students
- 3 units, Letter, 3 lec
- NDA
- Prerequisite: MATH 115 or 123B
- This course covers the definitions, axioms and theorems of geometry relating to angles, lines, circles, polygons and polyhedra. The meaning and techniques of logical proof is also covered.

MATH 123A: Elementary and Intermediate Algebra I
- 4 units, Letter, 4 lec
- NDA
- Prerequisite: MATH 112 or 110
- First of three modules for Math 123 covering elementary algebra topics such as properties and operations with real numbers, addition, subtraction, multiplication of algebraic expressions, solution of linear equations and inequalities. Solution of word problems involving linear equations and inequalities.

MATH 123B: Elementary and Intermediate Algebra II
- 4 units, Letter, 4 lec
- NDA
- Prerequisite: MATH 123A
- This is the second of three modules for Math 123 covering elementary algebra topics such as addition, subtraction, multiplication of polynomials, solution of second degree equations and radical expressions. Solution of word problems involving second degree equations and radical expressions.

MATH 123C: Elementary and Intermediate Algebra III
- 4 units, Letter, 4 lec
- DA
- Prerequisite: MATH 123B
- This is the third of three modules for Math 123 covering intermediate algebra topics such as functions and their operations, conic sections, series and sequences. Applications of these topics to Bus, science and engineering are included.

MATH 125: Intermediate Algebra
- 5 units, Letter, 4 lec/2 lab
- DA
- Prerequisite: MATH 115
- This course is a study of the properties of real numbers, laws of exponents, radicals, equations and inequalities in linear and quadratic form, system of equations, matrices, graphing in two variables, rational expressions & equations, complex numbers, exponential and logarithmic functions.

MATH 137: Pre-Statistics Algebra
- 5 units, Letter, 5 lec/1 lab
- NDA
- Prerequisite: MATH 110 or 112 or placement exam
- This course introduces algebra topics and the basic elements of exploratory data analysis. Topics in the course include: solving algebraic equations, simplifying algebraic expressions, data analysis,
sample statistics and graphs, measures of central tendency and spread, functions and their graphs, probability, sequences and series, and exponential and logarithmic functions. This class is intended as preparation for students who wish to take Statistics. Students wishing to take other 200 level math courses will require Math 123C and should consult the college catalog for prerequisites.

**MATH 215: Principles of Mathematics I**
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD D2, CSUGE B4
- Prerequisite: MATH 123C or 125
- First of two courses in a sequence designed for elementary school teachers. Emphasis is on the pedagogy of sets and relations, numeration systems, basic problem solving, elementary number theory and their applications.

**MATH 216: Principles of Mathematics II**
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD D2, CSUGE B4
- Prerequisite: MATH 215
- Second of two courses in a sequence designed for elementary school teachers. Emphasis is on the pedagogy of probability, statistics networks, basic geometry concepts and their applications.

**MATH 227: Statistics**
- 4 units, Letter, 4 lec, DE
- DA, CSU/UC, LACCD D2, CSUGE B4, IGETC 2, C-ID MATH 110
- Prerequisite: MATH 123C or 125, or 137
- This course is an introduction to probability, descriptive and inferential statistics. Topic include descriptive statistics; probability and sampling distribution; statistical inference; correlation and linear regression, chi-square and t-tests; application of technology of statistical analysis including the interpretation of the relevance of statistical finding. Applications using data from disciplines including Bus, social science, psychology, life science, and education.

**MATH 234: College Level Algebra**
- 4 units, Letter, 4 lec
- DA, CSU/UC, LACCD D2, CSUGE B4, IGETC 2, C-ID MATH 110
- Prerequisite: MATH 123C or 125 and 240
- This course is designed for students who are looking for a college level mathematics transfer level requirement. This course also satisfies the Math 235 and 235 sequence.

**MATH 260: Precalculus**
- 5 units, Letter, 5 lec
- DA, CSU/UC, LACCD D2, CSUGE B4, IGETC 2
- Prerequisite: MATH 121, and 123C or 125
- This course consists of topics essential for a comprehensive background for the Calculus sequence. Topics include function analysis, analytic geometry, theory of equations, matrices, induction, sequences and series.

**MATH 265: Calculus With Analytic Geometry I**
- 5 units, Letter, 5 lec
- DA, CSU/UC, LACCD D2, CSUGE B4, IGETC 2
- Prerequisite: MATH 240 and 260
- This is the first course in a sequence of three courses in calculus and analytic geometry. Topics include functions, limits, continuity, derivatives, integrals of rational and trigonometric functions. Applications include topics in engineering and physics.

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**Letter:** letter graded; **P/NP:** pass/no-pass graded; **Repeatable:** may be repeated; **Lec/Lab:** hours per week of lecture/lab; **TBA:** maximum total hours to be arranged; **DE:** distance education (online and/or hybrid); **NC:** non-credit; **DA/NDA:** degree/non-degree applicable; **CSU/UC:** transferability to the listed institution; **LACCD/CSUGE/IGETC:** general education area applicable; **C-ID:** CSU course ID equivalency; **Prerequisite:** required prerequisite (prior completion with a minimum grade of “C” or “P”); **Corequisite:** required corequisite (concurrent enrollment)
MATH 266: Calculus With Analytic Geometry II
- 5 units, Letter, 5 lec, DE
- DA, CSU/UC, LACCD D2, CSUGE B4, IGETC 2A, C-ID MATH 220
- Prerequisite: MATH 265
- This is the second course in a three course sequence calculus and analytic geometry. Topics include applications of integrals such as finding areas, volumes and arc lengths, study of transcendental functions, techniques of integration, improper integrals, infinite series and analytic geometry of conic sections.

MATH 267: Calculus With Analytic Geometry III
- 5 units, Letter, 5 lec
- DA, CSU/UC, LACCD D2, CSUGE B4, IGETC 2A, C-ID MATH 230
- Prerequisite: MATH 266
- This is the third course in a sequence of three courses in calculus and analytic geometry. Topics include polar, spherical and cylindrical coordinates; parametric equations, vector algebra; calculus in two and three dimensions; partial derivatives; multiple integrals and applications.

MATH 270: Linear Algebra
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD D2, CSUGE B4, IGETC 2A
- Prerequisite: MATH 266
- This course emphasizes the study of matrix algebra, vector spaces and linear transformations, including theory and applications.

MATH 275: Ordinary Differential Equations
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD D2, CSUGE B4, IGETC 2A
- Prerequisite: MATH 267
- This course introduces the theory and applications of ordinary differential equations with emphasis on applications in the physical sciences. Traditional methods of solution by closed forms are studied together with series solutions, numerical methods and Laplace transforms solutions.

MGMT 2: Organization and Management Theory
- 3 units, Letter, 3 lec, DE
- DA, CSU
- This course covers management organization and authority. Students learn to effectively communicate with and motivate employees. Students will understand the processes of hiring, evaluating, promoting and terminating personnel. Students will study the basic objectives, theory, and principles of management decision making.

MGMT 13: Small Business Entrepreneurship
- 3 units, Letter, 3 lec, DE
- DA, CSU
- This course covers the essentials of the successful start-up and management of a small business. Store location, layout, organization, merchandise control, buying, pricing, advertising, government regulation, labor relations, public relations and other phases of small business are studied. Particular emphasis is placed on entrepreneurship and business start-ups.

MGMT 31: Human Relations for Employees
- 3 units, Letter, 3 lec, DE
- DA, CSU
- This course presents the practical application of basic psychology in planning, conducting and evaluating conferences and interviews. Special emphasis on dynamics of counseling, interviewing and conference leading. Attention is given to individual and group attitudes in the occupational situation as they affect motivation, status and morale.

MGMT 33: Human Capital Management
- 3 units, Letter, 3 lec, DE
- DA, CSU
- Advisory Corequisite: ENGLISH 28
- This course introduces human resources management techniques and procedures. Topics include the selection, placement, testing, orientation, counseling, merit rating, promotion, transfer and training.

MICRO (Microbiology)

MICRO 20: General Microbiology
- 4 units, Letter, 3 lec/3 lab
- DA, CSU/UC, LACCD A, CSUGE B2/B3, IGETC 5B/5C
- Prerequisite CHEM 66 and 101; Advisory Corequisite: ANATOMY 1, BIOLOGY 33, and PHYSIOL 1
- This course surveys the principles of microbiology and how they relate to the entire biological world and to humans. Topics include: chemistry of life, cell structure, metabolic processes, human infection and disease, immunology, molecular genetics, and microbe ecology.

Student learning outcomes may appear in any or all of the following locations: linked to the course outline at https://ecd.laccd.edu/Default.aspx, and/or listed at http://www.lahc.edu/facultystaff/slo/courseassessment.html, and/or https://effectiveness.lahc.edu/epc/haps/SitePages/2015-18%20SLO-SA0%20Assessment.aspx. If so, those listed on the last site supersede all others.
MICRO 20L: General Microbiology L
- 1 units, Letter, Repeatable, 3 lab
- DA, CSU/UC, CSUGE B2, IGETC 5B
- Prerequisite: CHEM 65, or 66, or 101, or 212, or 211, or 212, or successful completion of 1 year of high school chemistry. Corequisite: Micro 20U
- This course surveys the principles of microbiology and how they relate to the entire biological world and to humans. Topics include: chemistry of life, cell structure, metabolic processes, human infection and disease, immunology, molecular genetics, and microbe ecology.

MICRO 20U: General Microbiology U
- 3 unit, Letter, 3 lec
- DA, CSU/UC, LACCD A, CSUGE B3, IGETC 5C
- Prerequisite: CHEM 65, or 66, or 101, or 212, or 211, or 212, or successful completion of 1 year of high school chemistry.
- This course surveys the principles of microbiology and how they relate to the entire biological world and to humans. Topics include: chemistry of life, cell structure, metabolic processes, human infection and disease, immunology, molecular genetics, and microbe ecology.

MICRO 40: Microbiology Laboratory Preparations
- 1 unit, Letter, 3 lab, 54:00 TBA
- DA, CSU
- Prerequisite or Corequisite: MICRO 20
- This course includes the preparation of culture media, indicators, reagents and stains; cleaning and care of glassware and bacteriological equipment; care, transfer and storage of culture organisms; and use of the autoclave. This course may be scheduled at times to be arranged (TBA) for a minimum of 54:00 hours.

MUSIC

MUSIC 101: Fundamentals of Music
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD C, CSUGE C1, IGETC 3A, C-ID MUS 110
- This course is offered for the non-music major who wishes to study the basic rudiments of music, including notation, rhythm, major and minor scales and key signatures, intervals, chords and chord progressions.

