

# CUYAMACA COLLEGE

## ACADEMIC PROGRAM CHANGES FOR THE 2018-2019 CATALOG

### COURSE ADDITIONS

#### **ART 149 – HISTORY OF GRAPHIC DESIGN**

**3 UNITS**

Prerequisite: None  
3 hours lecture

This course examines graphic design as a vital component of each culture and period in human history. Leaders in design, innovated technologies and import design movements are covered in their historical context. This course is for students majoring graphic design, art history, studio arts and anyone interested in the history of graphic design.

#### **AUTOMOTIVE TECHNOLOGY 191A – ASSET – BRAKES**

**1 UNIT**

Prerequisite: None

Recommended Preparation: "C" grade or higher or "Pass" in AUTO 122 Electrical or AUTO 196A Ford ASSET Electrical, or AUTO 196B Ford ASSET "TEST OUT" or equivalent

1 hour lecture

This Ford ASSET course includes a detailed study of modern automotive braking systems and service procedures. The course will cover drum and disc brake systems inspection, adjustment and repair procedures including methods of diagnosing and repairing various mechanical and hydraulic brake systems using Ford specified tools and procedures. This course is complemented by required work experience in the dealership where students will perform specific Ford competencies related to basic brake diagnosis and repair.

#### **AUTOMOTIVE TECHNOLOGY 191B – ASSET – BRAKES, ADVANCED BRAKES, SUSPENSION, NVH TEST OUT**

**.5 UNIT**

Prerequisite: None

Recommended Preparation: "C" grade or higher or "Pass" in AUTO 122 Electrical or AUTO 196A Ford ASSET Electrical, or AUTO 196B Ford ASSET "TEST OUT" or equivalent

1.5 hours laboratory

Ford ASSET course to include hands on summative and criterion tests for students to prove knowledge skills and abilities to perform diagnosis and repair of active brake systems, suspension, and noise vibration and harshness (NVH) on Ford vehicles in the department laboratory; or by using distance education technologies such as augmented reality or virtual reality. The tests will include brake control systems such as hydraulics, friction heating, electronic and mechanical parking brake control systems, inputs, actuations, or other auxiliary brake systems. As well as suspension system diagnosis, and NVH diagnosis prescribed by Ford Motor Company. This course allows a student residing distance from training centers to complete Ford certification requirements prior to performing warranty service at a dealership. This course is complemented by required work experience at a Ford dealership, and by completing lecture classes brakes, advanced brakes (vehicle dynamic braking and suspension), and NVH.

#### **AUTOMOTIVE TECHNOLOGY 191C – ASSET – DYNAMIC VEHICLE BRAKES**

**1.5 UNITS**

Prerequisite: None

Recommended Preparation: "C" grade or higher or "Pass" in AUTO 122 Electrical or AUTO 196A Ford ASSET Electrical, or AUTO 196B Ford ASSET "TEST OUT" or equivalent

1.5 hours lecture

This Ford ASSET course includes a detailed study of modern automotive braking systems and service procedures. The course will include electronic braking systems inspection, adjustment and repair procedures including methods of diagnosing and repairing various electro mechanical and hydraulic brake systems using Ford specified tools and procedures. This course explains the high speed communication module relationship of braking, suspension, and powertrain, including active versus passive brake controls. This course is complemented by required work experience in the dealership where students will perform specific Ford competencies related to advanced brake diagnosis and repair.

#### **AUTOMOTIVE TECHNOLOGY 191D – SUSPENSION**

**1 UNIT**

Prerequisite: None

Recommended Preparation: "C" grade or higher or "Pass" in AUTO 122 Electrical or AUTO 196A Ford ASSET Electrical, or AUTO 196B Ford ASSET "TEST OUT" or equivalent

1 hour lecture

This Ford ASSET course includes a detailed study of modern suspension systems and service procedures. This course includes inspection, adjustment, and repair procedures for suspension systems including methods of diagnosing and repairing various mechanical and hydraulic components using Ford specified tools and procedures. For example, alignments, adjustments, active suspension; and the relationship between suspension and vehicle dynamics. This course is complemented by required work experience in the dealership where students will perform specific Ford competencies related to suspension diagnosis and repair.

**AUTOMOTIVE TECHNOLOGY 191E – NOISE VIBRATION AND HARSHNESS****.5 UNIT**

Prerequisite: None

Recommended Preparation: "C" grade or higher or "Pass" in AUTO 122 Electrical or AUTO 196A Ford ASSET Electrical, or AUTO 196B Ford ASSET "TEST OUT" or equivalent

.5 hours lecture

This Ford ASSET course includes a detailed study of modern noise, vibration, and harshness (NVH) systems and service procedures. This course includes inspection, adjustment, and repair procedures for NVH systems including methods of diagnosing and repairing various mechanical, electronic, and hydraulic components using Ford specified tools and procedures. For example, noise is a relationship to the frequency of sound that a human can hear, and the relationship between the rotational speeds of vehicle systems. This course is complemented by required work experience in the dealership where students will perform specific Ford competencies related to NVH diagnosis and repair.

**AUTOMOTIVE TECHNOLOGY 192A – ASSET – AUTOMATIC TRANSMISSION SERVICE****2 UNITS**

Prerequisite: None

Recommended Preparation: "C" grade or higher or "Pass" in AUTO 122 Electrical or AUTO 196A Ford ASSET Electrical, or AUTO 196B Ford ASSET "TEST OUT" or equivalent

2 hours lecture

This classroom course contains information about servicing automatic transmissions. The course topics include disassembly & inspection, subassembly, assembly, critical measurements, and unique service procedures. The course also includes the theory of and operation of automatic transaxles. Current computerized control system operation and diagnosis of the drive train will be emphasized. Successful completion includes Ford Motor Company certification and preparation for ASE Certification. This course must be complemented by work experience in the Ford dealership.

**AUTOMOTIVE TECHNOLOGY 192B – ASSET – TRANSMISSION DIAGNOSE AND SERVICE TEST OUT****.5 UNIT**

Prerequisite: None

Recommended Preparation: "C" grade or higher or "Pass" in AUTO 122 Electrical or AUTO 196A Ford ASSET Electrical, or AUTO 196B Ford ASSET "TEST OUT" or equivalent

1.5 hours laboratory

Ford ASSET course to include hands on summative and criterion tests for students to prove knowledge skills and abilities to perform diagnosis and repair of active transmission systems including differential and four wheel drive (4WD) using Ford vehicles in the department laboratory; or by using distance education technologies such as augmented reality or virtual reality or mobile technologies. The tests will include drivetrain control systems such as hydraulics, friction clutches, electronic and mechanical transmission control systems, inputs, actuations, or other auxiliary systems prescribed by Ford Motor Company. This course allows a student residing distance from training centers to complete Ford certification requirements prior to performing warranty service at a dealership. This course is complemented by required work experience at a Ford dealership, and by completing lecture classes transmission service, transmission diagnosis, and differentials and 4WD.

**AUTOMOTIVE TECHNOLOGY 192C – ASSET – AUTOMATIC TRANSMISSION DIAGNOSIS****2 UNITS**

Prerequisite: None

Recommended Preparation: "C" grade or higher or "Pass" in AUTO 122 Electrical or AUTO 196A Ford ASSET Electrical, or AUTO 196B Ford ASSET "TEST OUT" or equivalent

2 hours lecture

This classroom course provides training about diagnosing automatic transmission concerns. Topics include normal operation, electrical fault diagnosis, diagnosing shift concerns, diagnosing engagement concerns, and the diagnostic process. This course is supplemented by work experience at a Ford dealership.

**AUTOMOTIVE TECHNOLOGY 192D – ASSET – DIFFERENTIAL AND 4WD DIAGNOSIS AND SERVICE****1 UNIT**

Prerequisite: None

Recommended Preparation: "C" grade or higher or "Pass" in AUTO 122 Electrical or AUTO 196A Ford ASSET Electrical, or AUTO 196B Ford ASSET "TEST OUT" or equivalent

1 hour lecture

This Ford ASSET course includes a detailed study of modern automotive electronic or manually controlled differential and 4WD systems and service procedures. The course will describe systems inspection, adjustment and repair procedures including methods of diagnosing and repairing various mechanical and hydraulic drivetrain systems using Ford specified tools and procedures. This course is complemented by required work experience in the dealership where students will perform specific Ford competencies related to differential and 4WD diagnosis and repair.

