HEALTH SCIENCES AND ATHLETICS

COURSE REVIEW

1. Physical Education 275 – Sport Psychology

CTE TWO-YEAR COURSE REVIEW; NONSUBSTANTIVE CHANGES

1. Nursing 253 – Intermediate Nursing Process II
2. Radiologic Technology 218 – Clinical Experience 5
3. Sign Language/Interpreter Training 200 – Principles of Sign Language Interpreting
4. Sign Language/Interpreter Training 210 – American Sign Language to English Interpreting I
5. Sign Language/Interpreter Training 211 – English to American Sign Language Interpreting I
6. Sign Language/Interpreter Training 220 – American Sign Language to English Interpreting II
7. Sign Language/Interpreter Training 221 – English to American Sign Language Interpreting II
8. Sign Language/Interpreter Training 230 – Sign Language Interpreting III
9. Sign Language/Interpreter Training 240 – Interpreting Practicum

COURSE REVIEW; CHANGE IN GENERAL EDUCATION REQUIREMENT

1. Sign Language/Interpreter Training 115 – American Sign Language V
   Current Status/Proposed Changes
   Proposed IGETC General Education - Area 6A

   Recommendation
   Proposed IGETC General Education - Area 6A

CTE TWO-YEAR COURSE REVIEW; CHANGES IN CATALOG DESCRIPTION

1. Radiologic Technology 255 – Advanced Imaging and Special Procedures
   Current Status/Proposed Changes
   This course is designed for the advanced radiography student. Emphasis is placed on anatomy, pathology, positioning and patient care for specialized radiographic procedures ~~and newer~~ . Newer imaging modalities are explored, along with cross sectional anatomy. Advanced modalities such as CT, MRI, Nuclear Medicine, PET,

Ultrasound and Radiation Therapy are covered. An in-depth exploration of digital imaging, ~~with review of~~ fluoroscopy and radiation safety principles are also ~~covered~~ reviewed.

Recommendation
This course is designed for the advanced radiography student. Emphasis is placed on anatomy, pathology, positioning and patient care for specialized radiographic procedures. Newer imaging modalities are explored, along with cross sectional anatomy. Advanced modalities such as CT, MRI, Nuclear Medicine, PET, Ultrasound and Radiation Therapy are covered. An in-depth exploration of digital imaging, fluoroscopy and radiation safety principles are also reviewed.

CTE TWO-YEAR COURSE REVIEW; CHANGES IN CONDITIONS OF ENROLLMENT (Pre/Corequisite, Recommended Preparation, or Enrollment Limitation)

1. Nursing 101 – Exploring Health Occupation Careers
   Current Status/Proposed Changes
   Prerequisite: eligibility for English 1A
   ~~Recommended Preparation: English 84~~

   Recommendation
   Prerequisite: eligibility for English 1A

2. Nursing 154 – Intermediate Nursing Process and Mental Health
   Current Status/Proposed Changes
   Prerequisite: Nursing ~~150~~150B, Nursing 151 and Nursing 152 with a minimum grade of C in prerequisite
   ~~Recommended Preparation: Nursing 156~~

   Recommendation
   Prerequisite: Nursing 150B, Nursing 151 and Nursing 152 with a minimum grade of C in prerequisite

3. Nursing 251 – Legal and Ethical Considerations in Nursing
   Current Status/Proposed Changes
   Prerequisite: Nursing ~~150~~ 153, Nursing ~~151~~ 154, Nursing 155 and Nursing 156 with a minimum grade of C in ~~each~~ prerequisite

   Recommendation
   Prerequisite: Nursing 153, Nursing 154, Nursing 155 and Nursing 156 with a minimum grade of C in prerequisite

4. Respiratory Care 170 – Introduction to the Respiratory Care Sciences and the Profession
   Current Status/Proposed Changes
   ~~Enrollment Limitation: high school graduation or equivalent~~

   Recommendation
   Enrollment Limitation: none

5. Respiratory Care 172 – Fundamentals of Cardiopulmonary Physiology and Pharmacology in Respiratory Care
   Current Status/Proposed Changes
   Prerequisite: Anatomy 30 with a minimum grade of C or concurrent enrollment
   Recommended Preparation: Respiratory Care 170 or concurrent enrollment
   ~~Enrollment Limitation: high school graduation or equivalent~~

   Recommendation
   Prerequisite: Anatomy 30 with a minimum grade of C or concurrent enrollment
   Recommended Preparation: Respiratory Care 170 or concurrent enrollment

6. Respiratory Care 174 – Introduction to Respiratory Care Equipment and Patient Care Procedures
   Current Status/Proposed Changes
   Recommended Preparation: Respiratory Care 170
   ~~Enrollment Limitation: high school graduation or equivalent~~

   Recommendation
   Recommended Preparation: Respiratory Care 170

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

1. Physical Education 132abc – Women's Intercollegiate Badminton Team
   Current Status/Proposed Changes
   ~~Enrollment Limitation tryout (high school varsity experience or equivalent skill)~~
   Recommended Preparation: high school varsity experience or equivalent skill

   This course provides ~~Women's varsity practice and~~ instruction, training, and practice in the ~~advanced~~ advance techniques of badminton ~~leading to intercollegiate competition with member schools of the South Coast Conference~~ and the opportunity for intercollegiate competition. Student athletes will compete against conference schools and other colleges. ~~Athletes who satisfactorily fulfill the course requirements~~

~~will earn an El Camino College award.~~

Note: This course is offered in the spring semester only.

Recommendation
Recommended Preparation: high school varsity experience or equivalent skill

This course provides instruction, training, and practice in the advance techniques of badminton and the opportunity for intercollegiate competition. Student athletes will compete against conference schools and other colleges.

Note: This course is offered in the spring semester only.

2. Radiologic Technology 111 – Fundamentals of Radiologic Technology
Current Status/Proposed Changes
Prerequisite: Radiologic Technology A with a minimum grade of C
Corequisite: Radiologic Technology 106 and Radiologic Technology 123
Enrollment Limitation: admission to the Radiologic Technology Program

This course is a combination of lab and lecture that explores the basic concepts and theories of radiologic science, technology, equipment, and physics in the field of radiology. The course content includes the study of matter, varying forms of energy, and different forms of radiation in radiology. Students will learn all of the essential equipment, how it functions, and proper-safe use in radiologic technology. The lab component of the course further reinforces the concepts taught in the didactic course. ~~This course is designed to prepare the radiography student with entry level skills and knowledge to perform safely in a radiology department. Topics covered are imaging receptors for screen/film; computed and direct-digital radiography; patient care; radiation safety; x-ray production and interaction with matter; radiographic quality and technique; operation of radiographic equipment; and image delivery, display, archiving, and retrieval. Laboratory experiments are performed to compliment the didactic instruction.~~

Recommendation
Prerequisite: Radiologic Technology A with a minimum grade of C
Corequisite: Radiologic Technology 106 and Radiologic Technology 123
Enrollment Limitation: admission to the Radiologic Technology Program

This course is a combination of lab and lecture that explores the basic concepts and theories of radiologic science, technology, equipment, and physics in the field of radiology. The course content includes the study of matter, varying forms of energy, and different forms of radiation in radiology. Students will learn all of the essential

equipment, how it functions, and proper-safe use in radiologic technology. The lab component of the course further reinforces the concepts taught in the didactic course.