MUSIC 111: Music Appreciation I
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD C, CSUGE C1, IGETC 3A, C-ID MUS 100
- This course is an introduction to music and musical masterpieces. They are presented through lectures, reports, and recordings. The course is recommended for the general college student who wishes to improve his/her understanding of music.

MUSIC 116: Survey and History of Rock, Pop and Soul Music
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD C, CSUGE C1, IGETC 3A
- Introduction to rock, pop, and soul music styles covering their origins, stylistic development and cultural impact. This course is designed to increase student awareness of the relationship between popular music and society.

MUSIC 141: Jazz Appreciation
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD C, CSUGE C1, IGETC 3A
- This course is an introduction to music approached through the study of American jazz. An in-depth understanding of the music is developed by tracing historical, cultural, political, and musical influences that shaped jazz. CD’s, DVD’s, the YouTube website, and live concerts provide the musical experience.
MUSIC 161: Introduction to Electronic Music
- 3 units, Letter, 2 lec/2 lab, DE
- DA, CSU/UC
- This is an introductory course examining the equipment, techniques, concepts and terminology related to music technology. Skills are introduced and developed for utilizing synthesizers, MIDI devices, and computer software applications for composing, performing, transcribing, and studying music.

MUSIC 165: Introduction to Recording Arts
- 3 units, Letter, 2 lec/2 lab
- DA, CSU
- This introductory course covers basic acoustics, audio systems and terminology, microphone principles and usage, and an introduction to recording equipment and procedures.

MUSIC 180-1: Applied Music Laboratory I
- 1.5 units, Letter, 5 lab, 90:00 TBA
- DA, CSU/UC
- Prerequisite: Placement audition; Corequisite: MUSIC 181, 182, 183, or 184
- Individual instruction in solo vocal or instrumental technique and performance focusing on the development of effective practice habits, basic technique, and mastery of basic repertoire. Content will be further developed in the required co-requisite course, MUSIC 181. Placement is by audition only. This course may be scheduled at times to be arranged (TBA) for a minimum of 90:00 hours.

MUSIC 180-2: Applied Music Laboratory II
- 1.5 units, Letter, 5 lab, 90:00 TBA
- DA, CSU/UC
- Prerequisite: Placement audition and MUSIC 180-1; Corequisite: MUSIC 181, 182, 183, or 184
- Individual instruction in solo vocal or instrumental technique and performance focusing on the analysis and interpretation of repertoire. Content will be further developed in the required co-requisite course, MUSIC 182. Placement is by audition only. This course may be scheduled at times to be arranged (TBA) for a minimum of 90:00 hours.

MUSIC 180-3: Applied Music Laboratory III
- 1.5 units, Letter, 5 lab, 90:00 TBA
- DA, CSU/UC
- Prerequisite: Placement audition and MUSIC 180-2; Corequisite: MUSIC 181, 182, 183, or 184
- Individual instruction in solo vocal or instrumental technique and performance focusing on recital preparation. Content will be further developed in the required co-requisite course, MUSIC 183. Placement is by audition only. This course may be scheduled at times to be arranged (TBA) for a minimum of 90:00 hours.

MUSIC 180-4: Applied Music Laboratory IV
- 1.5 units, Letter, 5 lab, 90:00 TBA
- DA, CSU/UC
- Prerequisite: Placement audition and MUSIC 180-3; Corequisite: MUSIC 181, 182, 183, or 184
- Individual instruction in solo vocal or instrumental technique and performance focusing on audition techniques. Content will be further developed in the required co-requisite course, MUSIC 184. Placement is by audition only. This course may be scheduled at times to be arranged (TBA) for a minimum of 90:00 hours.

MUSIC 181: Applied Music I
- 0.5 units, Letter, 1 lab
- DA, CSU/UC, C-ID MUS 160
- Prerequisite: placement audition; Corequisite: any music course numbered 180s, 400s or 600s
- This course is designed for students to develop study, practice, and performance skills on a principal instrument or voice through private lessons and recital and jury performances. Parallels the offering for and requirements of UC and CSU music majors.

MUSIC 182: Applied Music II
- 0.5 units, Letter, 1 lab
- DA, CSU/UC, C-ID MUS 160
- Prerequisite: MUSIC 181
- This course is designed for students to develop study, practice, and performance skills on a principal instrument or voice through private lessons. Parallels the offering for and requirements of UC and CSU music majors.

MUSIC 183: Applied Music III
- 0.5 units, Letter, 1 lab
- DA, CSU/UC, C-ID MUS 160
- Prerequisite: MUSIC 182
- This course is designed for students to develop study, practice, and performance skills on a principal instrument or voice through private lessons. Parallels the offering for and requirements of UC and CSU music majors.

MUSIC 184: Applied Music IV
- 0.5 units, Letter, 1 lab
- DA, CSU/UC, C-ID MUS 160
- Prerequisite: MUSIC 183
- This course is designed for students to develop study, practice, and performance skills on a principal...
MUSIC 216-1: Music Theory I
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD C, CSUGE C1, IGETC 3A, C-ID MUS 120
- Advisory Corequisite: MUSIC 217-1 and 321
- Music theory is the set of principles used to analyze the construction and perception of music. This course presents the principles of tonality and harmonic function—the tendency of certain types of music to progress toward a central tone or key. Topics will include a stylistic survey of music history, concepts in the sociological and psychological foundations in music, a review of the fundamentals of music, melodic construction, two-part counterpoint, harmonic progression, phrase structure and harmonization. Further application of these topics will be addressed in the corresponding musicianship course. Thus, concurrent enrollment in or previous completion (with a minimum grade of 'C') of Musicianship I (MUSIC 217-1) is required.

MUSIC 216-2: Music Theory II
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC
- Prerequisite: MUSIC 216-1; Advisory Corequisite: MUSIC 217-2 and 321
- This course is the second in a sequence of four intended for music majors who plan to earn a music certificate, degree, and/or transfer to a four-year music program. It presents the principles of contrapuntal expansion of tonality. Topics will include the elaboration and reduction of tonic, pre-dominant and dominant harmonies, and phrase structure. The practical application of these topics will be addressed in the corresponding musicianship course. Thus, concurrent enrollment in or previous completion (with a minimum grade of 'C') of Musicianship II (MUSIC 217-2) is required.

MUSIC 216-3: Music Theory III
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, C-ID MUS 140
- Prerequisite: MUSIC 216-2; Advisory Corequisite: MUSIC 217-3 and 321
- This course is the third in a sequence of four intended for music majors who plan to earn a music certificate, degree, and/or transfer to a four-year music program. It presents the principles of chromatic expansion of tonality and an introduction to musical form. Topics will include harmonic sequences, applied chords, modulation, binary form, modal mixture, Neapolitan chords, augmented sixth chords and period structure. The practical application of these topics will be addressed in the corresponding musicianship course. Thus, concurrent enrollment in or previous completion (with a minimum grade of 'C') of Musicianship III (MUSIC 217-3) is required.

MUSIC 216-4: Music Theory IV
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, C-ID MUS 150
- Prerequisite: MUSIC 216-3; Advisory Corequisite: MUSIC 217-4 and 321
- This course is the last in a sequence of four intended for music majors who plan to earn a music certificate, degree, and/or transfer to a four-year music program. It presents a survey of the principles of musical form used in a variety of styles from the late-nineteenth century on, including folk, classical, jazz, and popular music. Topics will include single-movement forms (binary, ternary, rondo and sonata), folk and popular song forms, extended tertian harmonies, modality, blues harmony, non-diatonic collections, post-tonal techniques, and non-pitch-related structures. The practical application of these topics will be addressed in the corresponding musicianship course. Thus, concurrent enrollment in or previous completion (with a minimum grade of 'C') of Musicianship IV (MUSIC 217-4) is required.

MUSIC 217-1: Musicianship I
- 1 unit, Letter, 3 lab, DE
- DA, CSU/UC, C-ID MUS 125
- Advisory Corequisite: MUSIC 216-1 and 321
- Musicianship is the ability to perceive and demonstrate musical artistry while reading, dictating and performing music. This course is the first in a sequence of four intended for music majors who plan to earn a music certificate, degree, and/or transfer to a four-year music program. It presents techniques for vocal and keyboard sight reading, improvisation, and melodic and harmonic dictation of music featuring the concepts presented in its counterpart music theory course. Thus, concurrent enrollment in or previous successful completion (with a minimum grade of 'C') of Music Theory I (MUSIC 216-1) is required.

MUSIC 217-2: Musicianship II
- 1 unit, Letter, 3 lab, DE
- DA, CSU/UC, C-ID MUS 135
- Prerequisite: MUSIC 217-1; Advisory Corequisite: MUSIC 216-2 and 321
- This course is the second in a sequence of four intended for music majors who plan to earn a music certificate, degree, and/or transfer to a four-year music program. It presents techniques for vocal and keyboard sight reading, improvisation, and melodic and harmonic dictation of music featuring the concepts presented in its counterpart music theory course. Thus, concurrent enrollment in or previous successful completion (with a minimum grade of 'C') of Music Theory I (MUSIC 216-1) is required.
• This course is the second in a sequence of four intended for music majors who plan to earn a music certificate, degree, and/or transfer to a four-year music program. It presents techniques for vocal and keyboard sight reading, improvisation, and melodic and harmonic dictation of music featuring the concepts presented in its counterpart music theory course. Thus, concurrent enrollment in or previous successful completion (with a minimum grade of 'C') of Music Theory II (MUSIC 216-2) is required.

MUSIC 217-3: Musicianship III

• 1 unit, Letter, 3 lab, DE
• DA, CSU/UC, C-ID MUS 145
• Prerequisite: MUSIC 217-2; Prerequisite or Corequisite: MUSIC 216-3 and 321
• This course is the third in a sequence of four intended for music majors who plan to earn a music certificate, degree, and/or transfer to a four-year music program. It presents techniques for vocal and keyboard sight reading, improvisation, and melodic and harmonic dictation of music featuring the concepts presented in its counterpart music theory course. Thus, concurrent enrollment in or previous successful completion (with a minimum grade of 'C') of Music Theory III (MUSIC 216-3) is required.