**AUTOMOTIVE TECHNOLOGY 193A – ASSET – ENGINE DIAGNOSIS AND REPAIR****2 UNITS**

Prerequisite: None

Recommended Preparation: "C" grade or higher or "Pass" in AUTO 122 Electrical or AUTO 196A Ford ASSET Electrical, or AUTO 196B Ford ASSET "TEST OUT" or equivalent

2 hours lecture

This classroom course teaches proper disassembly, assembly, repair, and diagnostic techniques for Ford engines including the proper timing procedures. The course also includes how to identify and measure critical clearances.

**AUTOMOTIVE TECHNOLOGY 193B – ASSET – ENGINE DIAGNOSIS AND REPAIR TEST OUT** **.5 UNIT**

Prerequisite: None

Recommended Preparation: "C" grade or higher or "Pass" in AUTO 122 Electrical or AUTO 196A Ford ASSET Electrical, or AUTO 196B Ford ASSET "TEST OUT" or equivalent

1.5 hours laboratory

Ford ASSET course to include hands on summative and criterion tests for students to prove knowledge skills and abilities to perform diagnosis and repair of engine and performance systems including diesel engine performance of Ford vehicles in the department laboratory; or by using distance education technologies such as augmented reality or virtual reality or mobile technologies. The tests will include engine component systems such as pistons, bearings, camshafts, electronic and mechanical engine control systems, inputs, actuations, or other auxiliary systems prescribed by Ford Motor Company. This course allows a student residing distance from training centers to complete Ford certification requirements prior to performing warranty service at a dealership. This course is complemented by required work experience at a Ford dealership, and by completing lecture classes engine diagnosis and repair and diesel engine performance.

**AUTOMOTIVE TECHNOLOGY 193C – ASSET – DIESEL ENGINE PERFORMANCE AND DIAGNOSIS** **2 UNITS**

Prerequisite: None

Recommended Preparation: "C" grade or higher or "Pass" in AUTO 122 Electrical or AUTO 196A Ford ASSET Electrical, or AUTO 196B Ford ASSET "TEST OUT" or equivalent

2 hours lecture

This classroom training course will cover diesel engine performance concerns and diagnosis, which will include the use of service publications, diagnostic tests and procedures as well as special tools and equipment. The information and exercises, presented in this course, are focused on the Power-stroke diesel engines and key subsystems found on Ford vehicles.

**AUTOMOTIVE TECHNOLOGY 195A – ASSET – ENGINE PERFORMANCE THEORY AND OPERATION** **1.5 UNITS**

Prerequisite: None

Recommended Preparation: "C" grade or higher or "Pass" in AUTO 122 Electrical or AUTO 196A Ford ASSET Electrical, or AUTO 196B Ford ASSET "TEST OUT" or equivalent

1.5 hours lecture

Ford ASSET course to include an in-depth study of engine drivability and electronic engine controls on modern automobiles and trucks. Includes the study of basic and electronic ignition systems, early and modern fuel systems, and the repair and diagnosis of these systems. Emphasis is on electronic engine control system theory of operation and repair to include discussion of sensors, processors and actuators, and system diagnosis and repair. On-board computer logic and strategies will also be presented. This classroom course will provide the knowledge and skills needed to describe fundamental engine performance theory and operation. The course includes scan tool operation, PID monitoring and PC/ED usage.

**AUTOMOTIVE TECHNOLOGY 195B – ASSET – ENGINE PERFORMANCE DIAGNOSIS AND REPAIR TEST OUT** **.5 UNIT**

Prerequisite: None

Recommended Preparation: "C" grade or higher or "Pass" in AUTO 122 Electrical or AUTO 196A Ford ASSET Electrical, or AUTO 196B Ford ASSET "TEST OUT" or equivalent

1.5 hours laboratory

Ford ASSET course to include hands on summative and criterion tests for students to prove knowledge skills and abilities to perform diagnosis and repair of engine performance systems including diesel engine performance of Ford vehicles in the department laboratory; or by using distance education technologies such as augmented reality or virtual reality or mobile technologies. The tests will include engine component systems such as parameter identification values (PID), inputs, actuations, or other auxiliary systems prescribed by Ford Motor Company. This course will test student knowledge of gasoline turbo direct injection (GTDI). This course allows a student residing distance from training centers to complete Ford certification requirements prior to performing warranty service at a dealership. This course is complemented by required work experience at a Ford dealership, and by completing lecture classes engine performance and diagnosis, engine performance diagnosing and testing, and GTDI diagnosis and testing.

**AUTOMOTIVE TECHNOLOGY 195C – ASSET – ENGINE PERFORMANCE DIAGNOSIS AND TESTING** **1.5 UNITS**

Prerequisite: None

Recommended Preparation: "C" grade or higher or "Pass" in AUTO 122 Electrical or AUTO 196A Ford ASSET Electrical, or AUTO 196B Ford ASSET "TEST OUT" or equivalent

1.5 hours lecture

This classroom course will provide the knowledge and skills needed to understand engine performance diagnosis and testing. The course includes an introduction to the Symptom/System/Component/Cause (SSCC) process, pinpoint test diagnosis and specific scan tool operations.

**AUTOMOTIVE TECHNOLOGY 195D – GASOLINE TURBO DIRECT INJECTION** **1.5 UNITS**

Prerequisite: None

Recommended Preparation: "C" grade or higher or "Pass" in AUTO 122 Electrical or AUTO 196A Ford ASSET Electrical, or AUTO 196B Ford ASSET "TEST OUT" or equivalent

1.5 hours lecture

This classroom course teaches proper diagnosis and repair of the Gasoline Turbocharged Direct Injection (GTDI) engine. You will use the IDS and follow Pinpoint tests to diagnose engine-related DTC's. This course will describe turbo charging and manifold absolute pressure sensor values relating to turbo charging. The course will describe high pressure fuel system tests.

**AUTOMOTIVE TECHNOLOGY 196A – ASSET – ELECTRICAL****2 UNITS**

Prerequisite: None

2 hours lecture

Ford ASSET course to include electrical systems, theory, diagnosis and repair procedures utilizing state of the art equipment. Systems covered will be storage, generating and starting. Coverage of accessory systems such as lighting, power seats, power door locks, cruise controls, electric windows, electronic dashboards, radios, windshield wipers, and introduction to electronic systems such as transistors and electronic computer controls. This course is supplemented with required work experience at a Ford dealership where specific competencies are performed.

**AUTOMOTIVE TECHNOLOGY 196B – ASSET – ELECTRICAL, ELECTRONICS, CLIMATE CONTROL TEST OUT****.5 UNIT**

Prerequisite: None

Recommended Preparation: "C" grade or higher or "Pass" in AUTO 122 Electrical or AUTO 196A Ford ASSET Electrical or equivalent

1.5 hours laboratory

Ford ASSET course to include hands on summative and objective tests for students to prove knowledge skills and abilities to perform diagnosis and repair of electronics systems on Ford vehicles in the department laboratory, or by using distance education technologies such as augmented reality or virtual reality. The tests will include electronics systems such as lighting, power seats, power door locks, cruise controls, electric windows, electronic dashboards, radios, windshield wipers, or other systems as prescribed by Ford Motor Company. This course allows a student residing distance from training centers to complete Ford certification requirements prior to performing warranty service at a dealership. This course is complemented by required work experience at a Ford dealership, and by completing lecture class Electronics.

**AUTOMOTIVE TECHNOLOGY 196C – ASSET – ELECTRONICS****2 UNITS**

Prerequisite: Students must have a signed Ford dealership sponsorship agreement

Recommended Preparation: "C" grade or higher or "Pass" in AUTO 122 Electrical or AUTO 196A Ford ASSET Electrical, or AUTO 196B Ford ASSET "TEST OUT" or equivalent

2 hours lecture

Ford ASSET course to include electronic systems, theory, diagnosis and repair procedures utilizing state of the art equipment. This course applies basic electrical test applications incorporating electronic controls units and computer networks. This course covers various vehicle computer functions such as: body electronics, infotainment systems, and electric vehicle and hybrid vehicle system operations. Students will use test equipment to measure sensor outputs used for computer component activation, and study vehicle electronic wiring diagrams in depth, gaining knowledge skills and abilities to perform complex tests. This course is preparation for Ford certification, and complemented by required work experience in the dealership.