COURSE REVIEW; DISTANCE EDUCATION REVIEW, CHANGES IN CONDITIONS OF ENROLLMENT (Pre/Corequisite, Recommended Preparation, or Enrollment Limitation), CATALOG DESCRIPTION

1. Contemporary Health 1 – Personal and Community Health Issues
   Current Status/Proposed Changes
   Recommended Preparation: ~~eligibility for~~ ~~English A or 84~~ English 84 and English B

   This course is designed to provide a critical analysis of factors, which affect personal and community health. Primary emphasis is placed upon self-empowerment and disease prevention in a culturally diverse community. General topics include ~~communicable~~ infectious and non-~~communicable~~ infectious diseases; physical fitness, weight management, and nutrition; human reproduction and sexuality; stress management and mental health; drug use and abuse; and environmental health.

   Note: This course satisfies Section A, Area 5 of the associate degrees' requirements.

   Note: The maximum UC credit allowed for students completing Contemporary Health 1 and Contemporary Health 5 is one course.

   Recommendation
   Recommended Preparation: English 84 and English B

   This course is designed to provide a critical analysis of factors, which affect personal and community health. Primary emphasis is placed upon self-empowerment and disease prevention in a culturally diverse community. General topics include infectious and non-infectious diseases; physical fitness, weight management, and nutrition; human reproduction and sexuality; stress management and mental health; drug use and abuse; and environmental health.

   Note: This course satisfies Section A, Area 5 of the associate degrees' requirements.

   Note: The maximum UC credit allowed for students completing Contemporary Health 1 and Contemporary Health 5 is one course.

NEW DISTANCE EDUCATION COURSE VERSION

1. Physical Education 275 – Sport Psychology

CHANGE IN MAJOR; PROGRAM DESCRIPTION, COURSE REQUIREMENTS, TOTAL UNITS

1. Physical Education A.A. Degree
   Current Status/Proposed Changes
   The degree provides an orientation to the profession through participation in diverse physical activities and study of the dimensions of exercise. Students will acquire the ability to utilize principles of human anatomy, physiology, and behavioral processes in a variety of exercise and sport applications. Competencies 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. Upon completion of the program, students will ~~qualify~~ enhance their ability to pursue advanced degree options or entry-level positions in the discipline.

Major Requirements		**Units**
Required Core: 16 units		
ANAT 30	Essentials of Anatomy and Physiology	4
PSYC 5	General Psychology	3
PE 277	Introduction to Kinesiology and Physical Education	3
PE 280	Exercise and Nutrition Programs for Fitness and Weight Management	3
FAID 1	First Aid, Cardiopulmonary Resuscitation (CPR) and Basic Emergency Care	3

plus ~~8~~ 4 units of activity-units distributed over a minimum of ~~4~~ 3 ~~activity~~ categories to include: Aquatics, Combatives, ~~Court/Racquet~~, Dance, Fitness, ~~Individual Sports Team Sports~~Individual/Dual Activities, Intercollegiate Sports, and Team Activities

Aquatics		
PE 240	Beginning Swimming	1
PE 241	Intermediate/Advanced Swimming	1
PE 244	Springboard Diving	1
PE 247	Swimming, Lifeguard Training	1
PE 248	Swimming, Water Safety Instructor	2
PE 249	Swimming for Fitness	1
PE 402	Adapted Swimming and Hydroexercise	1
Combatives		
PE 18	Boxing	1
PE 220	Naginata - A Japanese Martial Art	1
PE 221	Combative Arts and Self Defense	1

~~Court/Racquet~~		
~~PE 4~~	~~Basketball~~	~~1~~
~~PE 251~~	~~Tennis~~	~~1~~
~~PE 253~~	~~Volleyball~~	~~1~~
Dance		
DANC 110	Beginning Dance	2
DANC 120A	Beginning Ballet A	2
DANC 120B	Beginning Ballet B	2
DANC 130A	Beginning Modern Dance A	2
DANC 130B	Beginning Modern Dance B	2
DANC 140	Jazz Dance I	2
DANC 161	Tap Dance I - Beginning	1
DANC 162	Hip Hop Dance	2
DANC 164	World Dance	1
DANC 165	African Dance	1
DANC 167	Social and Ballroom Dance	1
DANC 168	Latin Social Dance	2
DANC 220A	Intermediate Ballet A	2
DANC 230A	Intermediate Modern Dance A	2
DANC 240	Jazz Dance II	2
DANC 250	Pilates Mat Class	3
DANC 261	Tap Dance II - Intermediate	2
DANC 262	Commercial Dance	2
DANC 265	Intermediate African Dance	2
DANC 268	Intermediate Latin Social Dance	2
Fitness		
PE 2	Walking for Fitness	1
PE 10	Body Conditioning and Physical Fitness	1
PE 54	Weight Training	1
PE 135abcd	Sport-Specific, Periodized Training for Athletes	1
PE 245	Water Aerobics	1
PE 254	Aerobic Fitness	1
PE 257	Yoga for Health and Fitness	1
PE 258	Power Vinyasa Yoga	1
PE 259	Circuit Training	1
PE 260	Basic Principles of Fitness and Weight Control	1
PE 400	Adapted Fitness	1
PE 401	Adapted Strength Training	1
PE 404	Adapted Cardiovascular Fitness	1
PE 409	Adapted Yoga	1