MUSIC 217-4: Musicianship IV

• 1 unit, Letter, 3 lab, DE
• DA, CSU/UC, C-ID MUS 155
• Prerequisite: MUSIC 217-3; Prerequisite or Corequisite: MUSIC 216-4 and 321
• This course is the last in a sequence of four intended for music majors who plan to earn a music certificate, degree, and/or transfer to a four-year music program. It presents techniques for vocal and keyboard sight reading, improvisation, and melodic and harmonic dictation of music featuring the concepts presented in its counterpart music theory course. Thus, concurrent enrollment in or previous successful completion (with a minimum grade of 'C') of Music Theory IV (MUSIC 216-4) is required.

MUSIC 231: Orchestration and Arranging I

• 3 units, Letter, 3 lec
• DA, CSU/UC
• Prerequisite or Corequisite: MUSIC 216-2; Advisory
• This course focuses on the writing of arrangements for a variety of bands, orchestras, and vocal groups. The student will study harmony and voicing and the basics about all the common instruments. Student arrangements will be performed.

MUSIC 232: Orchestration and Arranging II

• 3 units, Letter, 3 lec
• DA, CSU/UC
• Prerequisite: MUSIC 216-2 and 231
• In this course instruments will be examined in detail and students will write in a variety of styles, with emphasis on their special interests. Student's arrangements will be performed.

MUSIC 241: Music Notation and Copying I

• 1 unit, Letter, 1 lec, DE
• DA, CSU/UC
• Prerequisite: MUSIC 101 or 216-1 or Corequisite: MUSIC 216-1
• Techniques for hand drawing notes, rests, and other music symbols.

MUSIC 242: Music Notation and Copying II

• 1 unit, Letter, 1 lec, 18:00 TBA, DE
• DA, CSU/UC
• Prerequisite or Corequisite: MUSIC 241
• Techniques for computer-aided scoring of notes, rests, and other music symbols. This course may be offered at times to be announced (TBA) for a minimum of 18:00 hours.

MUSIC 251-1: Jazz Improvisation Workshop I

• 1 unit, Letter, 3 lab
• DA, CSU/UC
• In this course students learn to play improvised solos with various groups and big bands, and study the chords, scales, and "licks" used by great players. Students then practice these techniques in a weekly jam session. This first of four levels will focus on chart reading. Proficiency on a musical instrument is required for enrollment.

MUSIC 251-2: Jazz Improvisation Workshop II

• 1 unit, Letter, 3 lab
• DA, CSU/UC
• Prerequisite: MUSIC 251-1
• In this course students learn to play improvised solos with various groups and big bands, and study the chords, scales, and "licks" used by great players. Students then practice these techniques in a weekly jam session. This second of four levels will focus on improvisation in varied styles. Proficiency on a musical instrument is required for enrollment.

MUSIC 251-3: Jazz Improvisation Workshop III

• 1 unit, Letter, 3 lab
• DA, CSU/UC
• Prerequisite: MUSIC 251-2
In this course students learn to play improvised solos with various groups and big bands, and study the chords, scales, and "licks" used by great players. Students then practice these techniques in a weekly jam session. This third of four levels will focus on rehearsal and performance technique. Proficiency on a musical instrument is required for enrollment.

MUSIC 251-4: Jazz Improvisation Workshop IV
- 1 unit, Letter, 3 lab
- DA, CSU/UC
- Prerequisite: MUSIC 251-3
- In this course students learn to play improvised solos with various groups and big bands, and study the chords, scales, and "licks" used by great players. Students then practice these techniques in a weekly jam session. This fourth of four levels will focus on developing performance plans from jazz charts. Proficiency on a musical instrument is required for enrollment.

MUSIC 261-1: Electronic Music Workshop I
- 3 units, Letter, 2 lec/2 lab, DE
- DA, CSU/UC
- Prerequisite: MUSIC 161; Advisory Corequisite: MUSIC 101
- This is the first in an advanced series of courses that emphasize the study and application of electronic, electro-acoustic, and digital music techniques. Technical, compositional, and performance skills applied to synthesizers, computers, MIDI, software applications, virtual instruments and digital recording equipment will be introduced and developed.

MUSIC 261-2: Electronic Music Workshop II
- 3 units, Letter, 2 lec/2 lab, DE
- DA, CSU/UC
- Prerequisite: MUSIC 261-1
- This is the second in an advanced series of courses that emphasize the study and application of electronic, electro-acoustic, and digital music techniques. Technical, compositional, and performance skills applied to synthesizers, computers, MIDI, software applications, virtual instruments and digital recording equipment will be introduced and developed.

MUSIC 261-3: Electronic Music Workshop III
- 3 units, Letter, 2 lec/2 lab, DE
- DA, CSU/UC
- Prerequisite: MUSIC 261-2
- This is the third in an advanced series of courses that emphasize the study and application of electronic,
electro-acoustic, and digital music techniques. Technical, compositional, and performance skills applied to synthesizers, computers, MIDI, software applications, virtual instruments and digital recording equipment will be introduced and developed.

MUSIC 265-1: Recording Arts Workshop I
- 3 units, Letter, 2 lec/2 lab
- DA, CSU
- Prerequisite: MUSIC 165
- This is the first of a three-course intermediate to advanced series in recording arts for students who have previously completed MUS 165. Through lecture and hands-on experience students will study acoustic principles, microphones, multi-track recording, overdubbing and mixing, using hardware equipment and digital audio workstation (DAW) computer applications.

MUSIC 265-2: Recording Arts Workshop II
- 3 units, Letter, 2 lec/2 lab
- DA, CSU
- Prerequisite: MUSIC 265-1
- This is the second of a three-course intermediate to advanced series in recording arts for students who have previously completed MUS 265-1. Through lecture and hands-on experience students will study acoustic principles, advanced multi-track recording techniques, advanced microphone techniques, signal processing, track groups, and techniques for creating a balanced and effective mix.

MUSIC 265-3: Recording Arts Workshop III
- 3 units, Letter, 2 lec/2 lab
- DA, CSU
- Prerequisite: MUSIC 265-2
- This is the third of a three-course intermediate to advanced series in recording arts for students who have previously completed MUS 265-2. Through lecture and hands-on experience students will study acoustic principles, advanced multi-track recording, advanced audio editing and track comping, advanced signal processing, and mastering techniques.

MUSIC 271: Songwriters' Workshop I
- 3 units, Letter, 3 lec
- DA, CSU/UC
- This course offers the student the opportunity to develop skills in writing original songs. Techniques of creating original melodies, harmonies, and lyrics will be presented.

MUSIC 272: Songwriters' Workshop II

Letter: letter graded; P/NP: pass/no-pass graded; Repeatable: may be repeated; Lecl/Lab: hours per week of lecture/lab; TBA: maximum total hours to be arranged; DE: distance education (online and/or hybrid); NC: non-credit; DA/NDA: degree/non-degree applicable; CSU/UC: transferability to the listed institution; LACCD/CSUGE/IGETC: general education area applicable; C-ID: CSU course ID equivalency; Prerequisite: required prerequisite (prior completion with a minimum grade of “C” or “P”); Corequisite: required corequisite (concurrent enrollment)
• 3 units, Letter, 3 lec
• DA, CSU/UC
• Prerequisite: MUSIC 271
• This class is a continuation of exploration of developing skills in Commercial Songwriting. It offers the student additional opportunities to develop more advanced skills in writing original songs. Techniques of creating original melodies, harmonies, and lyrics will be reviewed and enhanced.

MUSIC 273: Songwriters’ Workshop III
• 3 units, Letter, 3 lec
• DA, CSU/UC
• Prerequisite: MUSIC 272
• This class is the final continuation of exploration of developing skills in Commercial Songwriting. It offers the student additional opportunities to develop more advanced skills in writing original songs. Techniques of creating original melodies, harmonies, and lyrics will be reviewed and enhanced.

MUSIC 280: The Business of Commercial Music
• 3 units, Letter, 3 lec
• DA, CSU
• This course offers the student the opportunity to examine economic opportunities in the music industry. Job opportunities and responsibilities for the performer, arranger, sales manager, audio engineer and other music business related position are explored. Students have the opportunity to research areas of interest and to discuss the music industry with guest speakers.

MUSIC 321: Elementary Piano I
• 2 units, Letter, 1 lec/2 lab
• DA, CSU/UC
• This course provides the student with functional keyboard skills such as note reading, sight reading, simple improvisations, transpositions, harmonization, technical skills (scales, chords, pedal use, etc.) in addition to learning repertoire on a graded level.

MUSIC 322: Elementary Piano II
• 2 units, Letter, 1 lec/2 lab
• DA, CSU/UC
• Prerequisite: MUSIC 321
• This is a continuation of Music 321 topics with additional technique exercises, improvisation and more advanced piano literature.

MUSIC 323: Elementary Piano III
• 2 units, Letter, 1 lec/2 lab
• DA, CSU/UC
• Prerequisite: MUSIC 322

MUSIC 324: Elementary Piano IV
• The third course in a four-semester series that develops the student's functional keyboard skills. Sight reading, technique, improvisation, transposition, are introduced and practiced, and graded repertoire is studied. Music majors should enroll in a piano class for each of four semesters or pass a piano proficiency exam.

MUSIC 411: Elementary Voice I
• 2 units, Letter, 1 lec/2 lab
• DA, CSU/UC
• In this course the student receives guidance in the learning and presentation of several types and styles of solo song. Problems of tone production, breathing, diction, repertoire, and song interpretation are studied. The course is designed to meet the voice requirements for traditional and commercial music majors.

MUSIC 412: Elementary Voice II
• 2 units, Letter, 1 lec/2 lab
• DA, CSU/UC
• Prerequisite: MUSIC 411
• This course is a continuation of the study of concepts and techniques introduced in MUS 411. Students will develop their technical skills and apply them to new and more challenging repertoire.

MUSIC 413: Elementary Voice III
• 2 units, Letter, 1 lec/2 lab
• DA, CSU/UC
• Prerequisite: MUSIC 412
• This course is a continuation of the study of concepts and techniques introduced in MUS 411 and 412. Students will develop their technical skills and apply them to new and more challenging repertoire.

MUSIC 414: Elementary Voice IV
• 2 units, Letter, 1 lec/2 lab
• DA, CSU/UC
• Prerequisite: MUSIC 413
• In this four-semester sequence the student receives guidance in the learning and presentation of several types and styles of solo songs. Problems of tone production, breathing, diction, repertoire, and song interpretation are studied. The course is designed to meet the voice requirement of music majors, and to provide voice instruction for candidates working toward teaching credentials.

MUSIC 501: College Choir
• 1 unit, Letter, Repeatable, 3 lab
• DA, CSU
• Prerequisite: Satisfactory performance in placement audition. Advisory Prerequisite: MUSIC 101
• A choral performance ensemble. Topics will include vocal technique and choral elements such as balance, intonation, diction, and music reading. Repertoire is chosen on the basis of group ability and represents historical and current styles of music. Students are required to perform in public.