**AUTOMOTIVE TECHNOLOGY 196D – ASSET – CLIMATE CONTROL****1 UNIT**

Prerequisite: Students must have a signed Ford dealership sponsorship agreement

Recommended Preparation: "C" grade or higher or "Pass" in AUTO 122 Electrical or AUTO 196A Ford ASSET Electrical, or AUTO 196B Ford ASSET "TEST OUT" or equivalent

1 hour lecture

Ford ASSET course to include climate control systems, theory, diagnosis and repair procedures utilizing state of the art equipment. This course applies basic heating and air conditioning test applications incorporating electronic controls units and computer networks. This course covers various vehicle computer functions such as: body electronics, climate control units, and electric vehicle and hybrid vehicle climate system operations. Students will use test equipment to measure sensor outputs used for computer component activation, and study vehicle electronic wiring diagrams in depth, gaining knowledge skills and abilities to perform complex tests. This course is preparation for Ford certification, and complemented by required work experience in the dealership.

**GEOLOGY 122 – REGIONAL FIELD STUDIES IN PHYSICAL GEOGRAPHY AND GEOLOGY OF DESERT ENVIRONMENTS****1 UNIT**

Prerequisite: None

Recommended Preparation: "C" grade or higher or "Pass" in GEOG 120, GEOL 104, or GEOL 110 or concurrent enrollment

1 hour lecture, 1 hour laboratory

Are you interested in science and enjoy spending time outdoors? Explore the desert and learn about regional geology and geography with this field studies course! Regional Field Studies in Physical Geography and Geology of Desert Environments provides focused experience in geological and geographical field studies of desert environments in California and western North America. This course emphasizes use of the scientific process, observation, and interpretation of geologic and geographic phenomena in desert environments through direct experience in a field setting. This course centers around multi-day weekend field trips to desert environments in addition to on-campus meetings prior to and immediately following the field trips. Students must supply their own camping gear (sleeping bag, tent, etc.) and attend all class meetings and field trips. *Also listed as GEOG 122. Not open to students with credit in GEOG 122.*

## COURSE MODIFICATIONS

The following reflect changes in subject designator, course number and/or title, prerequisite/corequisite/recommended preparation, units, hours, and/or course description. Other areas (e.g., course objectives, course content, student learning outcomes, etc.) may also have been modified to meet Title 5 standards (reflected as *“Review and update of course outline”*). These modifications have been carefully reviewed by the Curriculum, General Education and Academic Policies and Procedures Committee.

PRESENT	PROPOSED CHANGES TO AREAS AS INDICATED
<b>AMERICAN SIGN LANGUAGE 120 – AMERICAN SIGN LANGUAGE I</b>	<i>Review and update of course outline</i>
<b>ARABIC 250 – CONVERSATIONAL ARABIC I</b> Prerequisite: “C” grade or higher or “Pass” in ARBC 121 or three years of high school Arabic or equivalent	Prerequisite: ““C” grade or higher or “Pass” in ARBC 121 or 122 or 123 or 220 or 221 or three years of high school Arabic or equivalent
<b>AUTOMOTIVE TECHNOLOGY 191 – ASSET – BRAKES AND ALIGNMENT</b> Recommended Preparation: None Ford ASSET course to include a detailed study of modern automotive braking systems and service procedures. The laboratory will cover drum and disc brake systems inspection, adjustment and repair procedures. Also covers four wheel alignment principles as applied to checking and correcting alignment settings. Repair and replacement of suspension components. Additional training in wheel balancing. Emphasis on practical experience on “live” automobiles. Preparation for ASE Certification. Complemented by required work experience in the dealership.	<b>ASSET – BRAKES, ADVANCED BRAKES, SUSPENSION AND NVH</b>  Recommended Preparation: “C” grade or higher or “Pass” in AUTO 122 or AUTO 196 or equivalent Ford ASSET course to include a detailed study of modern automotive braking systems and service procedures. The course will describe brake systems inspection, adjustments, and repair procedures. Vehicle dynamic electronic brake systems will be demonstrated and described. This course will require the diagnosis and replacement of mechanical and electronic suspension components, and provide training in wheel balancing and tire service. The relationship between brakes and suspension and various causes of noise vibration and harshness will be emphasized. Students will be required to gain practical experience using diagnosing and repairing vehicles. This course is complemented by required work experience at a Ford dealership.
<b>BIOLOGY 240 – PRINCIPLES OF ECOLOGY, EVOLUTION AND ORGANISMAL BIOLOGY</b>	<i>Review and update of course outline</i>
<b>CADD TECHNOLOGY 125 – 3D SOLID MODELING</b> Advanced graphic communication using solid modeling techniques and software (SolidWorks). Techniques include feature based part construction using extrudes, cuts and revolves; advanced surface shaping using lofts and sweeps; and assembly construction and constraining in an engineering design environment. Students will continue to develop 2D drafting skills including proper organization and layout of component drawing views, dimensioning and tolerancing, sectioning and detailing, detail descriptive geometry, and introduction to manufacturing processes of mechanical parts such as sheet metal process and molding. <i>Also listed as ENGR 125. Not open to students with credit in ENGR 125.</i>	Advanced graphic communication using solid modeling techniques and software (SolidWorks). Techniques include feature based part construction using extrudes, cuts and revolves; advanced surface shaping using lofts and sweeps; and assembly construction and constraining in an engineering design environment. Students will continue to develop 2D drafting skills including proper organization and layout of component drawing views, dimensioning and tolerancing in accordance with ANSI standard, sectioning and detailing, detail descriptive geometry, and introduction to manufacturing processes of mechanical parts such as sheet metal process and molding, introduction to 3D printing technology. <i>Also listed as ENGR 125. Not open to students with credit in ENGR 125.</i>
<b>CADD TECHNOLOGY 127 – SURVEY DRAFTING TECHNOLOGY</b>	<i>Review and update of course outline</i>
<b>CADD TECHNOLOGY 129 – ENGINEERING SOLID MODELING</b> Advanced 3D computer-aided mechanical design and drafting. This parametric modeling course provides skills and knowledge of appropriate software (Pro/Engineer) and feature based part construction using extrudes, cuts, revolves, lofts and sweeps. Students will enhance their skills in model assembly and assembly drawings including proper organization and layout of component drawing views, dimensioning and tolerancing, sectioning and detailing. <i>Also listed as ENGR 129. Not open to students with credit in ENGR 129.</i>	Advanced 3D computer-aided mechanical design and drafting. This parametric modeling course provides skills and knowledge of appropriate software (Creo Parametric) and feature based part construction using extrudes, cuts, revolves, lofts and sweeps. Students will enhance their skills in model assembly and assembly drawings including proper organization and layout of component drawing views, dimensioning and tolerancing, sectioning and detailing. 3D printing technology (additive manufacturing) is integrated to this course. <i>Also listed as ENGR 129. Not open to students with credit in ENGR 129.</i>
<b>CHILD DEVELOPMENT 136 – ADULT SUPERVISION</b> This course provides an opportunity for students to develop skills in establishing and maintaining supportive working relationships with adults in early childhood settings. Explores positive communication strategies including team building, collaboration, and effective problem solving.	This course provides an opportunity for students to develop skills in establishing and maintaining supportive working relationships with adults in early childhood settings. Students explore and practice strategies for positive communication strategies including team building, collaboration, and effective problem solving.