Individual ~~Sports~~/Dual Activities		
PE 47	Introduction to Indoor Rock Climbing	1
PE 204	Badminton	1
PE 208	Bowling	1
PE 224	Golf	1
PE 251	Tennis	1
Intercollegiate Sports		
PE 5abc	Men's Intercollegiate Baseball Team	3
PE 6abc	Off-Season Training for Men's Intercollegiate Baseball Team	1
PE 15abc	Men's Intercollegiate Basketball Team	3
PE 16abc	Off-Season Training for Men's Intercollegiate Basketball Team	1
PE 20abc	Intercollegiate Cross Country Teams	3
PE 21abc	Off-Season Training for Intercollegiate Cross Country Teams	1
PE 35abc	Men's Intercollegiate Football Team	3
PE 36abc	Off-Season Training for Men's Intercollegiate Football Team	1
PE 45abc	Men's Intercollegiate Golf Team	3
PE 46abc	Off-Season Training for Men's Intercollegiate Golf Team	1
PE 57abc	Intercollegiate Swimming Teams	3
PE 58abc	Off-Season Training for Intercollegiate Swimming Teams	1
PE 60abc	Women's Intercollegiate Soccer Team	3
PE 61abc	Off-Season Training for Women's Intercollegiate Soccer Team	1
PE 65abc	Men's Intercollegiate Tennis Team	3
PE 66abc	Off-Season Training for Men's Intercollegiate Tennis Team	1
PE 70abc	Men's Intercollegiate Soccer Team	3
PE 71abc	Off-Season Training for Men's Intercollegiate Soccer Team	1
PE 75abc	Intercollegiate Track and Field Teams	3
PE 76abc	Off-Season Training for Intercollegiate Track and Field Teams	1
PE 80abc	Men's Intercollegiate Volleyball Team	3
PE 81abc	Off-Season Training for Men's Intercollegiate Volleyball Team	1
PE 85abc	Men's Intercollegiate Water Polo Team	3
PE 86abc	Off-Season Training for Men's Intercollegiate Water Polo Team	1
PE 87abc	Women's Intercollegiate Water Polo Team	3
PE 105abc	Women's Intercollegiate Basketball Team	3
PE 106abc	Off-Season Training for Women's Intercollegiate Basketball Team	1
PE 110abc	Women's Intercollegiate Volleyball Team	3
PE 111abc	Off-Season Training for Women's Intercollegiate Volleyball Team	1
PE 115abc	Women's Intercollegiate Tennis Team	3
PE 116abc	Off-Season Training for Women's Intercollegiate Tennis Team	1
PE 120abc	Women's Intercollegiate Softball Team	3
PE 121abc	Off-Season Training for Women's Intercollegiate Softball Team	1
PE 132abc	Women's Intercollegiate Badminton Team	3

PE 133abc	Off-season Training for Women's Intercollegiate Badminton Team	1
PE 140abc	Intercollegiate Sand Volleyball Team	3

Team ~~Sports~~ Activities

PE 4	Basketball	1
PE 7	Baseball	1
PE 74	Soccer	1
~~PE 204~~	~~Badminton~~	~~1~~
PE 233	Pep Squad and Cheer	1
PE 234ab	Pep Squad and Cheer Competition	1
PE 253	Volleyball	1
PE 255	Beach Volleyball	1

Restricted Elective Requirements: 2-3 units

PE 201	Introduction to Adapted Physical Education	2
PE 217	Sports Officiating	2
PE 270	Fitness and Sports Nutrition	3
PE 272	Care and Prevention of Athletic Injuries	3
PE 275	Sport Psychology	3
PE 290	Personal Fitness Trainer	3

Total Units: ~~24~~ 22-23

~~Note: Up to 4 units of intercollegiate sports can be counted toward the required 8 4 activity units.~~

Recommendation

The degree provides an orientation to the profession through participation in diverse physical activities and study of the dimensions of exercise. Students will acquire the ability to utilize principles of human anatomy, physiology, and behavioral processes in a variety of exercise and sport applications. Competencies will be assessed by student's ability to solve problems in exercise program design and to evaluate movement skills, tactics, and strategies in various physical activities. Upon completion of the program, students will enhance their ability to pursue advanced degree options or entry-level positions in the discipline.

Major Requirements **Units**

Required Core: 16 units

ANAT 30	Essentials of Anatomy and Physiology	4
PSYC 5	General Psychology	3
PE 277	Introduction to Kinesiology and Physical Education	3
PE 280	Exercise and Nutrition Programs for Fitness and	3

	Weight Management	
FAID 1	First Aid, Cardiopulmonary Resuscitation (CPR) and Basic Emergency Care	3

plus 4 units of activity-units distributed over a minimum of 3 categories to include: Aquatics, Combatives, Dance, Fitness, Individual/Dual Activities, Intercollegiate Sports, and Team Activities

Aquatics		
PE 240	Beginning Swimming	1
PE 241	Intermediate/Advanced Swimming	1
PE 244	Springboard Diving	1
PE 247	Swimming, Lifeguard Training	1
PE 248	Swimming, Water Safety Instructor	2
PE 249	Swimming for Fitness	1
PE 402	Adapted Swimming and Hydroexercise	1
Combatives		
PE 18	Boxing	1
PE 220	Naginata - A Japanese Martial Art	1
PE 221	Combative Arts and Self Defense	1
Dance		
DANC 110	Beginning Dance	2
DANC 120A	Beginning Ballet A	2
DANC 120B	Beginning Ballet B	2
DANC 130A	Beginning Modern Dance A	2
DANC 130B	Beginning Modern Dance B	2
DANC 140	Jazz Dance I	2
DANC 161	Tap Dance I - Beginning	1
DANC 162	Hip Hop Dance	2
DANC 164	World Dance	1
DANC 165	African Dance	1
DANC 167	Social and Ballroom Dance	1
DANC 168	Latin Social Dance	2
DANC 220A	Intermediate Ballet A	2
DANC 230A	Intermediate Modern Dance A	2
DANC 240	Jazz Dance II	2
DANC 250	Pilates Mat Class	3
DANC 261	Tap Dance II - Intermediate	2
DANC 262	Commercial Dance	2
DANC 265	Intermediate African Dance	2
DANC 268	Intermediate Latin Social Dance	2

Fitness		
PE 2	Walking for Fitness	1
PE 10	Body Conditioning and Physical Fitness	1
PE 54	Weight Training	1
PE 135abcd	Sport-Specific, Periodized Training for Athletes	1
PE 245	Water Aerobics	1
PE 254	Aerobic Fitness	1
PE 257	Yoga for Health and Fitness	1
PE 258	Power Vinyasa Yoga	1
PE 259	Circuit Training	1
PE 260	Basic Principles of Fitness and Weight Control	1
PE 400	Adapted Fitness	1
PE 401	Adapted Strength Training	1
PE 404	Adapted Cardiovascular Fitness	1
PE 409	Adapted Yoga	1
Individual/Dual Activities		
PE 47	Introduction to Indoor Rock Climbing	1
PE 204	Badminton	1
PE 208	Bowling	1
PE 224	Golf	1
PE 251	Tennis	1
Intercollegiate Sports		
PE 5abc	Men's Intercollegiate Baseball Team	3
PE 6abc	Off-Season Training for Men's Intercollegiate Baseball Team	1
PE 15abc	Men's Intercollegiate Basketball Team	3
PE 16abc	Off-Season Training for Men's Intercollegiate Basketball Team	1
PE 20abc	Intercollegiate Cross Country Teams	3
PE 21abc	Off-Season Training for Intercollegiate Cross Country Teams	1
PE 35abc	Men's Intercollegiate Football Team	3
PE 36abc	Off-Season Training for Men's Intercollegiate Football Team	1
PE 45abc	Men's Intercollegiate Golf Team	3
PE 46abc	Off-Season Training for Men's Intercollegiate Golf Team	1
PE 57abc	Intercollegiate Swimming Teams	3
PE 58abc	Off-Season Training for Intercollegiate Swimming Teams	1
PE 60abc	Women's Intercollegiate Soccer Team	3
PE 61abc	Off-Season Training for Women's Intercollegiate Soccer Team	1
PE 65abc	Men's Intercollegiate Tennis Team	3
PE 66abc	Off-Season Training for Men's Intercollegiate Tennis Team	1
PE 70abc	Men's Intercollegiate Soccer Team	3
PE 71abc	Off-Season Training for Men's Intercollegiate Soccer Team	1
PE 75abc	Intercollegiate Track and Field Teams	3