MUSIC 511: Collegiate Choir
• 1 unit, Letter, Repeatable, 3 lab
• DA, CSU/UC, C-ID MUS 180
• This course is the study and performance of standard choral literature from all periods and styles. Public performances are given each semester.

MUSIC 531: Philharmonic Choir
• 1 unit, Letter, Repeatable, 3 lab
• DA, CSU/UC, C-ID MUS 180
• This course is the study and performance of standard choral literature from all periods and styles. Public performances are given each semester.

MUSIC 631: Percussion Instrument Instruction I
• 2 units, Letter, 1 lec/2 lab
• DA, CSU/UC
• The student learns basic rhythms, rudiments, beginning notation and meters as applied to percussion instruments.

MUSIC 650: Beginning Guitar
• 2 units, Letter, 1 lec/2 lab
• DA, CSU/UC
• This course consists of basic instruction in guitar playing from the beginning level. It includes appropriate exercises to develop technical facility, material for sight reading, and study of basic chords and repertoire.

MUSIC 651: Classical Guitar I
• 2 units, Letter, 1 lec/2 lab
• DA, CSU/UC
• The first course in a four-semester series that develops classical guitar techniques, including right and left hand development. Includes beginning repertoire, note reading, preparation for solo and ensemble performance. Student must possess a nylon string guitar.

MUSIC 652: Classical Guitar II
• 2 units, Letter, 1 lec/2 lab
• DA, CSU/UC
• Prerequisite: MUSIC 651
• The second course in a four-semester series that develops classical guitar techniques, including right and left hand development. Includes advanced beginning repertoire, note reading, preparation for solo and ensemble performance. Student must possess a nylon string guitar.

MUSIC 653: Classical Guitar III
• 2 units, Letter, 1 lec/2 lab
• DA, CSU/UC
• Prerequisite: MUSIC 652
• This course is the study and performance of classical guitar techniques, including right and left hand development. Includes intermediate repertoire, note reading, preparation for solo and ensemble performance. Student must possess a nylon string guitar.

MUSIC 654: Classical Guitar IV
• 2 units, Letter, 1 lec/2 lab
• DA, CSU/UC
• Prerequisite: MUSIC 653
• The fourth course in a four-semester series that develops classical guitar techniques, including right and left hand development. Includes intermediate repertoire, note reading, preparation for solo and ensemble performance. Student must possess a nylon string guitar.

MUSIC 765: Percussion Ensemble
• 1 units, Letter, Repeatable, 3 lab
• DA, CSU/UC
• This course provides the student with the opportunity to learn the principles of percussion ensemble playing as they apply to standard literature in the symphonic and commercial fields. Public performances will be given.

MUSIC 775: Jazz Ensemble
• 1 units, Letter, Repeatable, 3 lab
• DA, CSU/UC
• This course provides the student with the opportunity to learn the principles of percussion ensemble playing as they apply to standard literature in the symphonic and commercial fields. Public performances will be given.
This course provides experience in dance band/studio band performance. Students will rehearse standard and special arrangements with emphasis on sight-reading, intonation, jazz feel and improvisation. Music is prepared for public performances. Proficiency on an appropriate instrument and a successful audition are required for continued enrollment.

MUSIC 780: Jazz Combo Workshop
- 1 unit, Letter, 3 lab
- DA, CSU/UC
- Prerequisite: placement audition
- Students will organize musical pieces, rehearse and perform a variety of jazz standards in jazz combo settings. Emphasis is on presentation, ensemble playing, improvisation, and live performance. A successful audition on the first day of class is required for placement and continued enrollment.

NURSING
also see HLTHOCC (Health Occupations)

NURSING 185: Directed Study - Nursing
- 1 unit, P/NP, 1 lec
- DA, CSU
- Corequisite: NURSING 313, 321, 323, or 325
- Students are encouraged to pursue Directed Study in Nursing under the direction of a supervising instructor. Study is coordinated with current course content and skill development needs, and response to individual learning styles for practice and feedback.

NURSING 302: Mathematics of Drugs and Solutions
- 3 units, Letter, 3 lec
- DA, CSU
- After a review of relevant basic arithmetic, the student will use concepts of higher mathematics to gain knowledge of measurement systems, including apothecary and metric, and techniques, including solving for an unknown, for computing medication dosages, I.V. flow rates, and weight related dosages for children and adults.

NURSING 311: Communication in Nursing
- 1 unit, Letter, 1 lec
- DA, CSU
- Prerequisite: official admission to the Nursing Program or currently licensed LVN taking required transition courses prior to application to RN Program.
- This course provides theoretical knowledge and practical experience needed by the nursing student to understand and effectively use basic communication skills to interact therapeutically with patients, communicate in groups, institute a teaching-learning plan, and begin the journey to cultural competence.

NURSING 313: Introduction to Nursing Practice
- 4 units, Letter, 1.75 lec/6.75 lab
- DA, CSU
- Prerequisite: completion and verification of all program prerequisites and official admission to the nursing program: ANATOMY 1, PHYSIOL 1, MICRO 20U, MICRO 20L, ENGLISH 101, PSYCH 1, PSYCH 41; Corequisite: NURSING 321; Advisory Corequisite: NURSING 185
- This course is an introduction to nursing and prepares the student to give care to the hospitalized patient, with focus on the (geriatric) mature adult. It includes introduction to the hospital environment and universal standards, basic nursing procedures, and utilization of the Nursing Process. After satisfactory completion of the course, the student can function at the beginning nurse aide level.

NURSING 315: Fundamentals of Nursing Process and Practice
- 4 units, Letter, 1.75 lec/6.75 lab
- DA, CSU
- Prerequisite: completion and verification of all program prerequisites and official admission to the nursing program and NURSING 313; Corequisite: or Prerequisite: NURSING 311
- This course uses the nursing process to assess adult and older adult needs, plan and implement nursing interventions and evaluate their effectiveness. Calculation and administration of medication, flow rate determination, asepsis and sterile technique, preoperative care, nutritional problem solving, and advanced skills are developed. Principles and practice of therapeutic communication and teaching are utilized. Documentation and legal obligations are focused. There is a practicum included with this course. (After successful completion of this course the student is eligible to complete examination for Certified Nurse Attendant.)

NURSING 318: Patient Care Seminar I
- 2 units, P/NP, 2 lec
- DA, CSU/UC
- Corequisite: NURSING 333, 335, 339, 343, 345 or 347 and enrollment in Nursing Program Course with a clinical component
- This course is strongly recommended for continuing nursing students enrolled in classes with clinical labs. Sections are course specific. An elective, but strongly recommended, instructor guided course to facilitate
development of knowledge and skills needed to safely assess, plan, and implement client care. Has individual and group work.

NURSING 321: Nursing Process

- 1 unit, Letter, 1 lec
- DA, CSU
- Prerequisite: official admission into the nursing program or experience in Nursing permitting advanced placement in the Nursing Program and ANATOMY 1, ENGLISH 101, MICRO 20, and PHYSIO 1; Corequisite: NURSING 311 and 313; Advisory Corequisite: NURSING 185
- This course introduces the concepts and provides practice experiences to understand and use the nursing process and the Roy Adaptation Model for planning, implementing and evaluating client care. The course is divided into four units: The Roy Adaptation Model, the Nursing Process, and the use of the Nursing Process within the Physiological Mode, and the use of the Nursing Process within the Psycho-Social Modes.

NURSING 323: Nursing Process & Practice in the Care of Adult Client I

- 5 units, Letter, 3 lec/6 lab
- DA, CSU
- Prerequisite: completion of program prerequisites and all previous courses in Nursing with a grade of "C" or better. A passing score on the Mathematics skills test is required for satisfactory clinical performance; Corequisite: NURSING 325; Advisory Corequisite: NURSING 185
- Care of the medical-surgical patient with problems of the cardiovascular, peripheral vascular, endocrine, immune and hematological system, and oncological problems is emphasized. Nursing process based on the Roy Adaptation Model is continued. Communication and teaching are practiced. This course may have a practicum.

NURSING 325: Nursing Process & Practice in the Care of Adult Client II

- 5 units, Letter, 3 lec/6 lab
- DA, CSU
- Prerequisite: completion of program prerequisites and all previous courses in Nursing with a grade of "C" or better. A passing score on the Mathematics skills test is required for satisfactory clinical performance; Corequisite: NURSING 323; Advisory Corequisite: NURSING 185
- This course emphasizes care of the medical-surgical patient with nutritional, elimination, fluid and electrolyte,rest and activity, sensory and regulatory needs, and connective tissue disorders. Nursing process based on the Roy Adaptation Model is continued. Communication and teaching are practiced. This course may have a practicum.

NURSING 327: Patient Care Management I

- 2 units, P/NP, 6 lab, 108:00 TBA
- DA, CSU
- Prerequisite: NURSING 311, 313, 315, and 321 and eligibility for the second semester, or admitted to the program Advanced placement and completed one semester of clinical course work with a grade of "C" or better. Repeat: Eligible for 4th semester of nursing program.
- This elective course will increase proficiency in the use of the nursing process and Roy Adaptation Model for the administration of client care. The clinical focus of care of clients with physiological mode problems will increase competency in client care management. Client care may include practice in specialty areas already successfully completed prior to this course. Staff preceptors may be used. This course may be scheduled at times to be arranged (TBA) for a minimum of 108:00 hours.

NURSING 329: Role Transition LVN to RN

- 2 units, Letter, 2 lec
- DA, CSU
- Prerequisite: current California LVN license or experience in nursing permitting advanced placement in the nursing program; Corequisite: NURSING 311
- This course is designed to assist the L. V. N. to make a successful transition to role of RN student and pursue an RN license. Content will focus on resources available, role development, learning styles, dosage calculations, and heart, lung and bowel assessment. In addition topics in critical thinking, documentation of history/assessment, nursing process, and administration of IV piggyback medications are also covered.

NURSING 329A: Role Transition LVN to RN

- 1 units, Letter, 1 lec, DE
- DA, CSU
- Prerequisite: current California LVN license or experience in nursing permitting advanced placement in nursing program; Advisory Corequisite: NURSING 321
- This online is designed to assist the L.V.N. to make a successful transition to role of RN student and pursue a RN license. Content will focus on resources available, role development, learning styles, dose calculations, and heart, lung and bowel assessment.