PRESENT	PROPOSED CHANGES TO AREAS AS INDICATED
<p><b>CHILD DEVELOPMENT 137 – ADMINISTRATION OF CHILD DEVELOPMENT PROGRAMS I</b>            Designed for the beginning director of child care and preschool programs. It includes administrative tools, knowledge, and techniques needed to organize, open, and operate a child development facility. Topics include budget, management, regulatory laws, and development of school policies and procedures. This course is required by the California Department of Social Services and California Department of Education for child care and preschool program directors and supervisors.</p>	<p>This course is designed for the beginning director of child care and preschool programs. It includes administrative tools, knowledge, and techniques needed to organize, open, and operate a child development facility. Topics include budget, management, regulatory laws, and development of school policies and procedures. This course meets the California Department of Social Services and California Department of Education requirement for child care and preschool program directors and supervisors.</p>
<p><b>CHILD DEVELOPMENT 138 – ADMINISTRATION OF CHILD DEVELOPMENT PROGRAMS II</b>            Designed for the experienced director of child care and preschool programs. The focus is on human relationships in the professional setting with an emphasis on political, fiscal, and working conditions and how they affect turnover and staff morale; support for families in the program, and managing personal growth and development.</p>	<p>This course is designed for the experienced director of child care and preschool programs. The focus is on human relationships in the professional setting with an emphasis on political, fiscal, and working conditions and how they affect turnover and staff morale; support for families in the program, and managing personal growth and development.</p>
<p><b>CHILD DEVELOPMENT 213 – OBSERVATION AND ASSESSMENT</b>            This course focuses on the appropriate use of a variety of assessment and observation strategies to document child development and behavior. Child observations will be conducted and analyzed.</p>	<p>This course focuses on the appropriate use of a variety of assessment and observation strategies to document child development and behavior. Child observations will be conducted and analyzed. The use of observation and assessment of children in planning, implementing, and evaluating early childhood curriculum and environments will be included.</p>
<p><b>COMMUNICATION 110 – INTRODUCTION TO MASS COMMUNICATION</b></p>	<p><i>Review and update of course outline</i></p>
<p><b>COMMUNICATION 123 – ADVANCED PUBLIC SPEAKING</b></p>	<p><i>Review and update of course outline</i></p>
<p><b>COMMUNICATION 145 – ARGUMENTATION</b></p>	<p><i>Review and update of course outline</i></p>
<p><b>COUNSELING 140 – SELF AWARENESS AND INTERPERSONAL RELATIONSHIPS</b></p>	<p><i>Review and update of course outline</i></p>
<p><b>ENGINEERING 125 – 3D SOLID MODELING</b>            Advanced graphic communication using solid modeling techniques and software (SolidWorks). Techniques include feature based part construction using extrudes, cuts and revolves; advanced surface shaping using lofts and sweeps; and assembly construction and constraining in an engineering design environment. Students will continue to develop 2D drafting skills including proper organization and layout of component drawing views, dimensioning and tolerancing, sectioning and detailing, detail descriptive geometry, and introduction to manufacturing processes of mechanical parts such as sheet metal process and molding. <i>Also listed as CADD 125. Not open to students with credit in CADD 125.</i></p>	<p>Advanced graphic communication using solid modeling techniques and software (SolidWorks). Techniques include feature based part construction using extrudes, cuts and revolves; advanced surface shaping using lofts and sweeps; and assembly construction and constraining in an engineering design environment. Students will continue to develop 2D drafting skills including proper organization and layout of component drawing views, dimensioning and tolerancing in accordance with ANSI standard, sectioning and detailing, detail descriptive geometry, and introduction to manufacturing processes of mechanical parts such as sheet metal process and molding, introduction to 3D printing technology. <i>Also listed as CADD 125. Not open to students with credit in CADD 125.</i></p>
<p><b>ENGINEERING 129 – ENGINEERING SOLID MODELING</b>            Advanced 3D computer-aided mechanical design and drafting. This parametric modeling course provides skills and knowledge of appropriate software (Pro/Engineer) and feature based part construction using extrudes, cuts, revolves, lofts and sweeps. Students will enhance their skills in model assembly and assembly drawings including proper organization and layout of component drawing views, dimensioning and tolerancing, sectioning and detailing. <i>Also listed as CADD 129. Not open to students with credit in CADD 129.</i></p>	<p>Advanced 3D computer-aided mechanical design and drafting. This parametric modeling course provides skills and knowledge of appropriate software (Creo Parametric) and feature based part construction using extrudes, cuts, revolves, lofts and sweeps. Students will enhance their skills in model assembly and assembly drawings including proper organization and layout of component drawing views, dimensioning and tolerancing, sectioning and detailing. 3D printing technology (additive manufacturing) is integrated to this course. <i>Also listed as CADD 129. Not open to students with credit in CADD 129.</i></p>
<p><b>ENGLISH 020 – SUPPORT FOR FRESHMAN COMPOSITION</b>            Prerequisite: “C” grade or higher or “Pass” in ENGL 098 or ESL 119 or ESL 120 or equivalent or assessment            Corequisite: Concurrent enrollment in English 120</p>	<p>Prerequisite: Appropriate Placement            Corequisite: Concurrent enrollment in English 120</p>
<p><b>ENGLISH 201 – IMAGES OF WOMEN IN LITERATURE</b></p>	<p><i>Review and update of course outline</i></p>
<p><b>ENGLISH 221 – BRITISH LITERATURE I</b></p>	<p><i>Review and update of course outline</i></p>
<p><b>ENGLISH 222 – BRITISH LITERATURE II</b></p>	<p><i>Review and update of course outline</i></p>
<p><b>ENGLISH 231 – AMERICAN LITERATURE I</b></p>	<p><i>Review and update of course outline</i></p>

PRESENT	PROPOSED CHANGES TO AREAS AS INDICATED
<b>ENGLISH 232 – AMERICAN LITERATURE II</b>	<i>Review and update of course outline</i>
<b>ENGLISH AS A SECOND LANGUAGE 010 – AMERICAN CULTURE I</b>	<i>Review and update of course outline</i>
<b>ENGLISH AS A SECOND LANGUAGE 020 – AMERICAN CULTURE II</b>	<i>Review and update of course outline</i>
<b>ENGLISH AS A SECOND LANGUAGE 070 – ESL I: INTRODUCTION TO ESL LITERACY</b> Corequisite: ESL 071	Corequisite: Grade of “Pass” in ESL 071 or concurrent enrollment
<b>ENGLISH AS A SECOND LANGUAGE 071 – ESL I: INTRODUCTION TO ESL COMMUNICATION</b> Corequisite: ESL 070	Corequisite: Grade of “Pass” in ESL 070 or concurrent enrollment
<b>ENGLISH AS A SECOND LANGUAGE 080 – ESL II: ESL LITERACY</b> Prerequisite: Grade of “Pass” in ESL 070, 071 or equivalent or assessment Corequisite: ESL 081	Prerequisite: Grade of “Pass” in ESL 070, 071 or equivalent or assessment Corequisite: Grade of “Pass” in ESL 081 or concurrent enrollment
<b>ENGLISH AS A SECOND LANGUAGE 081 – ESL II: ESL COMMUNICATION</b> Prerequisite: Grade of “Pass” in ESL 070, 071 or equivalent or assessment Corequisite: ESL 080	Prerequisite: Grade of “Pass” in ESL 070, 071 or equivalent or assessment Corequisite: Grade of “Pass” in ESL 080 or concurrent enrollment
<b>ENGLISH AS A SECOND LANGUAGE 099A – ESL FOR THE WORKPLACE I</b>	<i>Review and update of course outline</i>
<b>ENGLISH AS A SECOND LANGUAGE 099B – ESL FOR THE WORKPLACE II</b>	<i>Review and update of course outline</i>
<b>EXERCISE SCIENCE 013 – FLEXIBILITY FITNESS</b>	<i>Review and update of course outline</i>
<b>EXERCISE SCIENCE 019A – BEGINNING PHYSICAL FITNESS</b>	<i>Review and update of course outline</i>
<b>EXERCISE SCIENCE 019B – INTERMEDIATE PHYSICAL FITNESS</b>	<i>Review and update of course outline</i>
<b>EXERCISE SCIENCE 019C – ADVANCED PHYSICAL FITNESS</b>	<i>Review and update of course outline</i>
<b>GEOGRAPHY 122 – REGIONAL FIELD STUDIES IN PHYSICAL GEOGRAPHY</b> Recommended Preparation: “C” grade or higher or “Pass” in GEOG 120 or equivalent or concurrent enrollment Provides focused experience in geographical field studies of a selected region in western North America. Emphasizes observation and interpretation of physical geography phenomena through direct experience in a field setting. Requires a multi-day field trip as well as on-campus meetings prior to and immediately following the field trip. Students must supply their own camping gear including food, cooking gear, stove, eating utensils, sleeping bag and tent. <i>May be taken with different content for a maximum of 4 units.</i> Recommended Preparation: “C” grade or higher or “Pass” in GEOG 120 or equivalent or concurrent enrollment	<b>REGIONAL FIELD STUDIES IN PHYSICAL GEOGRAPHY AND GEOLOGY OF DESERT ENVIRONMENTS</b> Recommended Preparation: “C” grade or higher or “Pass” in GEOG 120, GEOL 104, or GEOL 110 or concurrent enrollment Are you interested in science and enjoy spending time outdoors? Explore the desert and learn about regional geology and geography with this field studies course! Regional Field Studies in Physical Geography and Geology of Desert Environments provides focused experience in geological and geographical field studies of desert environments in California and western North America. This course emphasizes use of the scientific process, observation, and interpretation of geologic and geographic phenomena in desert environments through direct experience in a field setting. This course centers around multi-day weekend field trips to desert environments in addition to on-campus meetings prior to and immediately following the field trips. Students must supply their own camping gear (sleeping bag, tent, etc.) and attend all class meetings and field trips. <i>Also listed as GEOL 122. Not open to students with credit in GEOL 122.</i>
<b>MATHEMATICS 096 – PREPARATION FOR ELEMENTARY STATISTICS AND QUANTITATIVE REASONING</b> An accelerated one-semester course to transfer-level Elementary Statistics (Math 160) or Quantitative Reasoning (Math 120). Math 096 covers core concepts from arithmetic, pre-algebra, elementary and intermediate algebra, and descriptive statistics that are needed to understand the basics of college-level statistics. Concepts are taught through the context of descriptive data analysis. The core arithmetic and algebra skills needed to understand the concepts, formulas, and graphs used in transfer-level statistics are investigated in a “just-in-time” approach rather than the standard sequence found in the traditional algebra path. Additional emphasis is placed on solving and graphing linear equations; modeling with linear functions; solving contextualized problems; and dimensional analysis. This course is NOT intended for math, science, computer science, business, or engineering majors. <b>Pass/No Pass only. Non-degree applicable.</b>	<b>FOUNDATIONS FOR STATISTICS AND QUANTITATIVE REASONING</b> An accelerated one-semester course to transfer-level Elementary Statistics (Math 160) or Quantitative Reasoning (Math 120). Math 096 covers core concepts from arithmetic, pre-algebra, elementary and intermediate algebra, and descriptive statistics that are needed to understand the basics of college-level statistics. Concepts are taught through the context of descriptive data analysis. The core arithmetic and algebra skills needed to understand the concepts, formulas, and graphs used in transfer-level statistics are investigated as needed. Additional emphasis is placed on solving and graphing linear equations; modeling with linear functions; solving contextualized problems; and dimensional analysis. This course is NOT intended for math, science, computer science, business, or engineering majors. <b>Pass/No Pass only. Non-degree applicable.</b>