PE 76abc	Off-Season Training for Intercollegiate Track and Field Teams	1
PE 80abc	Men's Intercollegiate Volleyball Team	3
PE 81abc	Off-Season Training for Men's Intercollegiate Volleyball Team	1
PE 85abc	Men's Intercollegiate Water Polo Team	3
PE 86abc	Off-Season Training for Men's Intercollegiate Water Polo Team	1
PE 87abc	Women's Intercollegiate Water Polo Team	3
PE 105abc	Women's Intercollegiate Basketball Team	3
PE 106abc	Off-Season Training for Women's Intercollegiate Basketball Team	1
PE 110abc	Women's Intercollegiate Volleyball Team	3
PE 111abc	Off-Season Training for Women's Intercollegiate Volleyball Team	1
PE 115abc	Women's Intercollegiate Tennis Team	3
PE 116abc	Off-Season Training for Women's Intercollegiate Tennis Team	1
PE 120abc	Women's Intercollegiate Softball Team	3
PE 121abc	Off-Season Training for Women's Intercollegiate Softball Team	1
PE 132abc	Women's Intercollegiate Badminton Team	3
PE 133abc	Off-season Training for Women's Intercollegiate Badminton Team	1
PE 140abc	Intercollegiate Sand Volleyball Team	3

Team Activities

PE 4	Basketball	1
PE 7	Baseball	1
PE 74	Soccer	1
PE 233	Pep Squad and Cheer	1
PE 234ab	Pep Squad and Cheer Competition	1
PE 253	Volleyball	1
PE 255	Beach Volleyball	1

Restricted Elective Requirements: 2-3 units

PE 201	Introduction to Adapted Physical Education	2
PE 217	Sports Officiating	2
PE 270	Fitness and Sports Nutrition	3
PE 272	Care and Prevention of Athletic Injuries	3
PE 275	Sport Psychology	3
PE 290	Personal Fitness Trainer	3

Total Units: 22-23

CHANGE IN MAJOR; COURSE REQUIREMENTS

1. Recreation A.A. Degree
   Current Status/Proposed Changes

Major Requirements		**Units**
Required Core: 14 units		
FAID 1	First Aid, Cardiopulmonary Resuscitation (CPR) and Basic Emergency Care	3
PE 217	Sports Officiating	2
RECR 207	Introduction to Recreation	3
RECR 217	Recreational Leadership	3
RECR 307	Camp Counseling: Leadership and Programming	3
~~plus~~ 7-9 units from:		
ANAT 30	Essentials of Anatomy and Physiology	4
CDEV 103	Child Growth and Development	3
~~MUSI 7~~	~~Exploring Music in Education~~	~~3~~
PE 247	Swimming, Lifeguard Training	1
PE 248	Swimming, Water Safety Instructor	2
PSYC 5	General Psychology	3
SLAN 111	American Sign Language I	4
Total Units: 21-23		

Recommendation

Major Requirements		**Units**
Required Core: 14 units		
FAID 1	First Aid, Cardiopulmonary Resuscitation (CPR) and Basic Emergency Care	3
PE 217	Sports Officiating	2
RECR 207	Introduction to Recreation	3
RECR 217	Recreational Leadership	3
RECR 307	Camp Counseling: Leadership and Programming	3
7-9 units from:		
ANAT 30	Essentials of Anatomy and Physiology	4
CDEV 103	Child Growth and Development	3
PE 247	Swimming, Lifeguard Training	1
PE 248	Swimming, Water Safety Instructor	2
PSYC 5	General Psychology	3
SLAN 111	American Sign Language 1	4
Total Units: 21-23		

HUMANITIES

NEW COURSE

1. English RWA – Integrated Reading and Writing
   Units: 5.0 Lecture: 4.0 Lab: 2.0 Faculty Load: 36.67%
   Prerequisite: credit in English B and credit in English 82 or qualification by testing (English Placement Test) and assessment
   Grading Method: Pass/No Pass
   Credit Status: Associate Degree Credit

   This course prepares students for transfer-level reading and writing tasks. The course integrates the reading and writing processes and includes weekly one-on-one focused tutorial support. Students practice analyzing and evaluating primarily non-fiction texts as the basis for composing well-developed expository essays. Students develop skills in reading comprehension, vocabulary, essay writing, sentence structure, research techniques, and source documentation.

   Note: Pass/no pass only.

COURSE REVIEW; NONSUBSTANTIVE CHANGES

1. Academic Strategies 25 – Thinking Skills for College Courses

COURSE REVIEW; CHANGES IN CATALOG DESCRIPTION

1. Academic Strategies 20 – Prewriting Workshop
   Current Status/Proposed Changes
   In this course, students will learn strategies to ~~break negative psychological barriers to writing and to~~ increase their understanding and use of prewriting and planning techniques, ~~as an~~ which are important first ~~step~~ steps in ~~the composing process~~ successfully completing college writing assignments.

   Note: Pass/no pass only.

   Recommendation
   In this course, students will learn strategies to increase their understanding and use of prewriting and planning techniques, which are important first steps in successfully completing college writing assignments.

   Note: Pass/no pass only.

2. Academic Strategies 23 – Spelling Techniques
   Current Status/Proposed Changes
   This course is designed ~~for adult learners~~ to help students identify ~~personal~~ and correct common spelling errors and to provide practice using the appropriate rules of spelling necessary for college-level writing.

   Note: Pass/no pass only.

   Recommendation
   This course is designed to help students identify and correct common spelling errors and to provide practice using the appropriate rules of spelling necessary for college-level writing.

   Note: Pass/no pass only.

INDUSTRY AND TECHNOLOGY

NEW COURSE

1. Welding 29 – Blueprint Reading
   Units: 3.0 Lecture: 3.0 Lab: 0 Faculty Load: 20.00%
   Grading Method: Letter
   Credit Status: Associate Degree Credit
   CSU Transfer

   This course is designed to provide principles of reading and interpreting basic industrial prints and shop drawings as applied to the welding trade. Emphasis is placed on shape identification, nomenclature, and welding symbols.

