# EL CAMINO COLLEGE

## COLLEGE CURRICULUM COMMITTEE

## May 22, 2012
## Proposed Curriculum Changes for 2013-2014

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## BEHAVIORAL AND SOCIAL SCIENCES

### COURSE REVIEW

1. Psychology 10 – African American Psychology

### COURSE REVIEW; DISTANCE EDUCATION UPDATE

1. History 145 – History of World Religions

2. Political Science 8 – California State and Local Government and Intergovernmental Issues

### COURSE REVIEW; CHANGES IN CATALOG DESCRIPTION

1. Anthropology 4 – Language and Culture
   *Current Status/Proposed Changes*
   This course introduces students to the anthropological study of language ~~and non-verbal human communication~~. Using a cross-cultural perspective, students will examine the relationship between culture and the ways in which humans communicate. Topics include language ~~structure,~~ acquisition, structure, diversity, and change. The social and non-verbal aspects of language will also be explored.

   *Recommendation*
   This course introduces students to the anthropological study of language. Using a cross-cultural perspective, students will examine the relationship between culture and the ways in which humans communicate. Topics include language acquisition, structure, diversity, and change. The social and non-verbal aspects of language will also be explored.

2. Child Development 160 – Working with Children: Autism Spectrum Disorders
   *Current Status/Proposed Changes*
   This course is designed for students interested in working as a paraprofessional with children who have been diagnosed with autism and related disorders. Students will be introduced to the social, emotional, cognitive, and academic needs of these children. The characteristics of effective teaching and the implementation of accommodation

strategies in the home and school setting will be explored. The laws governing the rights of children with special needs and their families will be discussed. Students will also observe local programs that serve children with autism and related disorders.

*Recommendation*
This course is designed for students interested in working as a paraprofessional with children who have been diagnosed with autism and related disorders. Students will be introduced to the social, emotional, cognitive, and academic needs of these children. The characteristics of effective teaching and the implementation of accommodation strategies in the home and school setting will be explored. The laws governing the rights of children with special needs and their families will be discussed. Students will also observe local programs that serve children with autism and related disorders.

3. History 106 – Women and American History from 1877 to the Present
*Current Status/Proposed Changes*
This course is a chronological survey of the history of the United States from 1877 to the present with special emphasis on the ~~role of women in shaping American society. The contributions of women to the economic~~ contributions of women to the evolving modern nation. The impact of social, political, ~~and social development of the nation will~~ economic and cultural forces on women's lives will also be examined.

*Recommendation*
This course is a chronological survey of the history of the United States from 1877 to the present with special emphasis on the contributions of women to the evolving modern nation. The impact of social, political, economic and cultural forces on women's lives will also be examined.

**NEW DISTANCE EDUCATION COURSE VERSION**

1. Anthropology 4 – Language and Culture

2. History 106 – Women and American History from 1877 to the Present

3. History 145 – History of World Religions

**COURSE REVIEW; CHANGES IN CONDITIONS OF ENROLLMENT**
**(Prerequisite, Corequisite, Recommended Preparation, or Enrollment Limitation)**

1. Child Development 169 – Special Education Practicum
*Current Status/Proposed Changes*
Prerequisite: Child Development 150 or 152
AND
Child Development 104, 107, 108, 110

AND
Child Development 116 or 117 or 118 or 119 with a minimum grade of C in prerequisite ~~or equivalent~~

*Recommendation*
Prerequisite: Child Development 150 or 152
AND
Child Development 104, 107, 108, 110
AND
Child Development 116 or 117 or 118 or 119 with a minimum grade of C in prerequisite

## BUSINESS

## COURSE REVIEW; CHANGES IN DESCRIPTIVE TITLE, CATALOG DESCRIPTION

*Current Status/Proposed Changes*

1. Computer Information Systems 40 – ~~Microcomputer~~ Personal Computer Operations
   In this course students will become familiar with managing and supporting ~~microcomputers~~ personal computers within an organization. The class will emphasize both computer hardware and applications software. Topics covered will include ~~microcomputer~~ personal computer concepts, computer devices, hardware management, applications and operating system software installation, maintenance and ~~setup~~ troubleshooting, and ethical concerns within the information systems environment.

   *Recommendation*
   Computer Information Systems 40 – Personal Computer Operations
   In this course students will become familiar with managing and supporting personal computers within an organization. The class will emphasize both computer hardware and applications software. Topics covered will include personal computer concepts, computer devices, hardware management, applications and operating system software installation, maintenance and troubleshooting, and ethical concerns within the information systems environment.

## FINE ARTS

## COURSE REVIEW

1. Art 61ab – Beginning Ceramics

2. Dance 70 – Improvisation

3. Dance 72ab – Choreography II

4. Music 84 – Commercial Music Business Studies

5. Theatre 15abcd – Improvisation

## COURSE REVIEW; CHANGES IN CATALOG DESCRIPTION

1. Art 73ab – Introduction to Jewelry and Metalsmithing
   *Current Status/Proposed Changes*
   This course is an introduction to the design and technical processes of jewelry and metalsmithing. Construction techniques such as sawing, soldering, forming, ~~casting,~~ and surface embellishment are employed in combination with various metals and stones. Also covered are issues of contemporary aesthetics and their influence on jewelry design and construction.