PRESENT	PROPOSED CHANGES TO AREAS AS INDICATED
<b>ORNAMENTAL HORTICULTURE 221 – LANDSCAPE CONSTRUCTION: IRRIGATION AND CARPENTRY</b>	<i>Review and update of course outline</i>
<b>ORNAMENTAL HORTICULTURE 225 – LANDSCAPE CONTRACTING</b>	<i>Review and update of course outline</i>
<b>ORNAMENTAL HORTICULTURE 263 – URBAN FORESTRY</b>	<i>Review and update of course outline</i>
<b>POLITICAL SCIENCE 121 – INTRODUCTION TO U.S. GOVERNMENT AND POLITICS</b>	<i>Review and update of course outline</i>
<b>POLITICAL SCIENCE 124 – INTRODUCTION TO COMPARATIVE GOVERNMENT AND POLITICS</b>	<i>Review and update of course outline</i>
<b>POLITICAL SCIENCE 130 – INTRODUCTION TO INTERNATIONAL RELATIONS</b>	<i>Review and update of course outline</i>
<b>POLITICAL SCIENCE 140 – INTRODUCTION TO CALIFORNIA GOVERNMENTS AND POLITICS</b>	<i>Review and update of course outline</i>
<b>SPANISH 250 – CONVERSATIONAL SPANISH I</b> Prerequisite: “C” grade or higher or “Pass” in SPAN 121 or three years of high school Spanish or equivalent	Prerequisite: “C” grade or higher or “Pass” in SPAN 121 or 220 or 221 or three years of high school Spanish or equivalent



## DEACTIVATIONS

Course, Program, Certificate	Reason For Deletion per Department Faculty and/or Advisory Committee Recommendations
<b>BIOLOGY 126 – INTRODUCTION TO BIOTECHNOLOGY</b>	Recommendation of department faculty. Course has not been offered since 2002. May consider offering in the future.
<b>EXERCISE SCIENCE 015 – STRENGTH AND STRETCH</b>	Recommendation of department faculty. Course was last offered 2009. May consider offering in the future.
<b>EXERCISE SCIENCE 018 – CARDIO STRETCH</b>	Recommendation of department faculty. Course was last offered 2009. May consider offering in the future.

## DELETIONS

Course, Program, Certificate	Reason For Deletion per Department Faculty and/or Advisory Committee Recommendations
<b>BUSINESS OFFICE TECHNOLOGY 105 – DATA ENTRY SKILLS</b>	Recommendation of department faculty and BOT Advisory Committee.
<b>EXERCISE SCIENCE 020 – ADAPTED WEIGHT TRAINING</b>	Recommendation of department faculty. Course was last offered 2002.
<b>EXERCISE SCIENCE 035 – ADAPTED SWIMMING</b>	Recommendation of department faculty. Course was never offered.
<b>EXERCISE SCIENCE 080A – MODERN DANCE I</b>	Recommendation of department faculty. Course was never offered.
<b>EXERCISE SCIENCE 080B – MODERN DANCE II</b>	Recommendation of department faculty. Course was never offered.
<b>EXERCISE SCIENCE 080C – MODERN DANCE III</b>	Recommendation of department faculty. Course was never offered.
<b>EXERCISE SCIENCE 080D – MODERN DANCE IV</b>	Recommendation of department faculty. Course was never offered.
<b>EXERCISE SCIENCE 084A – JAZZ DANCE I</b>	Recommendation of department faculty. Course was never offered
<b>EXERCISE SCIENCE 084B – JAZZ DANCE II</b>	Recommendation of department faculty. Course was never offered
<b>EXERCISE SCIENCE 084C – JAZZ DANCE III</b>	Recommendation of department faculty. Course was never offered
<b>EXERCISE SCIENCE 084D – JAZZ DANCE IV</b>	Recommendation of department faculty. Course was never offered
<b>EXERCISE SCIENCE 088A – BALLET I</b>	Recommendation of department faculty. Course was never offered
<b>EXERCISE SCIENCE 088B – BALLET II</b>	Recommendation of department faculty. Course was never offered
<b>EXERCISE SCIENCE 088C – BALLET III</b>	Recommendation of department faculty. Course was never offered
<b>EXERCISE SCIENCE 088D – BALLET IV</b>	Recommendation of department faculty. Course was never offered
<b>EXERCISE SCIENCE 150 – ADAPTED SPORTS EDUCATION</b>	Recommendation of department faculty. Course was never offered

## DISTANCE EDUCATION

Course	Title
ART 149	History of Graphic Design
ASL 120	American Sign Language I
AUTO 191A	ASSET – Brakes
AUTO 191B	ASSET – Brakes, Advanced Brakes, Suspension, NVH Test Out
AUTO 191C	ASSET – Dynamic Vehicle Brakes
AUTO 191D	Suspension
AUTO 191E	Noise Vibration and Harshness
AUTO 192A	ASSET – Automatic Transmission Service

AUTO 192B	ASSET – Transmission Diagnose and Service Test Out
AUTO 192C	ASSET – Automatic Transmission Diagnosis
AUTO 192D	ASSET – Differential and 4WD Diagnosis and Service
AUTO 193A	ASSET – Engine Diagnosis and Repair
AUTO 193B	ASSET – Engine Diagnosis and Repair Test Out
AUTO 193C	ASSET – Diesel Engine Performance and Diagnosis
AUTO 195A	ASSET – Engine Performance Theory and Operation
AUTO 195B	ASSET – Engine Performance Diagnosis and Repair Test Out
AUTO 195C	ASSET – Engine Performance Diagnosis and Testing
AUTO 195D	Gasoline Turbo Direct Injection
AUTO 196A	ASSET – Electrical
AUTO 196B	ASSET – Electrical, Electronics, Climate Control Test Out
AUTO 196C	ASSET – Electronics
AUTO 196D	ASSET – Climate Control
ES 013	Flexibility Fitness
ES 019A	Beginning Physical Fitness
ES 019B	Intermediate Physical Fitness
ES 019C	Advanced Physical Fitness