Letter: letter graded; P/NP: pass/no-pass graded; Repeatable: may be repeated; Leq/Lab: hours per week of lecture/lab; TBA: maximum total hours to be arranged; DE: distance education (online and/or hybrid); NC: non-credit; DA/NDA: degree/non-degree applicable; CSU/UC: transferability to the listed institution; LACCD/CSUGE/IGETC: general education area applicable; C-ID: CSU course ID equivalency; Prerequisite: required prerequisite (prior completion with a minimum grade of "C" or "P"); Corequisite: required corequisite (concurrent enrollment)
NURSING 329B: Role Transition LVN to RN
- 1 units, Letter, 1 lec, DE
- Prerequisite: NURSING 329A and current LVN license or experience in Nursing permitting advanced placement in nursing program; Advisory Corequisite: NURSING 311 and ANTHRO 101
- Continues with content to assist the L.V.N. to make a successful transition to the role of R.N. nursing student. Content will focus on critical thinking, documentation of history and assessment, nursing process, and calculation and administration of IV piggyback medications.

NURSING 333: Nursing Process & Practice in Health Care of Women/Families
- 3 unit, Letter, 1.5 lec/4.5 lab
- DA, CSU
- Prerequisite: completion of all program prerequisites in all first year Nursing Program courses OR admission through the Advanced Placement LVN to RN route, and Prerequisite: NURSING 325; Advisory Corequisite: NURSING 318
- Students experience includes both theory and practice in meeting the health care needs of women, and of the families during childbearing. Psychosocial as well as psychological nursing concepts, including cultural, emotional, developmental and environmental are emphasized. Settings include hospitals, clinics and parent education classes.

NURSING 335: Nursing Process and Practice in the Care of Children
- 3 unit, Letter, 1.67 lec/4.5 lab
- DA, CSU
- Prerequisite: completion of all program prerequisites in all first year Nursing Program courses OR admission through the Advanced Placement LVN to RN route, and Prerequisite: NURSING 325; Advisory Corequisite: NURSING 318
- Through the utilization of developmental theories (primarily Erikson & Piaget) and the Roy Adaptation Model of Nursing, this course focuses on the assessment, identification and nursing interventions of the biopsychosocial problems of children and their families. Nursing action is directed toward the integration of growth and development principles in the care of the child in relation to health-illness continuum. The student will contribute to the development of an optimal environment of the child in the hospital setting, in clinics, and in school facilities.

NURSING 339: Nursing Proc & Practice in the Care of the Geriatric Client
- 2 units, Letter, 1 lec/3 lab
- DA, CSU
- Prerequisite: completion of all program prerequisites and NURSING 333 and 335 and preceding nursing courses, OR admission to Nursing Program "LVN-30 unit option route. Advisory Corequisite: NURSING 318
- This course focuses on the Geriatric patient, integrating content of the Roy Adaptation Model and the Nursing Process. Clinical facilities include Long Term Care facilities, Home Health Agencies, and Day Care Centers/Assisted Living Facilities. Intravenous therapy (venipuncture) is introduced in this course.

NURSING 343: Nursing Process & Practice in Psychosocial Adaptation of Client
- 3 units, Letter, 1.5 lec/4.5 lab
- DA, CSU
- Prerequisite: NURSING 339 and admission to Nursing Program, and LVN Advanced Placement: completion of required 2nd and 3rd semester nursing program courses and cognates; Advisory Corequisite: NURSING 318
- This course is designed to provide neurobiopsychosocial theoretical knowledge correlated with clinical experience in planning and administering evidence-based nursing care to the psychiatric client in the acute care setting. The Roy Adaptation Model is utilized as a framework for assessment within the Nursing Process for client care. Emphasis is placed on holistic care of the client with mental health disorders across the lifespan, via therapeutic communication, incorporating relevant cultural or ethnic considerations.

NURSING 345: Nursing Process & Practice in the Care of Adult Client III
- 3 units, Letter, 1.5 lec/4.5 lab
- DA, CSU
- Prerequisite: NURSING 339 and admission to Nursing Program, and LVN Advanced Placement: completion of required 2nd and 3rd semester nursing program courses and cognates
- This course emphasizes the nursing process and the Roy Adaptation model in the care of clients with complex medical-surgical problems. High acuity care settings and the critical care units are utilized.

NURSING 347: Leadership and Management
- 3 units, Letter, 0.5 lec/7.5 lab
- DA, CSU

Student learning outcomes may appear in any or all of the following online locations: linked to the course outline at https://ecd.laccd.edu/Default.aspx, and/or listed at http://www.lahc.edu/facultystaff/slo/courseassessment.html, and/or https://effectiveness.lahc.edu/eps/haps/SitePages/2015-16%20SLO-SAO%20Assessment.aspx. If so, those listed on the last site supersede all others.
NURSING 399: Certified Nurse Assistant/Certified Home Health Aide
- 7 units, Letter, 4.5 lec/7.5 lab
- DA
- Prerequisite: must have AHA healthcare Provide BCLS card, have background check, and meet all health requirements of clinical agency prior to beginning clinical.
- This combined lecture/lab course teaches the student the theory and clinical skills needed to work with clients in the long-term care facility, the acute setting, and the home care setting. Emphasis is given to safety principles and to methods for providing physical care and emotional and social support. Upon successful completion of this course, the student is eligible to apply for certification as a Certified Nurse Assistant and Home Health Aide in the state of California.

NURSING 399A: Certified Nurse Assistant
- 5 units, Letter, 3 lec/6 lab
- DA
- Prerequisite: must have AHA healthcare Provide BCLS card, have background check, and meet all health requirements of clinical agency prior to beginning clinical.
- This combined lecture/lab course teaches the student the theory and clinical skills needed to work with residents/patients in the long-term care facility. Emphasis is given to safety principles, infection control, methods for providing physical care, emotional and social support. After the successful completion of this course, the student will be eligible to apply for certification and to take the State of California Certified Nurse Assistant examination.

NURSING 399B: Certified Home Health Aide
- 2 units, Letter, 1 lec/2 lab
- DA
- Prerequisite: NURSING 399A and valid CNA license
- This combined lecture/lab course teaches the student the theory and clinical skills needed to work with clients in the home care setting. Emphasis is given to safety principles and to methods for providing physical care and emotional and social support. Upon successful completion of this course, the student is eligible to apply for certification as a Home Health Aide in the state of California.

OCEANO (Oceanography)

OCEANO 1: Introduction to Oceanography
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD A, CSUGE B1, IGETC 5A
- Prerequisite or Corequisite: OCEANO 1
- This course introduces the student to the field of physical oceanography. Major topics include Plate Tectonics and features of the seafloor, islands, and coastlines, properties of seawater, waves, tides, currents, marine resources and pollution, and the effects of oceanographic factors on marine life. Field trips to coastal areas are made.

OCEANO 10: Physical Oceanography Laboratory
- 2 units, Letter, 1 lec/2 lab
- DA, CSU/UC, CSUGE B3, IGETC 5C
- Prerequisite or Corequisite: OCEANO 1
- This course introduces the student to the tools of oceanography and what is being used in oceanographic research today. The student will also learn analytic techniques used to study oceanographic features, seawater properties, currents, tides, and waves. Field trips to coastal southern California are made.

OCEANO 12: Lectures in Marine Biology
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD A, CSUGE B2, IGETC 5B
- This course investigates the intertidal and offshore habitats. Included in the course is the study of marine plants and animals; their morphology, physiology, symbiotic relationships, ecology and issues of...
pollution and economic uses. Field trips and special projects are among the class activities.

OLD ADL (Courses For Older Adults)

OLD ADL 57CE: Adventures in Theater
- 0 units, Non-credit, Repeatable, 2 lec
- NC, NDA
- This class explores the development of a play from paper to performance. You will be guided from the backstage to the front stage while tracing the life cycle of a play from the hands of the playwright through auditions, rehearsals, and performance.

OLD ADL 501CE: Community Chorus
- 0 units, Non-credit, Repeatable, 3
- NC, NDA
- This course provides the opportunity for members of the community to participate in the rehearsal and performance of choral music in an ensemble setting. Effective Fall 2017

OLD ADL 775CE: Community Jazz Band
- 0 units, Non-credit, Repeatable, 3
- NC, NDA
- This course provides the opportunity for members of the community who are experienced jazz musicians to participate in the rehearsal and performance of jazz repertoire in an ensemble setting. Effective Fall 2017

PHILOS (Philosophy)

PHILOS 1: Introduction to Philosophy
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD C, CSUGE C2, IGETC 3B
- This course is designed to introduce the student to philosophical thinking. Possible topics include: the existence of God; the relationship of mind to body; perception and knowledge of the external world; political theory; the free will issue; the nature, sources, and limits of knowledge; and the underlying principles of morality.

PHILOS 6: Logic in Practice
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD D2, CSUGE A3
- Prerequisite: ENGLISH 28
- This course is designed to improve critical thinking skills in evaluating arguments in everyday life, in particular, arguments over moral and political issues. Emphasis is placed upon the analysis of language as an aid to clear thinking. Informal fallacies of reasoning shall be studied and exercises in reasoning may be included. Techniques of formal logic are briefly introduced.

PHILOS 20: Ethics
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD C, CSUGE C2, IGETC 3B
- Prerequisite: ENGLISH 101
- Philosophy 20 is a study of the basic principles of moral evaluation and issues of ethical theory, and their application to contemporary moral and social issues. The primary emphasis in the course is in aiding students in developing critical abilities in moral evaluation. The scope of this introductory ethics course will include metaethics, normative ethics, social ethics, applied ethics, and personal ethics.

PHILOS 33: Comparative Survey of World Religions
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD C, CSUGE C2, IGETC 3B
- This course presents a historical overview of the principal religious traditions of the world, concentrating on Hinduism and Buddhism, Confucianism and Daoism, Judaism, Christianity, and Islam. Considers origins, principal beliefs and practices, and contemporary issues.

PHOTO (Photography)

PHOTO 121: History and Appreciation of Photography
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD C, CSUGE C1, IGETC 3A
- This course covers the major historical developments in photography from the origin of the camera to the present. The influence of the camera in relation to societal changes, technological advances and relationships with other art forms will be studied.

PHYS ED (Physical Education)

see KIN, KIN ATH, and KIN MAJ (Kinesiology, Kinesiology – Athletics, and Kinesiology – Major)

PHYS SC (Physical Science)

PHYS SC 1: Physical Science I
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD A, CSUGE B1, IGETC 5A
- This course introduces astronomy, chemistry, geology and physics in an interdisciplinary approach. The fundamental concepts and principles of each discipline are developed to allow the student the opportunity to gain an understanding of both science and the scientist’s viewpoint.

