

EL CAMINO COLLEGE
MINUTES OF THE COLLEGE CURRICULUM COMMITTEE
November 10, 2015

CALL TO ORDER

Meeting called to order at 2:30 p.m. by Chair Carr.

Members:

Present: S. Bartiromo, S. Bosfield, W. Brownlee, T. Bui, A. Carr, A. Cornelio, E. French-Preston, A. Hockman, L. Houske, K. Iino, V. Nemie, D. Pahl, S. Rodriguez, J. Shankweiler, A. Sharp

Ex-Officio Members:

Present: Q. Chapman, P. McDermott, A. Osanyinpeju, L. Suekawa, L. Young

Absent: M. Lipe, K. Whitney

Guests: C. Brewer-Smith, P. Fairchild, M. Fields, T. Lew, L. Linka, P. Sorunke

APPROVAL OF MINUTES

The committee approved the minutes of the College Curriculum Committee of October 13, 2015. The minutes of the October 27, 2015, meeting is currently under review by the Curriculum Advisor Q. Chapman.

CURRICULUM REVIEW

A. Full Program Review

The committee reviewed the following program proposals, which are ready for final action:

1. American Culture Option A.A. Degree
2. Chicano Studies Option A.A. Degree
3. Numerical Control Programmer Option A.S. Degree
4. Office Administration: Office Systems Option A.S. Degree
5. Physical Science A.S. Degree
6. Cisco Networking Administration Certificate of Achievement
7. Numerical Control Programmer Certificate of Achievement

The committee reviewed the following program inactivations, which and are ready for final action:

1. Industrial Computer Control Technician Certificate of Achievement
2. Power Electronics Certificate A Certificate of Accomplishment

B. Full Course Review

The committee reviewed the following courses, which are ready for final action:

1. Air Conditioning and Refrigeration 5 (ACR 5)
2. Administration of Justice 106 (AJ 106)
3. Administration of Justice 111 (AJ 111)
4. Administration of Justice 130 (AJ 130)

5. Automotive Collision Repair/Painting 6 (ACRP 6)
6. Child Development 112 (CDEV 112)
7. Child Development 115 (CDEV 115)
8. Child Development 116 (CDEV 116)
9. Child Development 117 (CDEV 117)
10. Child Development 118 (CDEV 118)
11. Child Development 119 (CDEV 119)
12. Computer Aided Design/Drafting 43 (CADD 43)
13. Chemistry 20 (CHEM 20)
14. English 34 (ENGL 34)
15. Fashion 14 (FASH 14)
16. Fashion 35 (FASH 35)
17. Fire and Emergency Technology 10 (FTEC 10)

STANDARD REVIEW/CONSENT AGENDA PROPOSALS

The committee reviewed the following courses, which are ready for final action:

1. Air Conditioning and Refrigeration 21 (ACR 21)
2. Air Conditioning and Refrigeration 23 (ACR 23)
3. Administration of Justice 107 (AJ 107)
4. Biotechnology 1 (BTEC 1)
5. Biotechnology 2 (BTEC 2)
6. Business 1A (BUS 1A)
7. Business 1B (BUS 1B)
8. Business 14 (BUS 14)
9. Business 24 (BUS 24)
10. Child Development 104 (CDEV 104)
11. Child Development 114 (CDEV 114)
12. Computer Information Systems 18 (CIS 18)
13. Computer Information Systems 19 (CIS 19)
14. Computer Information Systems 136 (CIS 136)
15. Cosmetology 10 (COSM 10)
16. Electronics and Computer Hardware Technology 110 (ECHT 110)
17. Electronics and Computer Hardware Technology 120 (ECHT 120)
18. Electronics and Computer Hardware Technology 122 (ECHT 122)
19. Electronics and Computer Hardware Technology 124 (ECHT 124)
20. Engineering Technology 12 (ETEC 12)
21. Engineering Technology 12A (ETEC 12A)
22. Engineering Technology 12B (ETEC 12B)
23. Engineering Technology 14 (ETEC 14)
24. Engineering Technology 14A (ETEC 14A)
25. Engineering Technology 14B (ETEC 14B)
26. Fashion 41 (FASH 41)
27. Geology 15 (GEOL 15)
28. History 154 (HIST 154)
29. Japanese 21 (JAPA 21)
30. Japanese 22 (JAPA 22)
31. Japanese 25 (JAPA 25)