   *Recommendation*
   This course is an introduction to the design and technical processes of jewelry and metalsmithing. Construction techniques such as sawing, soldering, forming, and surface embellishment are employed in combination with various metals and stones. Also covered are issues of contemporary aesthetics and their influence on jewelry design and construction.

2. Film/Video 52 – Film, Culture, and Technology
   *Current Status/Proposed Changes*
   This course surveys technological innovations in film/video production, distribution, and exhibition and their impact on the entertainment industries and society ~~as a whole~~. Special emphasis is placed on the economic, social and political issues raised by technological innovation and the ways new digital and interactive media have both embraced and altered the 'old' media. Screening of films that employ new technology or develop technology related themes are also included.

*Recommendation*
This course surveys technological innovations in film/video production, distribution, and exhibition and their impact on the entertainment industries and society. Special emphasis is placed on the economic, social and political issues raised by technological innovation and the ways new digital and interactive media have both embraced and altered the 'old' media. Screening of films that employ new technology or develop technology related themes are also included.

## HEALTH SCIENCES AND ATHLETICS

### COURSE REVIEW

1. Nursing 255 – Advanced Nursing Process II – Clinical Preceptorship

2. Radiologic Technologic 107 – Clinical Experience II

### COURSE REVIEW; CHANGE IN TRANSFER STATUS

1. Medical Terminology 1 – Medical Terminology
   *Current Status/Proposed Changes*
   ~~No Transfer CSU~~ Transfer CSU

   *Recommendation*
   Transfer CSU

### COURSE REVIEW; CHANGES IN CONTACT HOURS, FACULTY LOAD

1. Physical Education 7abcd – Baseball
   *Current Status/Proposed Changes*
   Units: 1.0 Lecture: 0 Hours Lab: ~~2~~ 3.00 Faculty Load: ~~9.09%~~ 15.00%

   *Recommendation*
   Units: 1.0 Lecture: 0 Hours Lab: 3.00 Faculty Load: 15.00%

2. Physical Education 208abcd – Bowling
   *Current Status/Proposed Changes*
   Units: 1.0 Lecture: 0 Hours Lab: ~~2~~ 3.00 Faculty Load: ~~10.00%~~ 15.00%

   *Recommendation*
   Units: 1.0 Lecture: 0 Hours Lab: 3.00 Faculty Load: 15.00%

3. Physical Education 244abcd – Springboard Diving
   *Current Status/Proposed Changes*
   Units: 1.0 Lecture: 0 Hours Lab: ~~2~~ 3.00 Faculty Load: ~~9.09%~~ 15.00%

   *Recommendation*
   Units: 1.0 Lecture: 0 Hours Lab: 3.00 Faculty Load: 15.00%

**COURSE REVIEW; CHANGES IN CATALOG DESCRIPTION**

1. Radiologic Technology 106 – Clinical Experience I
   *Current Status/Proposed Changes*
   This course provides an environment to apply and develop skills learned in patient transportation, hospital policies and procedures, image processing, professional ethics, practical aspects of radiation protection, and introduction to patient positioning. ~~for the development of skills in: patient transportation, darkroom operation, office and file room protocols. Also included is an orientation to: hospital policies and procedures, patient care, professional ethics, principles of radiation exposure, practical aspects of radiation protection, and an introduction to patient positioning.~~

   *Recommendation*
   This course provides an environment to apply and develop skills learned in patient transportation, hospital policies and procedures, image processing, professional ethics, practical aspects of radiation protection, and introduction to patient positioning.

**COURSE REVIEW; CHANGES IN CONTACT HOURS, FACULTY LOAD, CONDITIONS OF ENROLLMENT (Prerequisite, Corequisite, Recommended Preparation, or Enrollment Limitation)**

1. Physical Education 16abc – Off-Season Training for Men's Intercollegiate Basketball Team
   *Current Status/Proposed Changes*
   Units: 1.0 Lecture: 0 Hours Lab: ~~2~~ 3.0 Faculty Load: ~~10.00%~~ 15.00%
   ~~Enrollment Limitation~~ Recommended Preparation: ~~tryout (~~High school varsity experience or equivalent skill~~)~~

   *Recommendation*
   Units: 1.0 Lecture: 0 Hours Lab: 3.00 Faculty Load: 15.00%
   Recommended Preparation: High school varsity experience or equivalent skill

2. Physical Education 36abc – Off-Season Training for Men's Intercollegiate Football Team
   *Current Status/Proposed Changes*
   Units: 1.0 Lecture: 0 Hours Lab: ~~2~~ 3.0 Faculty Load: ~~10.00%~~ 15.00%

~~Enrollment Limitation~~ Recommended Preparation: ~~tryout (~~High school varsity experience or equivalent skill~~)~~

*Recommendation*
Units: 1.0 Lecture: 0 Hours Lab: 3.0 Faculty Load: 15.00%
Recommended Preparation: High school varsity experience or equivalent skill