# DEGREE AND CERTIFICATE MODIFICATIONS

## ART AND DESIGN Associate in Arts Degree

This degree program emphasizes aesthetics, design and craft using manual and digital mediums. Students will develop their ability to think spatially in two and three dimensions and to use creative problem-solving techniques using images and letter forms. Students will develop a professional portfolio for placement at a four-year university. Designed for students interested in pursuing a bachelor's degree in Graphic Design; please consult the catalog of the transfer institution for specific requirements. Students interested in pursuing the entry level, two-year associate degree or certificate in graphic design should refer to the Graphic Design program.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Use the vocabulary of the visual arts to express their observations as they perceive and respond to works of art, objects in nature, events, and the environment;
- Apply artistic processes and skills, using a variety of media to communicate meaning and intent in original works of art;
- Analyze the role and development of the visual arts in past and present cultures throughout the world, noting human diversity as it relates to the visual arts and artists;
- Analyze, assess, and derive meaning from works of art, including their own, according to the elements of art, the principles of design, and aesthetic qualities;
- Apply what they learn in the visual arts across subject areas; develop competencies and creative skills in problem solving, communication, and management of time and resources that contribute to lifelong learning and career skills; and identify careers in and related to the visual arts.
- ~~Research, analyze, organize and formulate artistic order out of chaos.~~
- ~~Recognize and speak a global visual language and demonstrate an awareness of the meanings and power of symbols and words.~~
- ~~Design products and services that will make a social and ecological impact.~~
- ~~Apply elements and principles of design to projects that include packaging, magazine production, and design and production of posters, logos and brochures.~~
- ~~Formulate decisions about issues of concept, format, imagery, type, printing and methodology.~~
- ~~Use computer and traditional methods to solve graphic problems.~~
- ~~Create a professional portfolio that can be used to pursue studies at a four-year university or obtain employment.~~

### CAREER OPPORTUNITIES

- \* Advertising Director  
Advertising
- \* Art Director  
Desktop Publishing  
Display Designer  
Graphic Designer  
Illustrator
- \* Marketing Director  
Multimedia  
Package Designer  
Web Page Designer

\* Bachelor Degree or higher required

### Associate in Arts Degree Requirements:

<i>Course</i>	<i>Title</i>	<i>Units</i>
ART 120	Two-Dimensional Design	3
ART 124	Drawing I	3
<del>ART 125</del>	<del>Drawing II</del>	<del>3</del>
ART 129	Three-Dimensional Design	3
ART 140	History of Western Art I: Prehistoric to 1250 A.D.	3
ART 141	History of Western Art II: Circa 1250 A.D. to Present Time	3
ART 149	History of Graphic Design	3
ART 177	Digital Drawing and Painting	3
ART 230	Figure Drawing I	3
ART 241	Illustration I	3
GD 105	Fundamentals of Digital Media	3
GD 110	Graphic Design Principles	3
GD 125	Typography	3
GD 126	Adobe Photoshop Digital Imaging	3
		<u>30-39</u>

Art and Design (continued)

**Select one of the following:**

ART 121	Painting I	3
ART 242	Illustration II	3
GD 130	Professional Business Practices	3
GD 210	Professional Digital Photography I	3
GD 217	WEB Graphics	3
GD 222	WEB Animation	3
GD 225	Digital Illustration	3
		3
	Total Required	<u>33-42</u>
	Plus General Education Requirements	

**Recommended Electives:** ART 135, BUS 110, GD 230, ~~MUS 121~~

**BUSINESS OFFICE TECHNOLOGY**

**OFFICE ASSISTANT LEVEL I  
Certificate of Specialization**

This certificate prepares students for positions that require keyboarding skills, basic knowledge of filing, and basic computer skills. It is designed for students with no prior computer training and who lack general office background and experience. Upon completion, students will qualify for positions as data entry clerks or other entry level office clerical positions.

**Program Learning Outcomes**

Upon successful completion of this certificate, students will be able to:

- Explain the basic language and concepts within the field of business office technology.
- Use computer input devices (e.g., keyboard and mouse) to properly and efficiently create and edit documents in word processing, spreadsheet, and presentation programs such as Word, Excel, and PowerPoint, and electronic communications such as email.

**Certificate Requirements:**

<i>Course</i>	<i>Title</i>	<i>Units</i>
BOT 101AB	Keyboarding/Document Processing I-II	3
BOT 104	Filing and Records Management	1
<del>BOT 105</del>	<del>Data Entry Skills</del>	<del>1</del>
BOT 119	Windows for the Information Worker	2
BOT 132	Google Applications for Business	<u>3</u>
	Total Required	<u>10 9</u>

## KINESIOLOGY FOR TRANSFER (AA-T)

The Associate in Arts in Kinesiology for Transfer degree is designed to prepare students for transfer to a California State University (CSU) by fulfilling lower-division requirements for the disciplines of Kinesiology, Exercise Science and Physical Education. This major provides preparation for careers in physical therapy, coaching, personal training, and other allied health professions by including classes oriented toward fitness, wellness, and health promotion throughout the lifespan.

The following is required for the AA-T in Kinesiology for Transfer degree:

1. Minimum of 60 semester or 90 quarter CSU-transferable units.
2. Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework.
3. Minimum of 18 semester or 27 quarter units in the major.
4. A grade of "C" or better in all courses required for the major.
5. Certified completion of the California State University General Education (CSU GE) Breadth pattern OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern; see Degree Requirements and Transfer Information section for more information.

Note: If following IGETC, IGETC-CSU must be followed for admission to a CSU.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- List and define the five basic components of physical fitness.
- Describe the concepts of frequency, intensity, and time and how they relate to personal fitness goals.
- Outline a basic strategy for achieving fitness through the lifespan.
- List options within the community for continued lifelong physical activity.
- List benefits of daily physical activity.
- Demonstrate competence in acquiring sound nutritional information.
- Demonstrate improvement in sport skills.
- Outline appropriate goals and activities for increasing the fitness of children.
- Describe appropriate preventive measures as well as treatments for various sport injuries.
- List and describe opportunities for employment in the field.
- Describe their field of interest and a course of instruction that will meet their professional needs.

### Associate in Arts Degree Requirements:

#### Core Curriculum:

<i>Course</i>	<i>Title</i>	<i>Units</i>
BIO 140	Human Anatomy	5
BIO 141	Human Physiology	3
BIO 141L	Laboratory in Human Physiology	1
ES 250	Introduction to Kinesiology	3

Movement Based Courses: Select one course from three different areas for a minimum of three units:

#### Combatives:

ES 180	Self Defense for Women	1
ES 181ABCD	Karate I-IV	1.5

#### Fitness:

ES 009ABC	Beginning, Intermediate, Advanced Aerobic Dance Exercise	1
ES 014ABC	Beginning, Intermediate, Advanced Body Building	1.5
ES 019ABC	Beginning, Intermediate, Advanced Physical Fitness	1.5

#### Individual Sports:

ES 060ABC	Beginning, Intermediate, Advanced Badminton	1
ES 076ABC	Beginning, Intermediate, Advanced Tennis	1
ES 125A	Beginning Golf	1
ES 125BC	Intermediate, Advanced Golf	1.5

#### Team Sports:

ES 155ABC	Beginning, Intermediate, Advanced Basketball	1
ES 170ABC	Beginning, Intermediate, Advanced Soccer	1
ES 171ABC	Beginning, Intermediate, Advanced Softball	1
ES 175ABC	Beginning, Intermediate, Advanced Volleyball	1
		<b>15-16.5</b>

#### **List A:**

#### Select one Chemistry course:

CHEM 102	Introduction to General, Organic and Biological Chemistry	5
<del>CHEM 120</del>	<del>Preparation for General Chemistry</del>	<del>4</del>
MATH 160	Elementary Statistics	4

8-9

Total Units for Major (10- <del>11.5</del> 10.5 units may be double-counted with GE)	<del>23-24</del> 25.5
Total Units for CSU GE or IGETC CSU	37-39
Total Transferable Elective Units	5.5-9 <u>10.5</u>
Total Units for Degree	<u>60</u>

Please note: SDSU accepts this degree for students transferring into Exercise Science Generalist.

**EXERCISE SCIENCE  
Associate in Science Degree**

This degree program is designed to prepare students for a variety of careers including education, physical therapy, coaching, personal training and other allied health professions by providing classes oriented toward fitness, wellness and health promotion throughout the lifespan. The major also provides preparation for transfer to a four-year college in physical education, exercise physiology, kinesiology, nutrition or athletic training, as well as teacher credentialing programs.

**Program Learning Outcomes**

Upon successful completion of this program, students will be able to:

- List and define the five basic components of physical fitness.
- Describe the concepts of frequency, intensity and time, and how they relate to personal fitness goals.
- Outline a basic strategy for achieving fitness through the lifespan.
- List options within the community for continued lifelong physical activity.
- List benefits of daily physical activity.
- Demonstrate competence in acquiring sound nutritional information.
- Demonstrate improvement in sport skills.
- Outline appropriate goals and activities for increasing the fitness of children.
- Describe appropriate preventive measures as well as treatments for various sport injuries.
- List and describe opportunities for employment in the field.
- Describe their field of interest and a course of instruction that will meet their professional needs.