32. Journalism 8 (JOUR 8)
33. Journalism 9abcd (JOUR 9abcd)
34. Journalism 12 (JOUR 12)
35. Machine Tool Technology 46 (MTT 46)
36. Psychology 7 (PSYC 7)
37. Psychology 15 (PSYC 15)
38. Welding 15 (WELD 15)
39. Welding 40A (WELD 40A)
40. Welding 40B (WELD 40B)
41. Welding 40C (WELD 40C)

CURRICULUM DISCUSSION

A. Full Program Review

Business Division

It was moved by D. Pahl, seconded by S. Rodriguez, that the committee approve program revision proposals for Office Administration: Office Systems Option A.S. Degree and Cisco Networking Administration Certificate of Achievement. Motion carried.

Behavioral and Social Sciences Division

It was moved by L. Houske, seconded by K. Iino, that the committee approve program revision proposals for American Cultures Option A.A. Degree and Chicano Studies Option A.A. Degree. Motion carried.

Industry and Technology Division

It was moved by V. Nemie, seconded by S. Rodriguez, that the committee approve program revision proposals for Numerical Control Programmer Option A.S. Degree and Certificate of Achievement, including the program inactivation proposals for Industrial Computer Control Technician Certificate of Achievement and Power Electronics Certificate A Certificate of Accomplishment. Motion carried.

Natural Sciences Division

It was moved by W. Brownlee, seconded by D. Pahl, that the committee approve program revision proposal for Physical Science A.S. Degree. Motion carried.

B. Full Course Review

Behavioral and Social Sciences Division

It was moved by E. French-Preston, seconded by L. Houske, that the committee approve course proposals for the Behavioral and Social Sciences Division. Motion carried.

Industry and Technology Division

It was moved by V. Nemie, seconded by W. Brownlee, that the committee approve course proposals, including condition of enrollment changes for the Industry and Technology Division. Motion carried.

Humanities Division

It was moved by D. Pahl, seconded by K. Iino, that the committee approve the course proposal for English 34. Motion carried.

Natural Sciences Division

It was moved by W. Brownlee, seconded by T. Bui, that the committee approve the course proposal for Chemistry 20. Motion carried.

C. Standard Review/Consent Agenda Proposals

It was moved by W. Brownlee, seconded by T. Bui, that the committee approve the standard review/consent agenda proposals. Motion carried.

VICE PRESIDENT'S REPORT

Vice President Academic Affairs – Dr. Shankweiler – No report

CHAIR'S REPORT

College Curriculum Committee Chair – A. Carr

- The committee was reminded to complete the *Course Review and Justification for Changes* page listed in the Course Review checklist for course proposals under review.
- The committee was advised to meet with faculty to determine a plan to offer or inactivate courses that have not been offered in three years. Q. Chapman will email the committee a report showing the list of courses not offered in three years.
- The Fall 2015 Curriculum Regional meeting will be held at Mt. San Antonio College on Saturday, November 14, 2015, from 9:30 a.m. to 3:30 p.m.

CURRICULUM ADVISOR REPORT

Curriculum Advisor – Q. Chapman

- The last two curriculum committee meetings will consist of a substantial number of agenda items.
- The committee was advised to start planning the curriculum review timeline for spring 2016 semester, which is due November 30, 2015.
- Instructions on how to calculate units will be available at the last curriculum meeting on Tuesday, December 1, 2015. The Chancellor's Office is no longer using the "Carnegie unit sheet" (dated 7-23-2014) for calculating student hours. Instead, the Chancellor's Office has refined the guidelines for calculating units. Colleges were given a twelve-page document on units and hours including a calculations table (effective 10-5-2015). The refined guidelines appear to be consistent with Title 5 and the Program and Course Approval Handbook.