3. Physical Education 46abc – Off-Season Training for Men's Intercollegiate Golf Team
*Current Status/Proposed Changes*
Units: 1.0 Lecture: 0 Hours Lab: ~~2~~ 3.0 Faculty Load: ~~10.00%~~ 15.00%
~~Enrollment Limitation~~ Recommended Preparation: ~~tryout (~~High school varsity experience or equivalent skill~~)~~

*Recommendation*
Units: 1.0 Lecture: 0 Hours Lab: 3.0 Faculty Load: 15.00%
Recommended Preparation: High school varsity experience or equivalent skill

4. Physical Education 61abc – Off-Season Training for Women's Intercollegiate Soccer Team
*Current Status/Proposed Changes*
Units: 1.0 Lecture: 0 Hours Lab: ~~2~~ 3.0 Faculty Load: ~~10.00%~~ 15.00%
~~Enrollment Limitation~~ Recommended Preparation: ~~tryout (~~High school varsity experience or equivalent skill~~)~~

*Recommendation*
Units: 1.0 Lecture: 0 Hours Lab: 3.0 Faculty Load: 15.00%
Recommended Preparation: High school varsity experience or equivalent skill

5. Physical Education 106abc – Off-Season Training for Women's Intercollegiate Basketball Team
*Current Status/Proposed Changes*
Units: 1.0 Lecture: 0 Hours Lab: ~~2~~ 3.0 Faculty Load: ~~10.00%~~ 15.00%
~~Enrollment Limitation~~ Recommended Preparation: ~~tryout (~~High school varsity experience or equivalent skill~~)~~

*Recommendation*
Units: 1.0 Lecture: 0 Hours Lab: 3.0 Faculty Load: 15.00%
Recommended Preparation: High school varsity experience or equivalent skill

6. Physical Education 116abc – Off-Season Training for Women's Intercollegiate Tennis Team
*Current Status/Proposed Changes*
Units: 1.0 Lecture: 0 Hours Lab: ~~2~~ 3.0 Faculty Load: ~~10.00%~~ 15.00%

~~Enrollment Limitation~~ Recommended Preparation: ~~tryout (~~High school varsity experience or equivalent skill~~)~~

*Recommendation*
Units: 1.0 Lecture: 0 Hours Lab: 3.0 Faculty Load: 15.00%
Recommended Preparation: High school varsity experience or equivalent skill

7. Physical Education 135abcd – Sport-Specific, Periodized Training for Athletes
*Current Status/Proposed Changes*
Units: 1.0 Lecture: 0 Hours Lab: ~~2~~ 3.0 Faculty Load: ~~10.00%~~ 15.00%
~~Enrollment Limitation~~ Recommended Preparation: ~~tryout (~~High school varsity experience or equivalent skill~~)~~

*Recommendation*
Units: 1.0 Lecture: 0 Hours Lab: 3.0 Faculty Load: 15.00%
Recommended Preparation: High school varsity experience or equivalent skill

**COURSE REVIEW; CHANGES IN CONDITIONS OF ENROLLMENT (Prerequisite, Corequisite, Recommended Preparation, or Enrollment Limitation)**

1. Recreation 217 – Recreational Leadership
*Current Status/Proposed Changes*
Recommended Preparation: eligibility for English ~~A or English 84~~ 1A

*Recommendation*
Recommended Preparation: eligibility for English 1A

2. Recreation 307 – Camp Counseling: Leadership and Programming
*Current Status/Proposed Changes*
Recommended Preparation: eligibility for English ~~A or English 84~~ 1A

*Recommendation*
Recommended Preparation: eligibility for English 1A

3. Sign Language/Interpreter Training 20 – Interpreting Practicum
*Current Status/Proposed Changes*
Prerequisite: Sign Language/Interpreter Training ~~18A~~ 18B with a minimum grade of C

*Recommendation*
Prerequisite: Sign Language/Interpreter Training 18B with a minimum grade of C

**COURSE REVIEW; CHANGES IN CONTACT HOURS, FACULTY LOAD, CATALOG DESCRIPTION**

1. Physical Education 14abcd – Boxing
   *Current Status/Proposed Changes*
   Units: 1.0 Lecture: 0 Hours Lab: ~~2~~ 3.0 Faculty Load: ~~9.09%~~ 15.00%
   This course examines the ~~basic~~ skills, rules, etiquette, and strategies for boxing. Students will ~~be introduced to the~~ utilize correct body positioning and footwork as well as the principles and mechanics of ~~the basic~~ punches and defenses. The training aspects of boxing as well as conditioning and fitness strategies will also be covered.

   *Recommendation*
   Units: 1.0 Lecture: 0 Hours Lab: 3.0 Faculty Load: 15.00%
   This course examines the skills, rules, etiquette, and strategies for boxing. Students will utilize correct body positioning and footwork as well as the principles and mechanics of punches and defenses. The training aspects of boxing as well as conditioning and fitness strategies will also be covered.