REACTIVATE COURSE; CTE COURSE REVIEW, CHANGES IN UNITS, LECTURE AND LAB CONTACT HOURS, FACULTY LOAD, CONDITIONS OF ENROLLMENT (Pre/Corequisite, Recommended Preparation, or Enrollment Limitation), CATALOG DESCRIPTION

1. Administration of Justice 155 – Peace Officer Training Module - Level II
   Current Status/Proposed Changes
   Units: ~~11.0~~ 10.0 Lecture: ~~9.5~~ 9.0 Lab: ~~5.0~~ 3.5 per week to be arranged
   Faculty Load: ~~88.33%~~ 77.50%
   Grading Method: Letter
   Credit Status: Associate Degree Credit

CSU Transfer

Prerequisite: Possession of a current Commission ~~of~~ on Peace Officer Standards and Training (P.O.S.T.) ~~certified~~ Level III certificate

Enrollment Limitation:
1. Current medical examination conducted within 6 months (for safety and liability reasons).
2. Current California Department of Justice Firearms and Arrest Clearance obtained within 6 months (Penal Code Section 13511.5).
3. Possession of a valid California driver's license. Copy of a current DMV printout will be requested.

This course is designed for California Commission on Peace Officer Standards and Training (P.O.S.T.) Certified Training Module - Level II peace officer training candidates. A Level II ~~peace~~ reserve officer may perform general law enforcement assignments while under the immediate supervision of a ~~sworn~~ peace officer. These officers may also work assignments authorized for Level III reserve officers.

Note: The student will participate in a ~~261~~ 225 hour course of instruction and training emphasizing basic law enforcement philosophy, procedures, tactics, and techniques. The course is certified pursuant to California Penal Code Section ~~836~~ 830.6(a)(1) and 832.6(a)(2).

Note: Students pay mandatory fees for Department of Justice background check and clearance, firing range, ammunition and targets, physical training clothing, and physical examination fees.

Recommendation
Units: 10.0 Lecture: 9.0 Lab: 3.5 per week to be arranged Faculty Load: 77.50%
Grading Method: Letter
Credit Status: Associate Degree Credit
CSU Transfer

Prerequisite: Possession of a current Commission on Peace Officer Standards and Training (P.O.S.T.) Level III certificate

Enrollment Limitation:
1. Current medical examination conducted within 6 months (for safety and liability reasons).
2. Current California Department of Justice Firearms and Arrest Clearance obtained within 6 months (Penal Code Section 13511.5).

3. Possession of a valid California driver's license. Copy of a current DMV printout will be requested.

This course is designed for California Commission on Peace Officer Standards and Training (P.O.S.T.) Certified Training Module - Level II peace officer training candidates. A Level II reserve officer may perform general law enforcement assignments while under the immediate supervision of a peace officer. These officers may also work assignments authorized for Level III reserve officers.

Note: The student will participate in a 225 hour course of instruction and training emphasizing basic law enforcement philosophy, procedures, tactics, and techniques. The course is certified pursuant to California Penal Code Section 830.6(a)(1) and 832.6(a)(2).

Note: Students pay mandatory fees for Department of Justice background check and clearance, firing range, ammunition and targets, physical training clothing, and physical examination fees.

CTE TWO-YEAR COURSE REVIEW; NONSUBSTANTIVE CHANGES

1. Architecture 170 – Architectural Graphics Techniques
2. Architecture 171 – Architectural Three-Dimensional Illustration
3. Computer Aided Design/Drafting 45 – Geometric Dimensioning and Tolerancing
4. Cosmetology 4 – Cosmetology Practicum
5. Engineering Technology 16 – Computer Integrated Manufacturing
6. Engineering Technology 16A – Computer Integrated Manufacturing I
7. Engineering Technology 16B – Computer Integrated Manufacturing II
8. Machine Tool Technology 10A – Introduction to CAD/CAM
9. Machine Tool Technology 10K – 3D Numerical Control Graphics Programming
10. Machine Tool Technology 101 – Introduction to Conventional and CNC Machining
11. Machine Tool Technology 103 – Conventional and CNC Turning
12. Machine Tool Technology 105 – Conventional and CNC Milling
13. Welding 10A – Introduction to Shielded Metal Arc Welding (SMAW)
14. Welding 10C – Advanced Certification and Career Preparation Lab

CTE TWO-YEAR COURSE REVIEW; CHANGES IN CONDITIONS OF ENROLLMENT (Pre/Corequisite, Recommended Preparation, or Enrollment Limitation)

1. Air Conditioning and Refrigeration 6 – Refrigeration and Air Conditioning Control Systems

Current Status/Proposed Changes
~~Prerequisite: Air Conditioning and Refrigeration 21 or 22 with a minimum grade of C in prerequisite~~
Recommended Preparation: Air Conditioning and Refrigeration 21

Recommendation
Recommended Preparation: Air Conditioning and Refrigeration 21

2. Air Conditioning and Refrigeration 27 – Heating Technologies
Current Status/Proposed Changes
Prerequisite: Air Conditioning and Refrigeration 21 ~~or Air Conditioning and Refrigeration 22~~ with a minimum grade of C ~~in prerequisite~~ or equivalent

Recommendation
Prerequisite: Air Conditioning and Refrigeration 21 with a minimum grade of C or equivalent

3. Automotive Technology 33 – Transmissions, Drive Train and Drive Axles
Current Status/Proposed Changes
Recommended Preparation: Automotive Technology 1 or equivalent <u>skills</u>

Recommendation
Recommended Preparation: Automotive Technology 1 or equivalent skills

4. Machine Tool Technology 40 – Machine Shop Calculations
Current Status/Proposed Changes
Recommended Preparation: ~~Technical Mathematics 1 or equivalent~~
<u>Machine Tool Technology 2 and Mathematics 23</u>

Recommendation
Recommended Preparation: Machine Tool Technology 2 and Mathematics 23

CTE TWO-YEAR COURSE REVIEW; CHANGES IN CATALOG DESCRIPTION

1. Automotive Collision Repair/Painting 1B – Collision Repair Equipment and Welding Techniques
Current Status/Proposed Changes
This course provides instruction on collision repair equipment and welding techniques involving safety practices, ~~Metal Inert Gas (MIG) welding,~~ vehicle collision analysis and theory, ~~hydraulic jacks, collision repair equipment~~ <u>vehicle disassembly procedures,</u> and body component <u>fit-up and</u> alignment principles. <u>The topics of</u>

replacing door skins, panel bonding, steel patch panel fabrication, weld-in panel replacement and aluminum panel repair are also covered. Equipment used includes Metal Inert Gas (MIG) and Squeeze-Type Resistance Spot Welders (STRSW), hydraulic jacks, pneumatic and other specialty tools.
~~Note: The two-course sequence Automotive Collision Repair/Painting 1A and 1B is the same as four semesters of Automotive Collision Repair/Painting 4abcd.~~

Recommendation
This course provides instruction on collision repair equipment and welding techniques involving safety practices, vehicle collision analysis and theory, vehicle disassembly procedures, and body component fit-up and alignment principles. The topics of replacing door skins, panel bonding, steel patch panel fabrication, weld-in panel replacement and aluminum panel repair are also covered. Equipment used includes Metal Inert Gas (MIG) and Squeeze-Type Resistance Spot Welders (STRSW), hydraulic jacks, pneumatic and other specialty tools.