ANNOUNCEMENTS – No report

ADJOURNMENT

Chair Carr called a motion to adjourn the meeting. D. Pahl moved, S. Bartiromo seconded, and the motion carried. The meeting adjourned at 3:30 p.m.

**EL CAMINO COLLEGE
COLLEGE CURRICULUM COMMITTEE
November 10, 2015
Approved Curriculum Changes for 2016-2017**

BEHAVIORAL AND SOCIAL SCIENCES

COURSE REVIEW; DISTANCE EDUCATION REVIEW

1. History 154 – A History of Mexico
2. Psychology 7 – Physiological Psychology
3. Psychology 15 – Abnormal Psychology

CTE TWO-YEAR COURSE REVIEW; DISTANCE EDUCATION REVIEW

1. Child Development 104 – The Home, The School, The Community
2. Child Development 114 – Observing and Assessing Young Children

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

1. Child Development 112 – Teaching Young Children in a Diverse Society
Current Status/Proposed Changes
Prerequisite: Child Development 103 with a minimum grade of C or concurrent enrollment

Recommended Preparation: eligibility for English 1A

Recommendation

Prerequisite: Child Development 103 with a minimum grade of C or concurrent enrollment

Recommended Preparation: eligibility for English 1A

2. Child Development 115 – Introduction to Curriculum
Current Status/Proposed Changes
Prerequisite: Child Development 103 with a minimum grade of C or concurrent enrollment

Recommended Preparation: eligibility for English 1A

Recommendation

Prerequisite: Child Development 103 with a minimum grade of C or concurrent enrollment

Recommended Preparation: eligibility for English 1A

3. Child Development 116 – Creative Art for Young Children

Current Status/Proposed Changes

Prerequisite: Child Development 103 with minimum grade of C or equivalent or concurrent enrollment

Recommended Preparation: eligibility for English 1A

Recommendation

Prerequisite: Child Development 103 with minimum grade of C or equivalent or concurrent enrollment

Recommended Preparation: eligibility for English 1A

4. Child Development 117 – Music and Movement for Young Children

Current Status/Proposed Changes

Prerequisite: Child Development 103 with a minimum grade of C or equivalent or concurrent enrollment

Recommended Preparation: eligibility for English 1A

Recommendation

Prerequisite: Child Development 103 with a minimum grade of C or equivalent or concurrent enrollment

Recommended Preparation: eligibility for English 1A

5. Child Development 118 – Science and Math for Young Children

Current Status/Proposed Changes

Prerequisite: Child Development 103 with a minimum grade of C or equivalent or concurrent enrollment

Recommended Preparation: eligibility for English 1A

Recommendation

Prerequisite: Child Development 103 with a minimum grade of C or equivalent or concurrent enrollment

Recommended Preparation: eligibility for English 1A

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

1. Child Development 119 – Language Arts for Young Children

Current Status/Proposed Changes

Prerequisite: Child Development 103 with a minimum grade of C or equivalent or concurrent enrollment

Recommended Preparation: eligibility for English 1A

This course focuses on the principles and methods of planning, presenting and evaluating language arts activities for young children ages two to six. Appropriate activities for expressive and receptive language development such as storytelling, dramatic play, listening, and emergent literacy will be examined. Methods for adapting language experiences for children with special needs will be discussed. This course is designed for teachers in training and teachers in service needing to develop or refine skills in planning and implementing language arts curriculum. Students ~~will~~ may be required to participate in one structured activity related to children and/or professional development outside of class hours.

Recommendation

Prerequisite: Child Development 103 with a minimum grade of C or equivalent or concurrent enrollment

Recommended Preparation: eligibility for English 1A

This course focuses on the principles and methods of planning, presenting and evaluating language arts activities for young children ages two to six. Appropriate activities for expressive and receptive language development such as storytelling, dramatic play, listening, and emergent literacy will be examined. Methods for adapting language experiences for children with special needs will be discussed. This course is designed for teachers in training and teachers in service needing to develop or refine skills in planning and implementing language arts curriculum. Students may

be required to participate in one structured activity related to children and/or professional development outside of class hours.