2. Physical Education 221abcd – Defense Tactics
   *Current Status/Proposed Changes*
   Units: 1.0 Lecture: 0 Hours Lab: ~~2~~ 3.0 Faculty Load: ~~9.09%~~ 15.00%
   This course provides instruction and practice in the application of combative arts for use in self-defense. Techniques presented will include various strikes, punches, ~~and~~ kicks ~~as well as~~ and ground defense strategies. Defense against the headlock, bear hug, ~~lapel grab,~~ chokes~~,~~ and confrontational situations will also be ~~examined~~ practiced. Physical conditioning relative to performing ~~and fitness specific to that needed to perform~~ self-defense ~~strikes~~ techniques will be emphasized. Prevention of training related injuries will be addressed through proper warm up and stretching.

   *Recommendation*
   Units: 1.0 Lecture: 0 Hours Lab: 3.0 Faculty Load: 15.00%
   This course provides instruction and practice in the application of combative arts for use in self-defense. Techniques presented will include various strikes, punches, kicks and ground defense strategies. Defense against the headlock, bear hug, chokes and confrontational situations will also be practiced. Physical conditioning relative to performing self-defense techniques will be emphasized. Prevention of training related injuries will be addressed through proper warm up and stretching.

3. Physical Education 245abcd – Water Aerobics
   *Current Status/Proposed Changes*
   Units: 1.0 Lecture: 0 Hours Lab: ~~2~~ 3.0 Faculty Load: ~~10.00%~~ 15.00%
   ~~Instruction focuses~~ This course provides instruction on aerobic conditioning done in water. Emphasis is placed on ~~cardio-respiratory~~ cardiorespiratory endurance, flexibility, muscular strength, and endurance.

   *Recommendation*
   Units: 1.0 Lecture: 0 Hours Lab: 3.0 Faculty Load: 15.00%
   This course provides instruction on aerobic conditioning done in water. Emphasis is placed on cardio-respiratory endurance, flexibility, muscular strength, and endurance.

**COURSE REVIEW; CHANGES IN CATALOG DESCRIPTION, CONDITIONS OF ENROLLMENT (Prerequisite, Corequisite, Recommended Preparation, or Enrollment Limitation)**

1. Physical Education 280 – Exercise and Nutrition Programs for Fitness and Weight Management
   *Current Status/Proposed Changes*
   Recommended Preparation: eligibility for English A ~~or~~ and English 84

   Students will be given guidelines for the design of individual exercise programs of aerobic fitness, weight loss, and development of muscle mass, muscle strength, and joint flexibility. Nutritional support for optimizing these fitness objectives is integrated throughout the course. Students participate in both classroom discussions and relevant exercise training in the El Camino College Fitness Center. Measurement of aerobic fitness (VO2max), body composition ~~by underwater weighing~~ , and tests of muscle function will be conducted ~~in the College's Exercise Science Laboratory~~ to guide exercise and dietary recommendations.

   *Recommendation*
   Recommended Preparation: eligibility for English A and English 84

   Students will be given guidelines for the design of individual exercise programs of aerobic fitness, weight loss, and development of muscle mass, muscle strength, and joint flexibility. Nutritional support for optimizing these fitness objectives is integrated throughout the course. Students participate in both classroom discussions and relevant exercise training in the El Camino College Fitness Center. Measurement of aerobic fitness (VO2max), body composition, and tests of muscle function will be conducted to guide exercise and dietary recommendations.

**COURSE REVIEW; CHANGES IN CONTACT HOURS, FACULTY LOD, CATALOG DESCRIPTION, CONDITIONS OF ENROLLMENT (Prerequisite, Corequisite, Recommended Preparation, or Enrollment Limitation)**

1. Physical Education 86abc – Off-Season Training for Men's Intercollegiate Water Polo Team
   *Current Status/Proposed Changes*
   Units: 1.0 Lecture: 0 Hours Lab: ~~2~~ 3.0 Faculty Load: ~~10.00%~~ 15.00%
   ~~Enrollment Limitation~~ Recommended Preparation: t~~ryout (~~High school varsity experience or equivalent skill~~)~~

   This course provides instruction and practice in the advanced techniques of water polo. All students will engage in an off-season program emphasizing instruction, skill development, strength training, and conditioning.
   ~~Note: This course is offered in the spring semester and summer session only.~~

   *Recommendation*
   Units: 1.0 Lecture: 0 Hours Lab: 3.0 Faculty Load: 15.00%
   Recommended Preparation: High school varsity experience or equivalent skill

   This course provides instruction and practice in the advanced techniques of water polo. All students will engage in an off-season program emphasizing instruction, skill development, strength training, and conditioning.

**COURSE REVIEW; CHANGES IN DISCIPLINE, CONTACT HOURS, FACULTY LOAD, GENERAL EDUCATION REQUIREMENT, CATALOG DESCRIPTION, CONDITIONS OF ENROLLMENT (Prerequisite, Corequisite, Recommended Preparation, or Enrollment Limitation)**

1. Physical Education 217 – Sports Officiating
   *Current Status/Proposed Changes*
   Discipline: Recreation Administration or Physical Education
   Units: 2.0 Lecture: 2.0 Hours Lab: ~~3.0~~ 0 Faculty Load: 13.33%
   Recommended Preparation: ~~Eligibility for~~ English ~~A or~~ 84 and English B
   El Camino General Education Pattern – Area 5

   This course provides instruction ~~and practice~~ in the basic principles and applications of sports officiating. ~~Emphasis is placed on a broad~~ A range of topics including officiating objectives, conduct, communication skills, conflict management, fitness ~~and injury prevention~~, legal rights and responsibilities, and career development will be discussed.