2. Automotive Collision Repair/Painting 1C – Major Collision Analysis and Repair
Current Status/Proposed Changes
This course provides instruction ~~on major collision analysis and repair involving safety practices, major collision repair, sectioning, suspensions,~~ in full frame and unibody vehicle construction and damage types, locating and analyzing direct and indirect damage, planning a pull, setting up and using a frame rack with and without computerized measuring systems, and replacing structural parts and panels with Metal Inert Gas (MIG) and Squeeze-Type Resistance Spot Welders (STRSW). The topics of vehicle sectioning, structural glass, suspension components, front-end alignment, ~~estimating and electric welding.~~ and damage estimating are also covered.

Recommendation
This course provides instruction in full frame and unibody vehicle construction and damage types, locating and analyzing direct and indirect damage, planning a pull, setting up and using a frame rack with and without computerized measuring systems, and replacing structural parts and panels with Metal Inert Gas (MIG) and Squeeze-Type Resistance Spot Welders (STRSW). The topics of vehicle sectioning, structural glass, suspension components, front-end alignment, and damage estimating are also covered.

3. Automotive Collision Repair/Painting 1D – Automotive Component Systems Analysis and Repair
Current Status/Proposed Changes
This course ~~provides instruction on the principles of automotive collision repair and painting involving safety practices, window glass, plastics, vinyl tops, electric circuits, cooling systems, air conditioning, upholstery and electric welding.~~ includes instruction in steering and suspension system parts and damage identification, wheel

alignment, airbag deactivation and reactivation, hybrid/electric vehicle safety and interior upholstery and reconditioning. This course also provides instruction in correcting structural damage such as core support, center pillar damage and replacing front side members, structural glass replacement, aluminum and composite structural components, and restoring corrosion protection.

Recommendation
This course includes instruction in steering and suspension system parts and damage identification, wheel alignment, airbag deactivation and reactivation, hybrid/electric vehicle safety and interior upholstery and reconditioning. This course also provides instruction in correcting structural damage such as core support, center pillar damage and replacing front side members, structural glass replacement, aluminum and composite structural components, and restoring corrosion protection.

4. Architecture 172 –Architectural Color Rendering Techniques
Current Status/Proposed Changes
This course is the study of rendering techniques used by illustrator to delineate architectural drawings. ~~The course is taught using various color mediums.~~ Topics include color theory and hue schemes. Both manual and computer graphic techniques will be taught.

Recommendation
This course is the study of rendering techniques used by illustrator to delineate architectural drawings. Topics include color theory and hue schemes. Both manual and computer graphic techniques will be taught.

5. Machine Tool Technology 2 – Manufacturing Print Reading
Current Status/Proposed Changes
Students are introduced to engineering drawings and engineering specifications used in manufacturing industries. Representative drawings from simple production to complex assembly will be used to demonstrate concepts and for practice in interpreting the symbols and notations. Geometric Dimensioning and Tolerancing (GD&T) in accordance with American National Standards Institute (ANSI) Y-14.5 standard and the ~~sketching~~ construction of simple machine parts are also discussed.

Recommendation
Students are introduced to engineering drawings and engineering specifications used in manufacturing industries. Representative drawings from simple production to complex assembly will be used to demonstrate concepts and for practice in interpreting the symbols and notations. Geometric Dimensioning and Tolerancing (GD&T) in accordance with American National Standards Institute (ANSI) Y-14.5 standard and the construction of simple machine parts are also discussed.

6. Machine Tool Technology 107 – Advanced Manufacturing Processes
   Current Status/Proposed Changes
   In this course, students will study the principles and operation of machine tools with an emphasis on advanced manufacturing processes and machines, such as Electrical Discharge Machines (EDM), water abrasive jet machines, and grinding machines. Additional topics will include abrasives, coordinate measuring machines, advanced precision measurement, Geometric Dimensioning and Tolerancing (~~DG~~ GD & T), optical comparators, and practices and setups as applied in industry.

   Note: Letter grade or pass/no pass option.

   Recommendation
   In this course, students will study the principles and operation of machine tools with an emphasis on advanced manufacturing processes and machines, such as Electrical Discharge Machines (EDM), water abrasive jet machines, and grinding machines. Additional topics will include abrasives, coordinate measuring machines, advanced precision measurement, Geometric Dimensioning and Tolerancing (GD & T), optical comparators, and practices and setups as applied in industry.

   Note: Letter grade or pass/no pass option.

7. Welding 10B – Intermediate Shielded Metal Arc Welding (SMAW)
   Current Status/Proposed Changes
   This course is designed for the intermediate student. Students will ~~develop manipulative skills using the semi-automatic and~~ enhance their skills by developing their technique in the open root process using Shielded Metal Arc Welding (SMAW) electrodes. The course emphasizes the theory and practice of ~~V-groove~~ joint preparation, ~~vertical (3G) and overhead (4G) welding, thermal cutting, and blueprint reading based on the American Welding Society (AWS) standards in weld symbols and ferrous alloys. Innershield wire (NR232) and duel shield wire will be explored in Flux Core Arc Welding (FCAW)~~ Complete Joint Penetration (CJP), and various cover pass processes including semi-automatic arc welding.

   Note: Letter grade or pass/no pass option.

   Recommendation
   This course is designed for the intermediate student. Students will enhance their skills by developing their technique in the open root process using Shielded Metal Arc Welding (SMAW) electrodes. The course emphasizes the theory and practice of joint preparation, Complete Joint Penetration (CJP), and various cover pass processes including semi-automatic arc welding.

   Note: Letter grade or pass/no pass option.

CTE TWO-YEAR COURSE REVIEW; CHANGES IN DESCRIPTIVE TITLE, CATALOG DESCRIPTION

Current Status/Proposed Changes

1. Architecture 150A – ~~Architectural Drafting I~~ Construction Documentation I

   This course is an introduction ~~to architectural drafting.~~ in creating construction documents for a small house. Line, lettering, sketching, and drawing techniques will be developed. Building codes and zoning codes will be introduced along with the functions of framing members in wood frame construction (Type V). Manual drafting techniques~~, will be used to develop a set of construction documents with an introduction to AutoCAD.~~ sketching and Computer Aided Drafting (CAD) will be introduced to students to create construction documents.