CHANGE IN MAJOR; COURSE REQUIREMENTS

1. American Cultures Option A.A. Degree
Current Status/Proposed Changes

Major Requirements		Units
Required Core: 3 units		
ESTU 1	Introduction to Ethnic Studies	3
15 units from:		
ANTH 6	Native Peoples of North America	3
ART 207	Art History of Mexico and Central and South America	3
ENGL 42	Chicano and Latino Literature	3
ENGL 43	African American Literature	3
ENGL 44	The Literature of American Ethnic Groups	3
<u>ESTU 3</u>	<u>The Chicano in Contemporary United States Society</u>	<u>3</u>
<u>ESTU 5</u>	<u>Chicano Culture</u>	<u>3</u>
HIST 108	United States History: The American Indian Experience	3
HIST 110	The African American in the United States to 1877	3
HIST 111	The African American in the United States from 1877 to the Present	3
HIST 112	History of the Chicano in the United States	3
HIST 122	United States Social History: Cultural Pluralism in America	3
PSYC 10	African American Psychology	3
SOCI 107	Issues of Race and Ethnicity in the United States	3
3 units from:		
ANTH 2	Introduction to Cultural Anthropology	3
HIST 154	A History of Mexico	3
HIST 175	History of Asian Civilizations to 1600	3
HIST 176	History of Asian Civilizations from 1600 to the Present	3
HIST 183	Introduction to African History, Prehistory to 1885	3
HIST 184	Introduction to African History, 1885 to the Present	3
MUSI 113	Survey of Jazz	3
POLI 5	Ethnicity in the American Political Process	3
SOCI 104	Social Problems	3
Total Units: 21		

2. Chicano Studies Option A.A. Degree
Current Status/Proposed Changes

Major Requirements

Units

Required Core: 18 units

ART 207	Art History of Mexico and Central and South America	3
ENGL 42	Chicano and Latino Literature	3
ESTU 1	Introduction to Ethnic Studies	3
<u>ESTU 3</u>	<u>The Chicano in Contemporary United States Society</u>	<u>3</u>
<u>ESTU 5</u>	<u>Chicano Culture</u>	<u>3</u>
HIST 112	History of the Chicano in the United States	3
HIST 154	A History of Mexico	3
POLI 5	Ethnicity in the American Political Process	3

3 units from:

ENGL 44	The Literature of American Ethnic Groups	3
<u>ESTU 1</u>	<u>Introduction to Ethnic Studies</u>	<u>3</u>
HIST 122	United States Social History: Cultural Pluralism in America	3
<u>POLI 5</u>	<u>Ethnicity in the American Political Process</u>	<u>3</u>
SOCI 104	Social Problems	3
SOCI 107	Issues of Race and Ethnicity in the United States	3

Total Units: 21

BUSINESS

CTE TWO-YEAR COURSE REVIEW

1. Computer Information Systems 136 – Building Mobile Apps

CTE TWO-YEAR COURSE REVIEW; DISTANCE EDUCATION REVIEW

1. Business 1A – Financial Accounting
2. Business 1B – Managerial Accounting
3. Business 14 – Marketing
4. Business 24 – Small Business Entrepreneurship

CTE TWO-YEAR COURSE REVIEW; REMOVE DISTANCE EDUCATION COURSE VERSION

1. Computer Information Systems 18 – Systems Analysis and Design
2. Computer Information Systems 19 – Internet, Security, and the Web

CHANGE IN MAJOR; COURSE REQUIREMENTS, TOTAL UNITS

1. Office Administration: Office Systems Option A.S. Degree
Current Status/Proposed Changes
 18 units of the major requirements must be completed at El Camino College.