**CAREER OPPORTUNITIES**

- Aerobics Instructor
- Athletics Coach
- \* Athletics Trainer
- \* Cardiovascular Rehabilitation
- \* College Professor
- \* Elementary School Teacher
- \* Exercise Physiologist
- \* Health Club Manager
- Personal Trainer
- \* Physical Therapist/ Assistant
- \* Registered Dietician
- \* Secondary School Teacher
- \* Teaching

\* Bachelor Degree or higher required

**Associate in Science Degree Requirements:**

<i>Course</i>	<i>Title</i>	<i>Units</i>
BIO 130	General Biology I	3
BIO 131	General Biology I Laboratory	1
BIO 140	Human Anatomy	5
CHEM 102	Introduction to General, Organic and Biological Chemistry	5
<hr/>		
<u>or</u>		
CHEM 115	Fundamentals of Chemistry	4
<hr/>		
<u>or</u>		
CHEM 120	Preparation for General Chemistry	4
<hr/>		
<u>or</u>		
CHEM 141	General Chemistry I	5
COMM 122	Public Speaking	3
ES 014ABC	Body Building	1.5
<hr/>		
<u>or</u>		
ES 019ABC	Physical Fitness	1.5
ES 250	Introduction to Kinesiology	3
ES 255	Care and Prevention of Athletic Injuries	3
HED 158	Nutrition for Fitness and Sports	3
<hr/>		
<u>or</u>		
HED 255*	Science of Nutrition	3
PSY 120	Introductory Psychology	3
SOC 120	Introductory Sociology	3
		<u>32.5-33.5</u>

Exercise Science (continued)

**Select one of the following:**

BIO 215	Statistics for Life Sciences	3
MATH 160	Elementary Statistics	4
PSY 215	Statistics for the Behavioral Sciences	<u>4</u>
		3-4

**Select two of the following** (fulfills the activity requirement for the associate degree):

ES 001	Adapted Physical Exercise	1
ES 009ABC	Aerobic Dance Exercise	1
ES 019ABC	Physical Fitness	1.5
ES 060ABC	Badminton	1
ES 076ABC	Tennis	1
ES 125ABC	Golf	1-1.5
ES 155ABC	Basketball	1
ES 170ABC	Soccer	1
ES 171ABC	Softball	1
ES 175ABC	Volleyball	<u>1</u>
		2-3
	Total Required	37.5- <del>40.5</del> <u>39.5</u>
	Plus General Education Requirements	

\*Students planning to transfer to SDSU must take HED 255.

**RECREATIONAL LEADERSHIP– SCHOOL-BASED PROGRAMS  
Certificate of Specialization**

This certificate offers specific training for entry-level positions or for advancement in child care and outdoor programs for children and families. It is designed to demonstrate an area of expertise that may be used to attain employment in areas of school-based recreation and fitness programs.

**Program Learning Outcomes**

Upon successful completion of this certificate, students will be able to:

- Describe and or demonstrate an hour of cooperative activity for children.
- Describe how principles learned in class may be applied to improve cardiovascular endurance, muscle strength, muscle endurance, and flexibility and body composition, (the five basic components of fitness) in children using walking as a primary conditioning activity.
- Investigate and list causes and risk factor associated with childhood obesity.
- Describe and prepare appropriate snacks for children.
- Demonstrate appropriate classroom organizational and management techniques.
- Demonstrate the ability to plan school-based recreational programs which deliberately intend to advance, stimulate or otherwise enhance children’s physical, emotional and social development in ways which are appropriate to their developmental level.
- Describe tested and proven teaching approaches to analyze and enhance movement competencies.

**Career Opportunities**

Students may find positions in an elementary or middle school, YMCA, recreation center, day or residential camp, or after school day care program. This is a great “stepping-stone” training for those who want to major in exercise science, recreation, elementary education or child development. Provides students with the expertise to enter the entry-level job market with knowledge of sound principles of fitness and developmentally appropriate recreation.

Students who complete the requirements below and hold a current First Aid/CPR certification qualify for a Certificate in Recreational Leadership–School-Based Programs. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

**Certificate Requirements:**

Course	Title	Units
CD 125	Child Growth and Development	3
CD 134	Health, Safety and Nutrition of Young Children	3
ES 253	Physical Education in Elementary Schools	3
ES 270	Cooperative Games	1
ES 271	Fitness Walking with Children	1
ES 272	Issues in Childhood Obesity	1
ES 273	Field Experience in School-Based Recreational Leadership	<u>1</u>
	Total Required	<del>13</del> <u>12</u>

## GENERAL STUDIES

The Associate Degree in General Studies with an Area of Emphasis provides an opportunity for students to design a program of study meaningful and appropriate to their own needs and academic interests. The degree includes general education and a focused area of study. Students may choose to earn this degree for preparation for employment or for personal development.

### A. Business and Technology *(no change)*

### B. Communication and Language Arts

The Associate in Arts in General Studies with an Emphasis in Communication and Language Arts will be awarded to students upon completion of general education degree requirements and 18 units in this area. These courses emphasize the study of how language works to express human ideas and feelings. Students will explore and analyze written and verbal communication methods, as well as develop and advance their oral and written communication skills. Students must complete a minimum of six units in Communication and six units in Language Arts. The remaining six units may be taken from either category.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate the ability to write effectively.
- Demonstrate the ability to locate relevant, reliable information and read it effectively.
- Organize thoughts and ideas in both oral and written format.
- Communicate effectively with diverse audiences.

#### Communication

BUS 128

COMM 110, 120, 122, 123, 124, 130, 135, 136, 137, 145

#### Language Arts

ARAM 120, 121, 220, 221

ARBC 120, 121, 122, 123, 220, 221, 250, 251, 254

ASL 120, 121, 220, 221

BUS 128

CHIN 120, 121, 220, 221, 250, 251

ENGL 122, 124, 126, 201, 202, 207, 214, 217, 221, 222, 231, 232, 270, 271, 275, 276, 277

FREN 120, 121, 220, 221, 250, 251

ITAL 120, 121, 220

LIR 110

NAKY 120, 121, 220

SPAN 120, 121, 220, 221, 250, 251

### C. Humanities and Fine Arts

The Associate in Arts in General Studies with an Emphasis in Humanities and Fine Arts will be awarded to students upon completion of general education degree requirements and 18 units in this area. These courses emphasize the study of cultural, humanistic activities and artistic expression of human beings. Students will evaluate and interpret the ways in which people through the ages in different cultures have responded to themselves and the world around them through artistic and cultural creation. Students will develop an aesthetic awareness and incorporate these concepts when constructing value judgments. Students must complete a minimum of six units in Humanities and six units in Fine Arts. The remaining six units may be taken from either category.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze the principle elements of representative examples of art, architecture, literature, theater, philosophy, music, dance, film, or other relevant areas of cultural and/or intellectual creativity.
- Demonstrate an awareness of the historical and philosophical contexts of representative areas, movements, media, works, or styles of cultural and/or intellectual creativity.
- Employ the language, concepts and methods of interpretive criticism as applicable to the respective categories of human creativity.
- When applicable, apply artistic processes and skills as a creative expression, using a variety of media to communicate meaning and intent in original works of art.

#### Humanities

ARAM 120, 121, 220

ARBC 120, 121, 122, 123, 220, 221, 250, 251, 254

ART 140, 141, 143, 145, 146, 149

ASL 120, 121, 140, 220, 221

CHIN 120, 121, 220, 221, 250, 251

ENGL 122, 201, 202, 207, 214, 217, 221, 222, 231, 232, 270, 271, 275, 276, 277

FREN 120, 121, 220, 221, 250, 251

HIST 100, 101, 105, 106

HUM 110, 115, 116, 120, 140, 155

ITAL 120, 121, 220

NAKY 120, 121, 220



General Studies (Humanities and Fine Arts, continued)

PHIL 110, 115, 117, 140, 160, 170  
RELG 120, 130, 160, 170  
SPAN 120, 121, 220, 221, 250, 251

**Fine Arts**

ART 100, 120, 121, 124, 125, 129, 135, 140, 141, 143, 144, 145, 146, 148, 220, 221, 222, 224, 225, 230, 231, 232, 233, 235, 236, 241, 242  
MUS 110, 111, 114, 115, 116, 117  
THTR 110, 120, 121

**D. Lifelong Health, Well-Being and Self-Development** (*no change*)

**E. Science and Mathematics** (*no change*)

**F. Social and Behavioral Sciences**

The Associate in Arts in General Studies with an Emphasis in Social and Behavioral Sciences will be awarded to students upon completion of general education degree requirements and 18 units in this area. These courses emphasize the study and understanding of human behavior. Students will evaluate and interpret human societies; the institutions, organizations and groups that form them; the ways in which individuals and groups relate to one another; and various approaches and methodologies of the disciplines. Students must complete a minimum of six units in Social Science and six units in Behavioral Science. The remaining six units may be taken from either category.