PHYS SC 14: Physical Science Laboratory

Student learning outcomes may appear in any or all of the following online locations: linked to the course outline at https://ecd.laccd.edu/Default.aspx, and/or listed at http://www.lahc.edu/facultystaff/slo/courseassessment.html, and/or https://effectiveness.lahc.edu/cpc/haps/SitePages/2015-18%20SLO-SA%20Assessment.aspx. If so, those listed on the last site supersede all others.
• 1 unit, Letter, 2 lab
• DA, CSU/UC, LACCD A, CSUGE B3, IGETC 5C
• This course covers the study of nature through experiments in physics, geology, chemistry and astronomy.

PHYSICS

PHYSICS 6: General Physics I
• 4 units, Letter, 3 lec/3 lab
• DA, CSU/UC, LACCD A, CSUGE B1/B3, IGETC 5A/5C
• Prerequisite or corequisite: MATH 240
• This is the first of two trigonometry based physics courses presenting topics in mechanics of solids and fluids, heat and thermodynamics, vibrations and waves.

PHYSICS 7: General Physics II
• 4 units, Letter, 3 lec/3 lab
• DA, CSU/UC, LACCD A, CSUGE B1/B3, IGETC 5A/5C
• Prerequisite: PHYSICS 6
• This is second of two trigonometry based physics courses presenting topics in light, electricity, magnetism and an introduction to modern physics.

PHYSICS 11: Introductory Physics
• 4 units, Letter, 3 lec/3 lab
• DA, CSU/UC, LACCD A, CSUGE B1/B3, IGETC 5A/5C
• Prerequisite: MATH 115 or 123A
• This course introduces the principles of general physics emphasizing algebra-based computations. Topics include mechanics, heat, sound, light, electricity, magnetism and modern physics.

PHYSICS 18: Spectroscopy Using Side Illuminated Optical Fibers
• 4 units, Letter, 2.5 lec/3 lab
• DA, CSU
• Prerequisite: CHEM 65 and PHYSICS 7
• This course covers the basic principles of spectroscopy using side illuminated optical fibers. Topics include a review of Geometrical Optics, total internal reflection, partial internal reflection, Fresnel reflection, light propagation in optical fibers, Beer-Lambert’s Law, a historical review of side illuminated optical fibers and optical absorption, fluorescence and scattering.

PHYSICS 37: Physics for Engineers and Scientists I
• 5 units, Letter, 4 lec/3 lab
• DA, CSU/UC, LACCD A, CSUGE B1/B3, IGETC 5A/5C, C-ID PHYS 205
• Prerequisite or Corequisite: MATH 265
• First course in a series of physics with calculus for majors in chemistry, engineering, mathematics and physics. Topics include Newton’s three laws of motion, energy, momentum, rotational motion, gravitation and thermodynamics.

PHYSICS 38: Physics for Engineers and Scientists II
• 5 units, Letter, 4 lec/3 lab
• DA, CSU/UC, LACCD A, CSUGE B1/B3, IGETC 5A/5C, C-ID PHYS 210
• Prerequisite: PHYSICS 37; Prerequisite or Corequisite: MATH 266
• Designed for Physics, Astronomy, Chemistry, Engineering & Mathematics majors. Topics include electric charge and electric fields, electric energy storage, electric currents, magnetism, electromagnetic induction, electromagnetic oscillations, AC circuits, and Maxwell’s Equations.

PHYSICS 39: Physics for Engineers and Scientists III
• 5 units, Letter, 4 lec/3 lab
• DA, CSU/UC, LACCD A, CSUGE B1/B3, IGETC 5A/5C, C-ID PHYS 215
• Prerequisite: PHYSICS 37; Prerequisite or Corequisite: MATH 266
• Third course in a series of physics with calculus for majors in chemistry, engineering, mathematics and physics. Topics include wave phenomena, electromagnetic radiation, relativity, quantum mechanics and nuclear physics.

PHYSICS 185: Directed Study - Physics
• 1 unit, P/NP, 1 lec
• DA, CSU
• Students study Physics on a contract basis under the direction of a supervising instructor.

PHYSICS 285: Directed Study - Physics
• 2 units, P/NP, 6 lab
• DA, CSU
• Students study Physics on a contract basis under the direction of a supervising instructor.

PHYSICS 385: Directed Study - Physics
• 3 units, P/NP, 9 lab
• DA, CSU
• Allow students to pursue Directed Study on a contract basis under the direction of a supervising instructor.
Student learning outcomes may appear in any or all of the following online locations: linked to the course outline at https://ecd.laccd.edu/Default.aspx, and/or listed at http://www.lahc.edu/facultystaff/slo/courseassessment.html, and/or https://effectiveness.lahc.edu/cpc/haps/SitePages/2015-18%20SLO-SAO%20Assessment.aspx. If so, those listed on the last site supersede all others.

204 * Course Descriptions

Los Angeles Harbor College

**PHYSIOL (Physiology)**

**PHYSIOL 1: Introduction to Human Physiology**
- 4 units, Letter, 3 lec/3 lab
- DA, CSU/UC, LACCD A, CSUGE B2/B3, IGETC 5B/5C, C-ID BIOL 120B
- Prerequisite or corequisite: CHEM 65; Advisory Corequisite: ENGLISH 28
- This course provides a basic understanding of the physiological processes with a focus on the human body. Basic concepts of cell structure, membrane transport and membrane potential are integrated within the concept of homeostasis involving various body systems: nervous, sensory, endocrine, muscular, cardiovascular, immune, respiratory, excretory, digestive and respiratory.

**POL SCI (Political Science)**

**POL SCI 1: The Government of the United States**
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD B1, CSUGE D, IGEC 4, C-ID POLS 110
- This is an introductory course in the principles and problems in the national, state, and local areas. This course meets California State University requirements for United States Constitution and California state and local government.

**POL SCI 2: Modern World Governments**
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD B2, CSUGE D, IGETC 4, C-ID POLS 130
- An introduction to the comparative analysis of political systems, including their histories, political institutions and processes, political cultures, and public policies. Theoretical issues are included. Britain, France or Germany, Russia, China and Japan or India are studied, as well as Mexico, Brazil, Nigeria, South Africa, or Iran.

**POL SCI 4: Introduction to State and Local Governments**
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD B2, CSUGE D
- This general survey course introduces the student to the various functions, structures and services of California government, its relations to local governments, and their interrelationships with the federal government.

**POL SCI 7: Contemporary World Affairs**
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD B2, CSUGE D, IGETC 4
- This course analyzes political, historical, geographic, economic and strategic factors that underlie conflict and cooperation among nation-states, international organizations, and other political actors in the international system. Emphasis is on international relations theories, processes and policies.

**POL SCI 30: The Political Process**
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD B1, CSUGE D, IGETC 4
- This course surveys the nature and foundation of the democratic order. Specific focus is placed on traditional democratic theory, the contrasting philosophies of the Framers of the Constitution, and the impact of the decentralized, federal structure on the political processes of the United States.

**POL SCI 41: Principles of Student Leadership**
- 2 units, Letter, 2 lec
- DA, CSU
- This course prepares students in the theory and practice of organizations, leadership, principles of group leadership, and the development of decision making skills.

**POL SCI 285: Directed Study - Political Science**
- 2 units, Letter, 2 lec
- DA, CSU
- Students study Political Science on a contract basis under the direction of a supervising instructor. Transfer Credit: CSU

**POL SCI 385: Directed Study - Political Science**
- 3 units, Letter, 3 lec
- DA, CSU
- This course allows students to pursue Directed Study in the field of Political Science on a contract basis under direction of the instructor. The student's writing will analyze the policymaking process in the issue area chosen, including the identification of the problem, placement on the policy agenda, development/formulation and adoption of the policy, and its implementation and evaluation. Transfer Credit: CSU
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Grade</th>
<th>Lecture/Lab</th>
<th>Repeatable</th>
<th>Corequisite</th>
<th>Prerequisite</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYCH 1</td>
<td>General Psychology I</td>
<td>3</td>
<td>Letter</td>
<td>3 lec, DE</td>
<td>DA, CSU/UC</td>
<td>LACCD B2</td>
<td>PSY 110</td>
<td>This course covers a basic introduction to the scientific study of human behavior including emotion, motivation, growth &amp; development, learning &amp; memory, personality, intelligence, sensation, perception, social psychology, biology of behavior, abnormal behavior, and mental health. Relevant areas such as dreams, interpersonal communication, sexuality, aging, death, creativity, multi-cultural diversity, and stress are also presented.</td>
</tr>
<tr>
<td>PSYCH 2</td>
<td>Biological Psychology</td>
<td>3</td>
<td>Letter</td>
<td>3 lec, DE</td>
<td>DA, CSU/UC</td>
<td>LACCD A</td>
<td>PSY 150</td>
<td>Prerequisite: PSYCH 001 This course is a study of the physiological basis of human behavior through an understanding of the structure and function of the sensory receptors, and the central nervous system, the muscular effectors, the glandular effectors, the physiological aspects of motivation, learning, emotion, memory, and other higher brain functions.</td>
</tr>
<tr>
<td>PSYCH 3</td>
<td>Personality and Social Development</td>
<td>3</td>
<td>Letter</td>
<td>3 lec, DE</td>
<td>DA, CSU</td>
<td>LACCD E1</td>
<td>PSY 001</td>
<td>This course encourages the attainment of more effective behavior through increased understanding of personality dynamics. Basic techniques for recognizing and dealing with emotions and defenses are studied. The student is invited to explore his or her own feelings and experiences in the light of fundamental principles of awareness, clarification, integration, and growth of selfhood.</td>
</tr>
<tr>
<td>PSYCH 10</td>
<td>Principles of Psychology</td>
<td>3</td>
<td>Letter</td>
<td>3 lec</td>
<td>DA, CSU/UC</td>
<td>CSUGE D</td>
<td>PSY 200</td>
<td>Prerequisite: PSYCH 001 and MATH 227 or STAT 1; Advisory Corequisite: ENGLISH 101 This course is an introduction to research design and statistical analysis for the behavioral sciences with a focus on the application of the philosophy of science and the scientific method. Students learn to design and conduct research, analyze data using descriptive and inferential statistics, and report results using the American Psychological Association format.</td>
</tr>
<tr>
<td>PSYCH 14</td>
<td>Abnormal Psychology</td>
<td>3</td>
<td>Letter</td>
<td>3 lec, DE</td>
<td>DA, CSU/UC</td>
<td>LACCD B2</td>
<td>PSYCH 1</td>
<td>Prerequisite: PSYCH 1 This course considers the major diagnostic, etiologic, and treatment issues for a variety of categories of abnormal behavior and psychological disorders. The course examines disorders related to anxiety, stress, mood, schizophrenia, eating, substance abuse, memory and organic dysfunctions, and personality. Social, cultural, legal and ethical issues of psychopathology are included.</td>
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<tr>
<td>PSYCH 15</td>
<td>Adult Development and Aging</td>
<td>3</td>
<td>Letter</td>
<td>3 lec, DE</td>
<td>DA, CSU/UC</td>
<td></td>
<td>PSYCH 1</td>
<td>Prerequisite: PSYCH 1 This course examines the specific age stages of adult development and aging using a biopsychosocial framework. Topics to be covered include social cognition in adulthood, gender role and personality development across the lifespan, adaptive coping, intimacy, and sexual aspects of the ongoing aging process. Critical life issues for elders and for those who live and work with them are explored. These issues include physical health, mental health, health care policy, caregiving, dependency and positive aging strategies.</td>
</tr>
<tr>
<td>PSYCH 41</td>
<td>Life-Span Psychology: From Infancy to Old Age</td>
<td>3</td>
<td>Letter</td>
<td>3 lec, DE</td>
<td>DA, CSU/UC</td>
<td>LACCD B2</td>
<td>PSY 180</td>
<td>Prerequisite: PSYCH 001 This course presents the psychosocial development of the person from the pre-natal period to old age and death. Emphasis is placed on theories and their application to the behavioral, cognitive, social and biological aspects of human development. Topics covered in this course include physical development, intelligence, personality, self-concept, and social roles, tasks, changes, and adjustments related to each phase of the life-span.</td>
</tr>
</tbody>
</table>