Major Requirements		Units
<u>Required Core: 23 units</u>		
BUS 27	Effective English for Business	3
BUS 28	Written Business Communications	3
BUS 40	Career Planning	2
BUS 41	Records/Information Management	2
BUS 43	Business Office Administration	3
BUS 52A	Microsoft Word Applications I	2
BUS 52B	Microsoft Word Applications II	2
BUS 55	Advanced Microsoft Office Integrated Software Applications	4
BUS 60A	Microcomputer Keyboarding	1
BUS 60B	Microcomputer Document Processing	1
BUS 60C	Microcomputer Document Formatting	1
CIS 13	Computer Information Systems	3
 <u>one course 3 units from:</u>		
CIS 26	Using Microsoft Excel	3
CIS 28	Database Management Using Microsoft Access	3
Total Units: 30 <u>26</u>		

CHANGE IN CERTIFICATE; COURSE REQUIREMENTS, TOTAL UNITS

1. Cisco Networking Administration Certificate of Achievement
Current Status/Proposed Changes
A Certificate of Achievement will be granted upon completion of all program requirements. A minimum of 915 units must be completed at El Camino College.

Certificate Requirements

Units

Required Core: 18 units

<u>CIS 13</u>	<u>Computer Information Systems</u>	<u>3</u>
<u>CIS 40</u>	<u>Personal Computer Operations</u>	<u>3</u>
CIS 140	Data Communications Cisco 1	3
CIS 141	Networking Microcomputers Cisco 2	3
CIS 142	Local Area Network (LAN) Switching and Wireless Cisco 3	3
CIS 143	Accessing the WAN - Cisco 4	3
3-4 units from:		
<u>CIS 11</u>	<u>Help Desk Operations</u>	<u>3</u>
<u>CIS 18</u>	<u>Systems Analysis and Design</u>	<u>3</u>
<u>CIS 19</u>	<u>Internet, Security, and the Web</u>	<u>3</u>
<u>CIS 28</u>	<u>Database Management Using Microsoft Access</u>	<u>3</u>
<u>CIS 134</u>	<u>ASP.NET with C# Business Web Programming</u>	<u>4</u>
<u>CIS 16</u>	<u>Application Development and Programming Using Visual Basic .Net</u>	<u>3</u>
CIS 80	Oracle Application Programming	4
CIS 133	Mashup JavaScript, jQuery and AJAX	4
Total Units: 15-16 <u>21-22</u>		

HUMANITIES

CTE TWO-YEAR COURSE REVIEW; NON-SUBSTANTIVE CHANGES

1. Journalism 9abcd – Magazine Editing and Production

COURSE REVIEW; NON-SUBSTANTIVE CHANGES

1. Japanese 21 – Beginning Conversational Japanese
2. Japanese 22 – Intermediate Conversational Japanese
3. Japanese 25 – Cultural Aspects of the Japanese Language

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

1. English 34 – The Short Story
Current Status/Proposed Changes

~~Recommended Preparation: eligibility for English 1A~~
Prerequisite: eligibility for English 1A

Recommendation

Prerequisite: eligibility for English 1A

CTE TWO-YEAR COURSE REVIEW; DISTANCE EDUCATION REVIEW; CHANGES IN CATALOG DESCRIPTION

1. Journalism 8 – Advanced Reporting and News Editing

Current Status/Proposed Changes

This course will provide students with instruction in ~~interpretive, in-depth,~~ explanatory and investigative journalism, and opinion writing, and will incorporate the study of editing principles, style, and design to conform with professional models. Problems of law and libel will be discussed. Students will also be given hands-on instruction in ~~electronic journalism, as well as in computer typesetting and graphics.~~ newspaper and web design, including graphics and multimedia. Leadership training, social media skills, and discussion of the business of journalism will also be provided.

Recommendation

This course will provide students with instruction in explanatory and investigative journalism, and opinion writing, and will incorporate the study of editing principles, style, and design to conform with professional models. Problems of law and libel will be discussed. Students will also be given hands-on instruction in newspaper and web design, including graphics and multimedia. Leadership training, social media skills, and discussion of the business of journalism will also be provided.

2. Journalism 12 – Mass Media and Society

Current Status/Proposed Changes

This course examines the past and current influences on American society of books, newspapers, magazines, movies, radio, television, recordings, and the ~~World Wide Web~~ Internet. With a focus on critical thinking skills, students gain experience in reading and writing persuasive and argumentative essays about problems facing the mass media. Students also learn the history of the eight mass media as well as analyze and evaluate the functions, the responsibilities, the regulations, and the ethics involved in the mass media industry.