   Recommendation
   Architecture 150A – Construction Documentation I

   This course is an introduction in creating construction documents for a small house. Line, lettering, sketching, and drawing techniques will be developed. Building codes and zoning codes will be introduced along with the functions of framing members in wood frame construction (Type V). Manual drafting techniques, sketching and Computer Aided Drafting (CAD) will be introduced to students to create construction documents.

Current Status/Proposed Changes

2. Architecture 150B – ~~Architectural Drafting II~~ Construction Documentation II

   This course is an advanced-level architectural ~~drafting course for a residential building. Sketching techniques and computer drawing techniques will be developed to create a set of construction documents for a two-story residence on a sloping site. Current~~ course in creating all the construction documents needed for a new two-story residential building. Current zoning and building codes will be explored to understand the design impact on the project residence and eco-friendly design and construction technology. Sketching techniques and Computer Aided Design (CAD) will be developed to create construction documents.

   Recommendation
   Architecture 150B – Construction Documentation II

   This course is an advanced-level architectural course in creating all the construction documents needed for a new two-story residential building. Current zoning and building codes will be explored to understand the design impact on the project residence and eco-friendly design and construction technology. Sketching techniques

and Computer Aided Design (CAD) will be developed to create construction documents.

CTE TWO-YEAR COURSE REVIEW; CHANGES IN CONDITIONS OF ENROLLMENT (Pre/Corequisite, Recommended Preparation, or Enrollment Limitation), CATALOG DESCRIPTION

1. Air Conditioning and Refrigeration 25 – Energy Efficient Residential, Commercial and Industrial Air Conditioning
   Current Status/Proposed Changes
   Prerequisite: Air Conditioning and Refrigeration 21 ~~or Air Conditioning and Refrigeration 22~~ with a minimum grade of C or equivalent

   This course covers energy efficient green technology (high efficiency)<u>,</u> ~~and~~ advanced residential, commercial and industrial air conditioning. ~~Lab activities include:~~ <u>Labs include</u> the use of air conditioning test equipment, installation, repair and maintenance of various types of air conditioning systems. ~~Students will learn various~~ <u>Topics include various</u> techniques of troubleshooting electrical and mechanical problems<u>; equipment operational efficiencies and building envelope condition; performing indoor air-quality and system efficiency testing; and system airflow and operational efficiencies</u>.

   Recommendation
   Prerequisite: Air Conditioning and Refrigeration 21 with a minimum grade of C or equivalent

   This course covers energy efficient green technology (high efficiency), advanced residential, commercial and industrial air conditioning. Labs include the use of air conditioning test equipment, installation, repair and maintenance of various types of air conditioning systems. Topics include various techniques of troubleshooting electrical and mechanical problems; equipment operational efficiencies and building envelope condition; performing indoor air-quality and system efficiency testing; and system airflow and operational efficiencies.

2. Air Conditioning and Refrigeration 31 – HVAC Electronics
   Current Status/Proposed Changes
   ~~Prerequisite: Air Conditioning and Refrigeration 21 or Air Conditioning and Refrigeration 22 with a minimum grade of C in prerequisite or equivalent~~
   <u>Recommended Preparation: Air Conditioning and Refrigeration 21</u>

   In this course, students learn the fundamentals of Direct Digital Controls (DDC) used in ~~h~~<u>H</u>eating, ~~v~~<u>V</u>entilation, ~~a~~<u>A</u>ir ~~c~~<u>C</u>onditioning, and ~~r~~<u>R</u>efrigeration (HVACR) systems.

The topics covered include basic DDC system components, single and multi-function electronic controls, DDC and pneumatic ~~v~~Variable ~~a~~Air ~~v~~Volume (VAV) systems, variable speed motors, controllers, programmable and configurable logic controller operation and application, introduction to communication protocols, and electronic diagram interpretation.

Recommendation
Recommended Preparation: Air Conditioning and Refrigeration 21

In this course, students learn the fundamentals of Direct Digital Controls (DDC) used in Heating, Ventilation, Air Conditioning, and Refrigeration (HVACR) systems. The topics covered include basic DDC system components, single and multi-function electronic controls, DDC and pneumatic Variable Air Volume (VAV) systems, variable speed motors, controllers, programmable and configurable logic controller operation and application, introduction to communication protocols, and electronic diagram interpretation.

3. Fashion 26A – Basic Design and Patternmaking
Current Status/Proposed Changes
Prerequisite: Fashion 10 with a minimum grade of C ~~or concurrent enrollment~~
Recommended Preparation: Mathematics 40 ~~or 43; eligibility for English 84~~

This course covers manual flat pattern methods for dress and separates apparel using the basic sample size for women's and girl's wear.

Recommendation
Prerequisite: Fashion 10 with a minimum grade of C
Recommended Preparation: Mathematics 40

This course covers manual flat pattern methods for dress and separates apparel using the basic sample size for women's and girl's wear.

CTE TWO-YEAR COURSE REVIEW; CHANGES IN LECTURE AND LAB CONTACT HOURS, FACULTY LOAD, CONDITIONS OF ENROLLMENT (Pre/Corequisite, Recommended Preparation, or Enrollment Limitation), CATALOG DESCRIPTION

1. Administration of Justice 150 – Peace Officer Training Module - Level III
Current Status/Proposed Changes
Units: 7.0 Lecture: ~~6.0~~ 5.5 Lab: ~~3.0~~ 3.5 per week to be arranged
Faculty Load: ~~55.00%~~ 54.17%

Enrollment Limitation:
1. Current medical examination conducted within 6 months (for safety and ~~college~~ liability reasons).
2. Students must apply for and receive a California Department of Justice Firearms and Arrest Clearance (Penal Code 13511.5).
3. Possession of a valid California driver's license. Copy of a current DMV printout will be requested.

This course is designed for California Commission on Peace Officer Standards and Training (P.O.S.T.) certified Training Module - Level III peace officer training candidates. A Level III peace officer may perform specified limited support duties that are not likely to result in physical arrests.

Note: The student will participate in a ~~216~~ 162 hour course of instruction and training emphasizing basic law enforcement philosophy, procedures, tactics, and techniques. The course is certified pursuant to California Penal Code Section ~~836~~ 830.6(a)(1) and 832.6(a)(3).

Note: Students who have earned credit in Administration of Justice 155 cannot receive unit credit for Administration of Justice 150.

Note: Students pay mandatory fees for ~~this course~~ Department of Justice background check and clearance, firing range, ammunition and targets, physical training clothing, and physical examination fees.