*Recommendation*
Discipline: Recreation Administration or Physical Education
Units: 2.0 Lecture: 2.0 Hours Lab: 0 Faculty Load: 13.33%
Recommended Preparation: English 84 and English B
El Camino General Education Pattern – Area 5

This course provides instruction in the basic principles and applications of sports officiating. A range of topics including officiating objectives, conduct, communication skills, conflict management, fitness, legal rights and responsibilities, and career development will be discussed.

**NEW DISTANCE EDUCATION COURSE VERSION**

1. Physical Education 217 – Sports Officiating

**INACTIVATE COURSE**

1. Physical Education 232abcd – Racquetball

**NEW MAJOR – SB 1440 TRANSFER DEGREE (AS-T)**

1. **Kinesiology**
   The kinesiology program provides a foundation for the study of diverse dimensions of exercise, science and sport. Upon completion of the program, students will have knowledge and skills for advancement into a number of kinesiology fields, such as adapted physical education, athletic training, coaching, exercise science, fitness specialist, kinesiotherapy, and teaching. Competency will be assessed by a student's ability to solve problems in exercise program design and to evaluate movement skills, tactics, and strategies in various physical activities.

   A Certificate of Accomplishment will be granted upon completion of all program requirements.

   The Associate in Science for Transfer (AS-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AS-T are guaranteed admission to the CSU system, but not to a particular campus or major. In order to earn an AS-T degree, students must complete a minimum of 18 semester units in the major, a minimum 60 required semester units of CSU-transferable coursework with a minimum GPA of 2.0 and the CSU General Education Breadth requirements or Intersegmental General Education Transfer Curriculum (IGETC). This degree may not be the best option for students intending to transfer to a particular university or college that is not part of the CSU system.

Students planning to complete the degree should consult with an El Camino counselor for more information on university admission and transfer requirements.

**Major Requirements**
**Required Core:**
Physical Education 277
and
select Option 1, Option 2 or Option 3

Option 1
Anatomy 30
and
three units from Skill, Fitness, Dance or Team Sports courses

or
Option 2
Anatomy 32, Physiology 31
and
three units from Skill, Fitness, Dance or Team Sports course

or
Option 3
Anatomy and Physiology 34A, Anatomy and Physiology 34B
and
three units from Skill, Fitness, Dance or Team Sports course

maximum of 3 units from at least two of the following categories:

Skill Courses
Physical Education 4abcd, 6abc, 7abcd, 14abcd, 16abc, 21abc, 26abc, 36abc, 46abc, 47abcd, 58abc, 61abc, 66abc, 71abc, 74abcd, 76abc, 81abc, 86abc, 106abc, 111abc, 116abc, 121abc, 126abc, 131abc, 133abc, 204abcd, 208abcd, 220abcd, 221abcd, 224abcd, 234abcd, 238abcd, 240abcd, 241abcd, 242abcd, 243abcd, 244abcd, 250abcd, 251abcd, 253abcd, 402abcd, 407abcd

Fitness Courses
Physical Education 1abcd, 2abcd, 3abcd, 54abcd, 102abcd, 135abcd, 245abcd, 246abcd, 256abcd, 282abcd, 285abcd, 300abcd, 400abcd, 401abcd, 404abcd, 409abcd

Dance Courses
Dance 9ab, 10, 12abcd, 14ab, 16ab, 19ab, 20abcd, 21abcd, 22ab, 26abcd, 32ab, 42ab, 51ab, 53ab, 61ab, 70abcd

Team Sports Courses
Physical Education 5abc, 14abc, 20abc, 25abc, 35abc, 45abc, 57abc, 60abc, 65abc, 70abc, 75abc, 80abc, 85abc, 87abc, 105abc, 110abc, 115abc, 120abc, 125abc, 130abc, 132abc, 233abc

select 6-10 units:
Chemistry 1A, 4, 20, 21A, Contemporary Health 1, First Aid 1, Mathematics 150, Nutrition and Foods 11, Physical Education 272, 280, Physiology 2A, Psychology 5; Psychology 9A or Sociology 109; ~~Recreation 207~~

Total units: 20

**NEW CERTIFICATE OF ACCOMPLISHMENT**

1. **Recreation Leadership**
   The recreation program is designed for students desiring to transfer or to obtain entry-level positions in recreation and leisure services. After acquiring the historical, philosophical, and theoretical foundations of recreation, students will apply administrative, leadership, planning, supervision, and counseling skills in diverse commercial, municipal, and camp recreation settings. Competencies will be assessed by evaluating the student's ability to solve problems in recreation and leisure program design and to develop organizational skills in a variety of situations.