**Program Learning Outcomes**

Upon successful completion of this program, students will be able to:

- Describe general principles of the political institutions and government of the United States.
- Demonstrate an understanding and appreciation of social, political, and economic institutions within a historical perspective.
- Evaluate the ways people act and interact in cultures, societies and social subgroups.
- Assess how social issues are influenced by geographical and historical processes.
- Apply knowledge of social and behavioral sciences theories and scientific methods in an assessment of real-world problems.

**Social Science**

ANTH 120, 140  
ARBC 145  
CD 145  
ECON 110, 120, 121  
GEOG 106, 122, 130, 132  
HIST 100, 101, 105, 106, 108, 109, 118, 119, 122, 123, 124, 130, 131, 132, 180, 181, 271, 275, 276, 277  
POSC 120, 121, 124, 130, 140  
SOC 120, 125, 130  
SPAN 145

**Behavioral Science**

CD 115, 125, 131  
COMM 110, 124  
HED 120, 158, 201, 203, 204, 251  
PSY 120, 125, 134, 138, 140, 150, 170, 201, 220

**KUMEYAAY STUDIES**  
**Certificate of Specialization**

Students who complete the requirements below qualify for a Certificate in Kumeyaay Studies. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

**Program Learning Outcomes**

Upon successful completion of this certificate, students will be able to:

- Communicate in the Kumeyaay language at a basic level in a variety of settings.
- Acquire an understanding of Kumeyaay heritage, history, society and traditions.
- Gain sensitivity, globalism and cultural competence of a unique peoples

**Certificate Requirements:**

<i>Course</i>	<i>Title</i>	<i>Units</i>
BIO 133*	Ethnoecology	3
<hr/>		
<u>or</u>		
BIO 134	Ethnobotany	3
HIST 132	Kumeyaay History I: Precontact-1900	3
NAKY 120	Kumeyaay I	<u>4</u>
		10

**Select one of the following:**

BIO 133*	Ethnoecology	3
HIST 133	Kumeyaay History II: 1900-Present	3
HUM 116	Kumeyaay Arts and Culture	3
NAKY 121	Kumeyaay II	4
NAKY 220	Kumeyaay III	<u>4</u>
		3-4
	Total Required	13-14

\*BIO 133 may be counted one time only

**UNIVERSITY STUDIES**

The Associate Degree in University Studies with an Area of Emphasis is intended to accommodate the differing requirements of a wide variety of transfer institutions and major options. Because admission and major preparation requirements vary at each four-year transfer institution, courses used to complete this degree should be selected with the assistance of a counselor. The completion of the University Studies Degree does not guarantee acceptance into either a baccalaureate major or a four-year institution.

**A. Business and Economics (no change)**

**B. Communication and Language Arts**

Courses for the Associate in Science in University Studies with an Emphasis in Communication and Language Arts focus on the study of how language works to express human ideas and feelings. Students will explore and analyze written and verbal communication methods, as well as develop and advance their oral and written communication skills. Students completing this area may be interested in the following baccalaureate majors: communication, English, foreign language, literature, journalism, and linguistics. Students must complete a minimum of six units in Communication and six units in Language Arts. The remaining six units may be taken from either category.

**Program Learning Outcomes**

Upon successful completion of this program, students will be able to:

- Demonstrate the ability to write effectively.
- Demonstrate the ability to locate relevant, reliable information and read it effectively.
- Organize thoughts and ideas in both oral and written format.
- Communicate effectively with diverse audiences.

**Communication**

BUS 128\*  
COMM 110, 120, 122, 123, 124, 130\*, 137, 145

**Language Arts**

ARAM 120, 121, 220  
ARBC 120, 121, 122, 123, 220, 221, 254  
ASL 120, 121, 220, 221  
BUS 128\*  
CHIN 120, 121, 220, 221, 250, 251  
ENGL 122, 124, 126, 201, 202, 207, 214, 221, 222, 231, 232, 270, 271  
FREN 120, 121, 220, 221, 250, 251  
ITAL 120, 121, 220  
NAKY 120, 121, 220  
SPAN 120, 121, 220, 221, 250, 251

## University Studies (continued)

### C. Humanities and Fine Arts

Courses for the Associate in Science in University Studies with an Emphasis in Humanities and Fine Arts focus on the study of cultural, humanistic activities, and artistic expression of human beings. Students will evaluate and interpret the ways in which people through the ages in different cultures have responded to themselves and the world around them through artistic and cultural creation. Students will develop an aesthetic awareness and incorporate these concepts when constructing value judgments. Students completing this area may be interested in the following baccalaureate majors: art, humanities, music, philosophy, religious studies, and theatre arts. Students must complete a minimum of six units in Humanities and six units in Fine Arts. The remaining six units may be taken from either category.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze the principle elements of representative examples of art, architecture, literature, theater, philosophy, music, dance, film, or other relevant areas of cultural and/or intellectual creativity.
- Demonstrate an awareness of the historical and philosophical contexts of representative areas, movements, media, works, or styles of cultural and/or intellectual creativity.
- Employ the language, concepts and methods of interpretive criticism as applicable to the respective categories of human creativity.
- When applicable, apply artistic processes and skills as a creative expression, using a variety of media to communicate meaning and intent in original works of art.

#### Humanities

ARAM 120, 121, 220

ARBC 120, 121, 122, 123, 220, 221, 254

ART 140, 141, 145, 146, 149

ASL 120, 121, 140, 220, 221

CHIN 120, 121, 220, 221, 250, 251

ENGL 122, 201, 202, 207, 214, 217, 221, 222, 231, 232, 270, 271

FREN 120, 121, 220, 221

HIST 100, 101, 105, 106, 210

HUM 110, 115, 116, 120, 140, 155

ITAL 120, 121, 220

NAKY 120, 121, 220

PHIL 110, 115, 117, 140, 160, 170

RELG 120, 130, 160, 170

SPAN 120, 121, 141, 145\*, 220, 221, 250, 251

#### Fine Arts

ART 100, 120, 124, 125, 129, 140, 141, 143, 144, 145, 146, 148\*, 241, 242

MUS 110, 111, 114, 115, 116, 117

THTR 110, 120, 121

### D. Science and Mathematics (*no change*)

### E. Social and Behavioral Sciences

Courses for the Associate in Science in University Studies with an Emphasis in Social and Behavioral Sciences focus on the study and understanding of human behavior. Students will evaluate and interpret human societies; the institutions, organizations, and the groups that form them; the ways in which individuals and groups relate to one another; and various approaches and methodologies of the disciplines. Students completing this area may be interested in the following baccalaureate majors: anthropology, child development, education, history, nutrition, political science, psychology, social work, and sociology. Students must complete a minimum of six units in Social Science and six units in Behavioral Science. The remaining six units may be taken from either category.

#### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Describe general principles of the political institutions and government of the United States.
- Demonstrate an understanding and appreciation of social, political, and economic institutions within a historical perspective.
- Evaluate the ways people act and interact in cultures, societies and social subgroups.
- Assess how social issues are influenced by geographical and historical processes.
- Apply knowledge of social and behavioral sciences theories and scientific methods in an assessment of real-world problems.

#### Social Science

ANTH 120, 140

BIO 134

ECON 110, 120, 121

GEOG 106, 130

HIST 100, 101, 105, 106, 108, 109, 118, 119, 122, 123, 130, 131, 132, 180, 181, 275, 276, 277

POSC 120, 121, 124, 130, 140

SOC 120, 125, 130

SPAN 145\*

#### Behavioral Science

CD 115, 125, 131, 145

COMM 110, 124

University Studies (Social and Behavioral Science, continued)

HED 120, 158, 201, 203, 204, 251\*

PSY 120, 125, 134, 138, 140, 150, 170, 201\*, 220

\*Course not UC-transferable