Recommendation
Units: 7.0 Lecture: 5.5 Lab: 3.5 per week to be arranged Faculty Load: 54.17%

Enrollment Limitation:
1. Current medical examination conducted within 6 months (for safety and liability reasons).
2. Students must apply for and receive a California Department of Justice Firearms and Arrest Clearance (Penal Code 13511.5).
3. Possession of a valid California driver's license. Copy of a current DMV printout will be requested.

This course is designed for California Commission on Peace Officer Standards and Training (P.O.S.T.) certified Training Module - Level III peace officer training candidates. A Level III peace officer may perform specified limited support duties that are not likely to result in physical arrests.

Note: The student will participate in a162 hour course of instruction and training emphasizing basic law enforcement philosophy, procedures, tactics, and techniques.

The course is certified pursuant to California Penal Code Section 830.6(a)(1) and 832.6(a)(3).
Note: Students who have earned credit in Administration of Justice 155 cannot receive unit credit for Administration of Justice 150.

Note: Students pay mandatory fees for Department of Justice background check and clearance, firing range, ammunition and targets, physical training clothing, and physical examination fees.

INACTIVATE COURSE

1. Welding 5 – Basic Welding Technology

MATHEMATICAL SCIENCES

NEW COURSES

1. Mathematics 17A – Math Academy: Arithmetic
   Units: 0 Lecture: 7.0 Lab: 1.0 Course Length: 6 weeks
   Prerequisite: Qualification by testing (El Camino College Mathematics Placement Test) and assessment
   Recommended Preparation: Human Development 101 or concurrent enrollment
   Grading Method: No Grade
   Credit Status: Noncredit

   This course is designed to develop student's number and operation sense working with whole numbers, fractions, decimals, and percents, as well as develop problem-solving skills. Topics include operations on whole numbers and decimals, estimations, ratios, proportions, applications, an introduction to variables, algebraic equations, and signed numbers.

   Note: This course is designed for students who placed into Mathematics 12. It is repeatable and open for enrollment at registration and at any time during the semester.

2. Mathematics 27A – Math Academy: Pre-Algebra
   Units: 0 Lecture: 7.0 Lab: 1.0 Course Length: 6 weeks
   Prerequisite: Mathematics 12 with a minimum grade of C or qualification by testing (El Camino College Mathematics Placement Test) and assessment
   Recommended Preparation: Human Development 101 or concurrent enrollment
   Grading Method: No Grade
   Credit Status: Noncredit

This course bridges the gap between arithmetic and formal algebra, developing number sense and operation sense, in order to formulate and solve algebraic equations with integers, fractions, and percent. Algebraic principles are applied to problems from a variety of fields. Other topics include proportional reasoning, spatial reasoning, informal geometry and measurement, coordinate graphing, and informational graphs.

Note: This course is designed for students who passed Mathematics 12 or who placed into Mathematics 23. It is repeatable and open for enrollment at registration and at any time during the semester.

3. Mathematics 47A – Math Academy: Elementary Algebra
   Units: 0 Lecture: 7.0 Lab: 1.0 Course Length: 6 weeks
   Prerequisite: Mathematics 23 with a minimum grade of C or qualification by testing (El Camino College Mathematics Placement Test) and assessment
   Recommended Preparation: Human Development 101 or concurrent enrollment
   Grading Method: No Grade
   Credit Status: Noncredit

   This elementary algebra course is the study of real number solutions and applications of linear equations, quadratic equations, linear inequalities, and systems of linear equations. Other topics include coordinate graphing or linear equations, factoring techniques, and simplification of rational and radical expressions.

   Note: This course is designed for students who passed Mathematics 23 or who placed into Mathematics 40. It is repeatable and open for enrollment at registration and at any time during the semester.

COURSE REVIEW; CHANGES IN CATALOG DESCRIPTION

1. Computer Science 1 – Problem Solving and Program Design Using C++
   Current Status/Proposed Changes
   This course is an introduction to problem solving and program design using structured, top-down, algorithmic development techniques applied to the solution of numeric and non-numeric problems. Software engineering topics such as analysis, design, implementation, testing, documentation, and maintenance of software are discussed. Laboratory work will be done using the C++ computer language. <u>The course also summarizes the evolution of programming languages illustrating how this history has led to the paradigms available today.</u>

   Note: This course meets the CSU general education requirement for mathematics and

quantitative reasoning.

Recommendation
This course is an introduction to problem solving and program design using structured, top-down, algorithmic development techniques applied to the solution of numeric and non-numeric problems. Software engineering topics such as analysis, design, implementation, testing, documentation, and maintenance of software are discussed. Laboratory work will be done using the C++ computer language. The course also summarizes the evolution of programming languages illustrating how this history has led to the paradigms available today.

Note: This course meets the CSU general education requirement for mathematics and quantitative reasoning.

COURSE REVIEW; DISTANCE EDUCATION REVIEW, CHANGES IN CATALOG DESCRIPTION

1. Mathematics 120 – Nature of Mathematics
   Current Status/Proposed Changes
   This course surveys general ideas and concepts of mathematics, including mathematics of finance, set theory, probability, statistics, voting systems, logic, and ~~types of geometries~~ geometry.

   Note: This course meets the CSU general education requirement for mathematics and quantitative reasoning.

   Recommendation
   This course surveys general ideas and concepts of mathematics, including mathematics of finance, set theory, probability, statistics, voting systems, logic, and geometry.

   Note: This course meets the CSU general education requirement for mathematics and quantitative reasoning.

NATURAL SCIENCES

CHANGE IN MAJOR; TOTAL UNITS

1. Physics AS-T Degree
   Current Status/Proposed Changes
   Major Requirements **Units**

Required Core: 26-27 units

PHYS 1A	Mechanics of Solids	4
PHYS 1C	Electricity and Magnetism	4
and		
PHYS 1B	Fluids, Heat and Sound	3
or		
PHYS 1D	Optics and Modern Physics	~~3~~ 4
MATH 190	Single Variable Calculus and Analytic Geometry I	5
MATH 191	Single Variable Calculus and Analytic Geometry II	5
MATH 220	Multi-Variable Calculus	5

Total Units: ~~26~~ 26-27

Recommendation

Major Requirements		**Units**
Required Core: 26-27 units		
PHYS 1A	Mechanics of Solids	4
PHYS 1C	Electricity and Magnetism	4
and		
PHYS 1B	Fluids, Heat and Sound	3
or		
PHYS 1D	Optics and Modern Physics	4
MATH 190	Single Variable Calculus and Analytic Geometry I	5
MATH 191	Single Variable Calculus and Analytic Geometry II	5
MATH 220	Multi-Variable Calculus	5

Total Units: 26-27