   A Certificate of Accomplishment will be granted upon completion of all program requirements.

   **Certificate Requirements**
   Recreation 207, 217, First Aid 1
   Elective Courses:
   Child Development 104, Physical Education 201, 217, 242abcd (one semester), 277
   Total units: 16

**HUMANITIES**

**COURSE REVIEW; CHANGES IN CONDITIONS OF ENROLLMENT (Prerequisite, Corequisite, Recommended Preparation, or Enrollment Limitation)**

1. French 1 – Elementary French I
   *Current Status/Proposed Changes*
   Recommendation Preparation: eligibility for English ~~A~~ 1A

*Recommendation*
Recommendation Preparation: eligibility for English 1A

## INDUSTRY AND TECHNOLOGY

### COURSE REVIEW

1. Engineering Technology 12A – Introduction to Engineering Design I

2. Engineering Technology 12B – Introduction to Engineering Design II

3. Engineering Technology 14B – Electronics for Engineering Technologists II

4. Engineering Technology 18A – Engineering Design and Development I

### COURSE REVIEW; CHANGES IN CATALOG DESCRIPTION

1. Engineering Technology 14A – Electronics for Engineering Technologists I
   *Current Status/Proposed Changes*
   This is the first of two courses in which students are introduced to the application of electronics in engineering technology. The topics studied include safety, Ohm's Law, engineering notation, DC (Direct Current) circuits, capacitance, inductance, reactance, and impedance. Techniques in computer simulation and electrical measurements will be stressed.
   Note: The two course sequence Engineering Technology 14A and Engineering Technology 14B is the same as Engineering Technology 14.

   *Recommendation*
   This is the first of two courses in which students are introduced to the application of electronics in engineering technology. The topics studied include safety, Ohm's Law, engineering notation, DC (Direct Current) circuits, capacitance, inductance, reactance, and impedance. Techniques in computer simulation and electrical measurements will be stressed.
   Note: The two course sequence Engineering Technology 14A and Engineering Technology 14B is the same as Engineering Technology 14.

2. Manufacturing Technology 75 – Integrated Robotic and Automated Technologies\
   *Current Status/Proposed Changes*
   This course covers robotic and automation applications with emphasis on imbedded electronics, micro-controller programming, motors and drive trains. Additional topics covered include electronics theory, electro-mechanical fabrication, sensors,

manufacturing materials and processes and career fields in which robotic applications are used. Students will construct, program and test a vehicular or process robot. Note: This course is the same as the two-course sequence Manufacturing Technology 75A and 75B.

*Recommendation*
This course covers robotic and automation applications with emphasis on imbedded electronics, micro-controller programming, motors and drive trains. Additional topics covered include electronics theory, electro-mechanical fabrication, sensors, manufacturing materials and processes and career fields in which robotic applications are used. Students will construct, program and test a vehicular or process robot. Note: This course is the same as the two-course sequence Manufacturing Technology 75A and 75B.

**COURSE REVIEW; CHANGES IN CONDITIONS OF ENROLLMENT (Prerequisite, Corequisite, Recommended Preparation, or Enrollment Limitation)**

1. Engineering Technology 12 – Introduction to Engineering Design
   *Current Status/Proposed Changes*
   Recommended Preparation: ~~Engineering Technology 10~~

   *Recommendation*
   Recommended Preparation: none

2. Engineering Technology 16A – Computer Integrated Manufacturing I
   *Current Status/Proposed Changes*
   Recommended Preparation: ~~Engineering Technology 10 or Engineering Technology 10A and Engineering Technology 10B~~
   ~~AND~~
   ~~Engineering Technology 12 or Engineering Technology 12A and Engineering Technology 12B~~

   *Recommendation*
   Recommended Preparation: none

3. Engineering Technology 18 – Engineering Design and Development
   *Current Status/Proposed Changes*
   Prerequisite: Engineering Technology 12 or 12A and 12B
   AND
   Engineering Technology 14 or 14A and 14B
   AND
   Engineering Technology 16 or 16A and 16B with a minimum grade of C in prerequisite

*Recommendation*
Prerequisite: Engineering Technology 12 or 12A and 12B
AND
Engineering Technology 14 or 14A and 14B
AND
Engineering Technology 16 or 16A and 16B with a minimum grade of C in prerequisite

4. Fashion 28 – Visual Merchandising
*Current Status/Proposed Changes*
Recommended Preparation: ~~eligibility for~~ English ~~84~~ A

*Recommendation*
Recommended Preparation: English A

**COURSE REVIEW; CHANGES IN CATALOG DESCRIPTION, CONDITIONS OF ENROLLMENT (Prerequisite, Corequisite, Recommended Preparation, or Enrollment Limitation)**

1. Engineering Technology 14 – Electronics for Engineering Technologists
*Current Status/Proposed Changes*
Recommended Preparation: ~~Engineering Technology 10~~

In this course, students are introduced to the application of electronics in engineering technology. The topics studied include safety, Ohm's Law, engineering notation, DC (Direct Current) circuits, capacitance, inductance, reactance, impedance, analog and digital waveforms, basic motors, number systems, logic gates, Boolean algebra, flipflops, shift registers, and microprocessors. Techniques in computer simulation and electrical measurements will be stressed.