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PUB REL (Public Relations)
See also Journalism

PUB REL 001: Principles of Public Relations
- 3 units, Letter, 3 lec
- DA, CSU
- Students evaluate public relations as a growing profession. Students look at the job opportunities for the practitioner, internal and external PR and investigate relationships with the media, organizing and executing campaigns and tie-ins with marketing. The use of social media, photography, graphics and video/audio components for campaigns is studied. Effective Fall 2017

REAL ES (Real Estate)

REAL ES 1: Real Estate Principles
- 3 units, Letter, 3 lec, DE
- DA, CSU
- This course examines the basic laws and principles of California Real Estate. It provides the background and terminology required for all Real Estate Agent License applicants and for advanced study.

REAL ES 3: Real Estate Practices
- 3 units, Letter, 3 lec, DE
- DA, CSU
- **Advisory Prerequisite: ENGLISH 28**
- This course stresses day-to-day operations in real estate sales and brokerage activities. Subject areas include listing, prospecting, advertising, financing, sales techniques, escrow and ethics. This course is required by the California Department of Real Estate before a licensee with a conditional license can receive an unconditional license. This course is also part of the State’s educational requirements for the real estate brokers license.

REAL ES 5: Legal Aspects of Real Estate I
- 3 units, Letter, 3 lec
- DA, CSU
- **Advisory Prerequisite: ENGLISH 28**
- This course is a study of California real estate law. Areas covered include property ownership, transfer of title, contract law, agency law, landlord/tenant law, probate proceedings, the Department of Real Estate regulation of licensees, taxation of real estate, foreclosures, escrow and title insurance and recent legislation.

REAL ES 7: Real Estate Finance I
- 3 units, Letter, 3 lec
- **DA, CSU**
- **Advisory Prerequisite: ENGLISH 28**
- This course stresses the analysis of real estate financing including lending policies and problems in financing transactions in residential, apartment, commercial, and special purpose properties. Methods of financing properties are also emphasized. This course is part of the State’s Department of Real Estate educational requirements for the brokers examination.

REAL ES 14: Property Management
- 3 units, Letter, 3 lec
- DA, CSU
- This course partially satisfies the educational requirements of the Department of Real Estate for both Real Estate Salesperson and Real Estate Broker licenses. It explains the principles, laws, and ethics relating to property management. This course emphasizes the principles of real estate property management including the basic foundation for pursuing the field of property management. Topics covered include history, preparing your business real estate leases and clauses, ethics, maintenance procedures, records, and advertising for both residential and commercial properties.

REAL ES 16: Income Tax Aspects of Real Estate
- 3 units, Letter, 3 lec, DE
- DA, CSU
- This basic course covers the impact of Federal and California state income tax on the purchase, sale exchange and use of real property. Included among the topics covered are depreciation, capital gains, installment sales, and tax-saving opportunities.

REAL ES 18: Real Estate Investments I
- 3 units, Letter, 3 lec
- DA, CSU
- **Advisory Prerequisite: ENGLISH 28**
- This course is an analysis of investment factors to determine the value of commercial, industrial and residential projects. Emphasized are site location, feasibility studies, zoning, financing, sales and leasebacks, and condominiums.

REAL ES 21: Real Estate Economics
- 3 units, Letter, 3 lec
- DA, CSU
- **Advisory Prerequisite: ENGLISH 28**
- This course covers business and real estate cycles, money, credit, real estate activity, regional and community economic development, real estate investment, income tax impact and residential
markets. This course is part of the educational requirements for the Real Estate Broker's License

SERVLRN (Service Learning)

SERVLRN 100: Introduction to Service Learning
- 1 unit, P/NP, 0.5 lec/1 lab, 27:00 TBA, DE
- DA, CSU
- Corequisite: enrollment in any class
  This is an activity course in which students provide service to public and private agencies. It emphasizes course content while nurturing a sense of social responsibility, ethics of service, and civic skills in students. This course is integrated with and enhances the curriculum of the students by applying course content and classroom learning in courses with service learning components. This course may be scheduled at times to be arranged (TBA) for a minimum of 27:00 hours.

SERVLRN 100-1: Introduction to Service Learning I
- 1 unit, P/NP, 0.5 lec/1 lab, 27:00 TBA, DE
- DA, CSU
- Corequisite: enrollment in any class
  This is an activity course in which students provide service to public and private agencies. It emphasizes course content while nurturing a sense of social responsibility, ethics of service, and civic skills in students. This course is integrated with and enhances the curriculum of the students by applying course content and classroom learning in courses with service learning components. This course may be scheduled at times to be arranged (TBA) for a minimum of 27:00 hours.

SOC (Sociology)

SOC 1: Introduction to Sociology
- 3 units, Letter, 3 lec, DE
- DA, CSU/UC, LACCD B2, CSUGE D, IGETC 4, C-ID SOCI 110
- This course provides an introduction to the general principles of sociology, emphasizing social organization, change and interaction. Reference is made to varied world cultures with concentration upon social institutions in our own society. Topics include culture, status, role, personality, socialization, social groups, social power, family, social stratification, collective behavior, and social change.

SOC 2: American Social Problems
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD B2, CSUGE D, IGETC 4
- Prerequisite: SOC 1
- This class is an introduction to the scientific study of social phenomena. Topics include research design, conceptualization, measurement, sampling methodology, and both qualitative and quantitative data analysis. Students analyze specific data collected in the field.

SOC 21: Human Sexuality
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD E1, CSUGE E, IGETC 4
- This course provides a comprehensive introduction to the cultural, behavioral, psychosocial, and biological aspects of human sexuality in a way that is meaningful to students. Topics will also include AIDS, physical and emotional orgasmic response, myths, sexual variance and dysfunction, gender identity, gender roles, communication about sex, love. Improving sexual satisfaction, sexuality throughout life cycle and cross-cultural variations in sexual expression.

SPANISH

also see Voc Ed (Vocational Education)

SPANISH 1: Elementary Spanish I
- 5 units, Letter, 5 lec, DE

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**SPANISH 2: Elementary Spanish II**
- 5 units, Letter, 5 lec
- DA, CSU/UC, LACCD C, CSUGE C2, IGETC 3B/6A
- Prerequisite: SPANISH 1
- This course stresses the mastery of speaking and understanding. Emphasis is also placed on correct pronunciation, vocabulary, and sentences structure. Reading and writing of basic Spanish are also further developed. Introduction to Hispanic culture.

**SPANISH 3: Intermediate Spanish I**
- 5 units, Letter, 5 lec
- DA, CSU/UC, LACCD C, CSUGE C2, IGETC 3B/6A
- Prerequisite: SPANISH 2
- A thorough review of Spanish grammar is given in this course along with an introduction to advanced grammatical concepts. Emphasis is also placed on the development of the student’s ability to express written and oral language, vocabulary building, reading comprehension, and increasing proficiency in pronunciation.

**SPANISH 4: Intermediate Spanish II**
- 5 units, Letter, 5 lec
- DA, CSU/UC, LACCD C, CSUGE C2, IGETC 3B/6A
- Prerequisite: SPANISH 3
- This course is a continuation of Spanish 3. Further development of writing and communication skills through the study of representative Spanish and Latin American literary and cultural works where the focus is on analysis and discussion. Sustained study of grammar and vocabulary with emphasis on complex structures and stylistics and the use of idiomatic expressions will also be developed.

**SPANISH 12: Contemporary Mexican Literature**
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD C, CSUGE C2, IGETC 3B
- This course includes a presentation of Mexican and Chicano literary works of various genres with emphasis on the 20th century. Students will read the texts in English. Lecture is also in English.

**SPANISH 21: Fundamentals of Spanish I**
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD C, CSUGE C2

**SPANISH 22: Fundamentals of Spanish II**
- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD C, CSUGE C2, IGETC 6
- Prerequisite: SPANISH 21
- This course is a continuation of Spanish 21. It covers the second half of Spanish 1. It introduces the fundamentals of Spanish pronunciation, grammar, vocabulary, sentence structure, and idiomatic expressions. Furthermore, it stresses the ability to understand, read, write, and speak simple Spanish and introduces cultural insights into Spanish and Spanish-speaking worlds. Spanish 21 and 22 together are equivalent to Spanish1. Both Spanish 21 and 22 must be taken for UC:CSUGE Credit.

**SPANISH 35: Spanish for Spanish Speakers I**
- 5 units, Letter, 5 lec
- DA, CSU/UC, LACCD C, CSUGE C2, IGETC 6
- Prerequisite: SPANISH 35
- This course addresses the needs of the native Spanish speaking student. It focuses on the acquisition of a solid grammar base, vocabulary enrichment, spelling, reading, and writing skills. Also included is a study of linguistic variants in the Spanish language and of Spanish and Latin American literature, culture, and civilization.