*Recommendation*
Recommended Preparation: none

In this course, students are introduced to the application of electronics in engineering technology. The topics studied include safety, Ohm's Law, engineering notation, DC (Direct Current) circuits, capacitance, inductance, reactance, impedance, analog and digital waveforms, basic motors, number systems, logic gates, Boolean algebra, flipflops, shift registers, and microprocessors. Techniques in computer simulation and electrical measurements will be stressed.

2. Engineering Technology 16 – Computer Integrated Manufacturing
   *Current Status/Proposed Changes*
   Recommended Preparation: ~~Engineering Technology 10 and Engineering Technology 12~~

   This course covers the integration of engineering technology principles and automation in manufacturing environments. Students will create three-dimensional designs with modeling software and produce actual components of their designs on ~~c~~Computer ~~n~~Numerically ~~c~~Controlled (CNC) machine tools. Additional topics covered include machine tool operations, simulations, ~~r~~Rapid ~~p~~Prototyping (RP), robotics, and manufacturing systems.

   *Recommendation*
   Recommended Preparation: none

   This course covers the integration of engineering technology principles and automation in manufacturing environments. Students will create three-dimensional designs with modeling software and produce actual components of their designs on Computer Numerically Controlled (CNC) machine tools. Additional topics covered include machine tool operations, simulations, Rapid Prototyping (RP), robotics, and manufacturing systems.

3. Engineering Technology 16B – Computer Integrated manufacturing I
   *Current Status/Proposed Changes*
   Recommended Preparation: ~~Engineering Technology 10 or Engineering Technology 10A and Engineering Technology 10B~~
   ~~AND~~
   ~~Engineering Technology 12 or Engineering Technology 12A and Engineering Technology 12B~~
   ~~AND~~
   Engineering Technology 16A

   This is the second of two courses that cover the integration of engineering technology principles and automation in manufacturing environments. Students will create three-dimensional designs with modeling software and produce actual components of their designs on ~~c~~Computer ~~n~~Numerically ~~c~~Controlled (CNC) machine tools. Additional topics covered include simulations, ~~r~~Rapid ~~p~~Prototyping (RP)~~,~~ and manufacturing systems.
   Note: The two course sequence Engineering Technology 16A and Engineering Technology 16B is the same as Engineering Technology 16.

*Recommendation*
Recommended Preparation: Engineering Technology 16A

This is the second of two courses that cover the integration of engineering technology principles and automation in manufacturing environments. Students will create three-dimensional designs with modeling software and produce actual components of their designs on Computer Numerically Controlled (CNC) machine tools. Additional topics covered include simulations, Rapid Prototyping (RP) and manufacturing systems. Note: The two course sequence Engineering Technology 16A and Engineering Technology 16B is the same as Engineering Technology 16.

4. Machine Tool Technology 103abcd – Conventional and CNC Turning
*Current Status/Proposed Changes*
Prerequisite: Machine Tool Technology 46 or Machine Tool Technology 101abcd ~~(or the former machine Tool Technology 13A)~~ with a minimum grade of C in prerequisite or equivalent

In ~~T~~this course, ~~covers~~ students will study at an advanced level the principles and operation of conventional and ~~CNC (~~Computer Numerically Controlled (CNC) machine tools with an emphasis on the set up and operation of lathes. Topics will include safety, turning, drilling, boring, threading, cutting tools, CNC programming practices, and setups as applied in industry.

*Recommendation*
Prerequisite: Machine Tool Technology 46 or Machine Tool Technology 101abcd with a minimum grade of C in prerequisite or equivalent

In this course, students will study at an advanced level the principles and operation of conventional and Computer Numerically Controlled (CNC) machine tools with an emphasis on the set up and operation of lathes. Topics will include safety, turning, drilling, boring, threading cutting tools, CNC programming practices, and setups as applied in industry.

**INACTIVATE COURSE**

1. Technical Mathematics 1 – Technical Mathematics for Vocational Students

**NEW COURSE**

1. Administration of Justice 10ab – Introduction to Homeland Security
Units: 3.0 Lecture: 3.0 Hours Lab: 0 Faculty Load: 20.00%
Enrollment Limitation: current employment with the Transportation Security Administration (TSA)

Grading Method: Letter
Credit, degree applicable
No Transfer

This course provides an overview of important components of homeland security, including various agencies and their interrelated responsibilities. Topics include historical events, critical threats, and legislative constraints that impact national security. The course clarifies the roles of military agencies and local, federal, and international law enforcement in combating terrorism and indentifies characteristics, ideologies, motives, and behaviors of extremist groups that foster and support terrorist activities. Students will examine and interpret forensic evidence to reconstruct crimes of terrorism. Students will examine and interpret forensic evidence to reconstruct crimes of terrorism.

## MATHEMATICAL SCIENCES

## CHANGE IN MAJOR; CHANGES IN PROGRAM DESCRIPTION, COURSE REQUIREMENTS, UNITS

1. **Mathematics**
   *Current Status/Proposed Changes*
   The ~~degree~~ mathematics program provides the student with sufficient depth to support a lifelong interest in mathematics, and is suitable for the student who plans to transfer in mathematics. The core of the major is the calculus sequence, in which the student will acquire a conceptual understanding of the principles of differential and integral calculus for functions of one and several variables, as well as the ability to apply calculus techniques in a variety of applications. ~~A minimum of~~ One course in Differential Equations with Linear Algebra is required, as well as one additional course ~~is required~~ to provide the student with greater breadth in mathematics. Competency will be assessed by evaluating the student's ability to solve a wide range of calculus and other mathematical problems.

   At least 8 units for this degree must be completed at El Camino College.

   **Major Requirements**
   Mathematics 190, 191, 220, 270;
   ~~four units~~ one course from: Computer Science 1, 2, 3, Mathematics ~~140,~~ 150, 210, ~~270,~~ Physics 1A, 3A
   Total Units: ~~19-20~~ 24-25

*Recommendation*
The mathematics program provides the student with sufficient depth to support a lifelong interest in mathematics, and is suitable for the student who plans to transfer in mathematics. The core of the major is the calculus sequence, in which the student will acquire a conceptual understanding of the principles of differential and integral calculus for functions of one and several variables, as well as the ability to apply calculus techniques in a variety of applications. One course in Differential Equations with Linear Algebra is required, as well as one additional course to provide the student with greater breadth in mathematics. Competency will be assessed by evaluating the student's ability to solve a wide range of calculus and other mathematical problems.

At least 8 units for this degree must be completed at El Camino College.

**Major Requirements**
Mathematics 190, 191, 220, 270;
one course from: Computer Science 1, 2, 3, Mathematics 150, 210, Physics 1A, 3A
Total Units: 24-25

**NEW MAJOR – SB 1440 TRANSFER DEGREE**

1. **Mathematics**
   The Associate in Science for Transfer (AS-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AS-T are guaranteed admission to the CSU system, but not to a particular campus or major. In order to earn an AS-T degree, students must complete a minimum of 18 semester units in the major, a minimum 60 required semester units of CSU-transferable coursework with a minimum GPA of 2.0 and the CSU General Education Breadth requirements or Intersegmental General Education Transfer Curriculum (IGETC). This degree may not be the best option for students intending to transfer to a particular university or college that is not part of the CSU system.

   Students planning to complete the degree should consult with an El Camino College counselor for more information on university admission and transfer requirements.

   **Major Requirements**
   Mathematics 190, 191, 220, 270;
   one course from: Computer Science 1, 2, 3; Mathematics 150, 210; Physics 1A, 3A
   Total Units: 24-25

**COURSE REVIEW**

1. Mathematics 161 – Calculus II for the Biological, Management and Social Sciences

## COURSE REVIEW; DISTANCE EDUCATION UPDATE

1. Mathematics 33 – Extended Elementary Algebra, Part I

2. Mathematics 43 – Extended Elementary Algebra, Part II

## NATURAL SCIENCES

## NEW MAJOR – SB 1440 TRANSFER DEGREE

1. **Physics**
   The physics program provides students with the ability to use and develop problem solving strategies that apply to physical concepts involving mechanics, thermodynamics, sound, light, electricity and magnetism, and modern physics. Laboratory activities establish a foundation in measurement and analysis techniques necessary to test, understand, and apply physical concepts. Upon completion of the program requirements, students will be prepared to transfer and major in physics. Competency will be assessed by evaluating the student's ability to quantitatively and qualitatively determine the results of physical situations.

   The Associate in Science for Transfer (AS-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AS-T are guaranteed admission to the CSU system, but not to a particular campus or major. In order to earn an AS-T degree, students must complete a minimum of 18 semester units in the major, a minimum 60 required semester units of CSU-transferable coursework with a minimum GPA of 2.0 and the CSU General Education Breadth requirements or Intersegmental General Education Transfer Curriculum (IGETC). This degree may not be the best option for students intending to transfer to a particular university or college that is not part of the CSU system. Students planning to complete the degree should consult with an El Camino College counselor for more information on university admission and transfer requirements.

   **Major Requirements**
   Physics 1A, 1C; Physics 1B or 1D; Mathematics 190, 191, 220
   Total Units: 26

## COURSE REVIEW

1. History of Science 11 – Introduction to the History of Western Science

2. Horticulture 53 – Soils and Fertilizers

**COURSE REVIEW; CHANGES IN CONDITIONS OF ENROLLMENT**
**(Prerequisite, Corequisite, Recommended Preparation, or Enrollment Limitation)**

1. Astronomy 13abc – Astronomical Optic
   *Current Status/Proposed Changes*
   Recommended Preparation: Astronomy 20 or Astronomy 25 ~~or equivalent~~ with a minimum grade of B ~~better~~ or equivalent
   AND
   Mathematics 73 or Mathematics 80

   *Recommendation*
   Recommended Preparation: Astronomy 20 or Astronomy 25 with a minimum grade of B or equivalent
   AND
   Mathematics 73 or Mathematics 80