**SPANISH 36: Spanish for Spanish Speakers II**
- 5 units, Letter, 5 lec
- DA, CSU/UC, LACCD C, CSUGE C2, IGETC 3B
- Prerequisite: SPANISH 35
- This course is a continuation of Spanish 035. It completes the study of grammar, vocabulary, and continues the development of reading and writing skills. Further course study of linguistic variants in the Spanish language and of Spanish and Latin American literature, culture, and civilization.

**SPANISH 101: Spanish Language Laboratory**
- 1 unit, P/NP, 2 lab, 36:00 TBA
- DA, CSU
- Corequisite: SPANISH 1, SPANISH 2, SPANISH 3, or SPANISH 4
- An independent course in which students improve their reading, writing, speaking and comprehension.
skills by use of audio and online materials. Students must complete 36 hours for credit. This course may be scheduled at times to be arranged (TBA) for a minimum of 36:00 hours.

SPEECH (Speech Communications)

see COMM (Communication Studies)

STAT (Statistics)

also see MATH (Mathematics)

STAT 1: Elementary Statistics I for the Social Sciences

- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD B2/D2, CSUGE B4, IGETC 2A, C-ID MATH 110, SOCI 125
- Prerequisite: MATH 123C or 125; Advisory Corequisite: PSYCH 1
- Introduces fundamental tools of quantitative methods in research: the use of probability techniques, hypothesis testing, and predictive techniques to facilitate decision-making. Topics in this course include descriptive statistics; probability and sampling distributions; statistical inference; correlation and linear regression; analysis of variance, chi-square and t-tests; and application of technology for statistical analysis including the interpretation of the relevance of the statistical findings. Applications using data from disciplines including Bus, social sciences, psychology, life science, health science, and education.

SUPV (Supervision)

SUPV 1: Elements of Supervision

- 3 units, Letter, 3 lec, DE
- DA, CSU
- This course presents the theory and principles of supervision, as well as the supervisor’s responsibilities for organization, human relations, training, rating, quality-quantity control, and management-employee relations.

THEATER

also see OLD ADL (Courses for Older Adults)

THEATER 100: Introduction to the Theater

- 3 units, Letter, 3 lec
- DA, CSU/UC, LACCD C, CSUGE C1, IGETC 3A
- This is a lecture course designed to provide the beginning student with a general knowledge of theater, television, motion pictures, and radio, and their influences on modern society. It emphasizes the historical growth, basic vocabulary, and related skills and crafts within the theater. This course offers students a basis for critical analysis through attending and evaluating theatrical and motion picture productions which aid in a greater appreciation and understanding of good theater and other entertainment.

THEATER 200: Introduction to Acting

- 3 units, Letter, Repeatable, 3 lec
- DA, CSU/UC
- This course covers introductory exercises in voice, diction, movement, and personality projection. The course also reviews actors and acting approaches, past and present, along with elements of the actors work as artists. The reading of plays and viewing of theatrical performances are also included.

THEATER 232: Play Production II

- 2 units, Letter, Repeatable, 6 lab, 108:00 TBA
- DA, CSU/UC
- Training and Practice are given in all phases of mounting plays for stage and television. Topics considered are plays selection, organization, directing, performance, costume, and scenery designing, construction, and lighting. This course may be scheduled at times to be arranged (TBA) for a minimum of 108:00 hours.

THEATER 250: Children’s Theater Production

- 2 units, Letter, Repeatable, 6 lab, 108:00 TBA
- DA, CSU
- Experience is given in the acting, directing, and producing of children’s plays for public presentation. This course may be scheduled at times to be arranged (TBA) for a minimum of 108:00 hours.

THEATER 270: Beginning Acting

- 3 units, Letter, Repeatable, 3 lec
- DA, CSU/UC
- This is an introduction to the acting process with supervised practice in characterization, interpretation, body movement, pantomime, and concentration through exercises and improvisations. The selection, study and presentation of short scenes are emphasized.

THEATER 271: Intermediate Acting

- 3 units, Letter, 1 lec/2 lab
- DA, CSU/UC
- Prerequisite: THEATER 270

**Letter**: letter graded; **P/NP**: pass/no-pass graded; **Repeatable**: may be repeated; **Lec/Lab**: hours per week of lecture/lab; **TBA**: maximum total hours to be arranged; **DE**: distance education (online and/or hybrid); **NC**: non-credit; **DA/ND**: degree/non-degree applicable; **CSU/UC**: transferability to the listed institution; **LACCD/CSUGE/IGETC**: general education area applicable; **C-ID**: CSU course ID equivalency; **Corequisite**: required corequisite (concurrent enrollment); **Prerequisite**: required prerequisite (prior completion with a minimum grade of “C” or “P”).
• Acting principles are expanded and applied in staged scenes. The emphasis is on comprehension, translation into meaningful dramatic action, and creation. The actor’s self-awareness is explored and developed before a classroom audience.

*Effective Spring 2017*

THEATER 275: Scene Study
• 2 units, Letter, 1 lec/2 lab
• DA, CSU/UC
• In this course students are given the opportunity to plan, rehearse, stage and produce all-student projects in a repertory theater atmosphere. Productions are presented before campus audiences during school hours and also in the evening. Students must be available for additional rehearsal and performance time outside of class.

THEATER 279: Musical Theater
• 2 units, Letter, Repeatable, 1 lec/2 lab
• DA, CSU
• A performance class which integrates the elements of voice, dance and acting as required for performing in musicals. Emphasis is placed on learning musical theater techniques and preparing successful audition material for musicals.

THEATER 280: Musical Theater Workshop I
• 3 units, Letter, 6 lab
• DA, CSU/UC
• This course will provide practical experience in using techniques and principles of acting in the musical theatre and will culminate with a live performance before an audience. Emphasis will focus on the development of acting, singing, and movement skills. Students are advised to have some knowledge of reading music and vocal singing ability.

THEATER 281: Rehearsals and Performances I
• 1 unit, Letter, Repeatable, 3 lab
• DA, CSU/UC
• Training and Practice are given in all phases of mounting plays for stage and television. Topics considered are plays selection, organization, directing, performance, costume, and scenery designing, construction, and lighting.

THEATER 282: Rehearsals and Performances II
• 2 units, Letter, Repeatable, 6 lab, 108:00 TBA
• DA, CSU/UC
• Training and Practice are given in all phases of mounting plays for stage and television. Topics considered are plays selection, organization, directing, performance, costume, and scenery designing, construction, and lighting. This course may be scheduled at times to be arranged (TBA) for a minimum of 108:00 hours.

THEATER 300: Introduction to Stage Craft
• 3 units, Letter, 3 lec
• DA, CSU/UC
• An introduction to technical theater 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.

THEATER 301: Stage Craft
• 3 units, Letter, 2 lec/2 lab
• DA, CSU/UC
• Prerequisite: THEATER 300
• This course is an intermediate level and laboratory practice of technical theater, including the creation of scenic elements and solving the practical problems involved in all technical aspects of mounting a stage production. Areas of concentration include painting techniques, set construction, set movement, prop construction, backstage organization, lighting hang and focus, and basic sound set up.

*Effective Spring 2017*

THEATER 323: Stage Management and Production
• 3 units, Letter, 3 lec
• DA, CSU/UC
• This course is a study of stage managerial practices and procedures. Students will study the organization of theatrical and multi-media production and the various aspects which interconnect in the production process.

THEATER 325:
• 3 units, Letter, 2 lec/2 lab
• DA, CSU/UC
• Prerequisite: THEATER 301
• This course will provide the student with instruction in advanced methods, physical techniques, and crew responsibilities of the theater technician in all the specialty areas. The process will include emphasis on practical solutions and leadership in crew and equipment management. Use of state-of-the-art stage equipment and show operation forms to execute a production in multiple entertainment medias is covered. The direct outcome is to prepare the student for work in the behind the scenes of the entertainment industry.

*Effective Spring 2017*

THEATER 550: Multimedia Production for the Stage

Student learning outcomes may appear in any or all of the following online locations: linked to the course outline at https://ecd.laccd.edu/Default.aspx, and/or listed at http://www.lahc.edu/facultystaff/slo/courseassessment.html, and/or https://effectiveness.lahc.edu/cpc/haps/SitePages/2015-18%20SLO-SA0%20Assessment.aspx. If so, those listed on the last site supersede all others.
• 2 units, Letter, 6 lab
• DA, CSU
• Students taking this course will develop theater skills including: video camera operation, video studio operation, telecommunication technology, and other ways of incorporating digital technology into the performing arts. Focus of this course will be on collaborative productions with other campuses within the United States and international sites.

TUTOR (Tutoring)

TUTOR 001T: Supervised Tutoring
• 0 units, Non-credit, Repeatable, 20 lab, 360:00 TBA
• NC, NDA
• Prerequisite: referred by instructor or counselor per Title 5 Section (58170 e.)
• Upon faculty/counselor referral, student will receive tutoring in designated subject areas using course textbooks and other related materials. Cumulative progress and attendance records will be maintained for this non-credit, open entry course. TUTOR 001T will not appear on the student's transcript. This course may be scheduled at times to be arranged (TBA) for a minimum of 360:00 hours.

VOC ED (Vocational Education)

Also see SPANISH and CAOT (Computer Applications of Office Technologies)

VOC ED 53CE: Spanish for Public Personnel
• 0 units, Non-credit, Repeatable, 3 lec
• NC, NDA
• This course is designed to provide a working knowledge of Spanish and customer service to individuals within the community who serve, or are in contact with populations whose primary language is Spanish. Topics include: read and recite high frequency words and phrases, constructing simple commands, questions & answers, basic grammar, cultural awareness, customer service and etiquette.

VOC ED 100CE: Typing
• 0 units, Non-credit, Repeatable, 3 lec
• NC, NDA
• This beginning course in typing is designed to develop mastery of the keyboard and the fundamental keyboarding techniques.

VOC ED 106CE: Word Processing
• 0 units, Non-credit, Repeatable, 3 lec
• NDA
• This course introduces word processing software and provides basic hands-on instruction. Students will learn the basics in computer usage and word processing software. Students will create documents, memos, fliers, and other office related documents. Students will be introduced to basic editing procedures and file management.

VOC ED 117CE: Clerical Skills
• 0 units, Non-credit, Repeatable, 3 lec
• NC, NDA
• This course introduces office related clerical skills including basic communication, letter/memo writing, mathematics/calculator usage, answering telephone calls, and simple bookkeeping techniques. Students will also prepare/update a resume and practice interview skills.