Recommendation

This course examines the past and current influences on American society of books, newspapers, magazines, movies, radio, television, recordings, and the Internet. With a focus on critical thinking skills, students gain experience in reading and writing persuasive and argumentative essays about problems facing the mass media. Students

also learn the history of the eight mass media as well as analyze and evaluate the functions, the responsibilities, the regulations, and the ethics involved in the mass media industry.

INDUSTRY AND TECHNOLOGY

CTE TWO-YEAR COURSE REVIEW; NON-SUBSTANTIVE CHANGES

1. Air Conditioning and Refrigeration 21 – Air Conditioning Fundamentals
2. Administration of Justice 107 – Crime and Control - An Introduction to Corrections
3. Electronics and Computer Hardware Technology 120 – Semiconductor Circuits
4. Electronics and Computer Hardware Technology 122 – Semiconductor Power Devices
5. Electronics and Computer Hardware Technology 124 – Operational Amplifiers and Linear Integrated Circuits
6. Engineering Technology 12 – Introduction to Engineering Design
7. Engineering Technology 12A – Introduction to Engineering Design I
8. Engineering Technology 12B – Introduction to Engineering Design II
9. Engineering Technology 14 – Electronics for Engineering Technologists
10. Engineering Technology 14A – Electronics for Engineering Technologists I
11. Engineering Technology 14B – Electronics for Engineering Technologists II
12. Machine Tool Technology 46 – Basic Machine Tool Operation
13. Welding 40A – Introduction to Gas Tungsten Arc Welding (GTAW)
14. Welding 40B – Intermediate Gas Tungsten Arc Welding (GTAW)
15. Welding 40C – Advanced Gas Tungsten Arc Welding (GTAW) Skills Lab

CTE TWO-YEAR COURSE REVIEW; CHANGES IN CATALOG DESCRIPTION

1. Cosmetology 10 – Introduction to Cosmetology I
Current Status/Proposed Changes

This course is the first of a two-course introductory series covering the principles and practical operations of cosmetology techniques, procedures and equipment for wet and thermal styling, permanent waving, chemical straightening, hair coloring, ~~and~~ scalp treatments, manicuring and pedicuring. The course also prepares students for the State Board of Cosmetology examination and employment.

Note: Students who have earned credit in Cosmetology 1 cannot receive unit credit for Cosmetology 10.

Note: First time students must purchase the complete kit of supplies from the El Camino College Bookstore.

Recommendation

This course is the first of a two-course introductory series covering the principles and practical operations of cosmetology techniques, procedures and equipment for wet and thermal styling, permanent waving, chemical straightening, hair coloring, scalp treatments, manicuring and pedicuring. The course also prepares students for the State Board of Cosmetology examination and employment.

Note: Students who have earned credit in Cosmetology 1 cannot receive unit credit for Cosmetology 10.

Note: First time students must purchase the complete kit of supplies from the El Camino College Bookstore.

2. Electronics and Computer Hardware Technology 110 – Introduction to Direct and Alternating Current Circuits

Current Status/Proposed Changes

This course examines advanced topics in the ~~foundational~~ principles of direct and alternating current electricity through the correlation of theory and laboratory experiments. Basic circuit analysis forms the core of the course. Included in this class are the use of calculators, computer circuit simulation and many types of electrical/electronic test equipment to perform electrical measurements, and yield analysis.

Recommendation

This course examines advanced topics in the principles of direct and alternating current electricity through the correlation of theory and laboratory experiments. Basic circuit analysis forms the core of the course. Included in this class are the use of calculators, computer circuit simulation and many types of electrical/electronic test equipment to perform electrical measurements, and yield analysis.

3. Fashion 41 – Fashion Analysis and Selection

Current Status/Proposed Changes

In this course, students are introduced to the societal importance of apparel and personal appearance. Emphasis is placed on social, psychological, cultural and physical clothing needs. Additional topics ~~covered~~ include ~~the history of fashion design~~, elements and principles of design, wardrobe planning, identifying apparel quality, and clothing care, fit, and apparel purchasing.

Recommendation

In this course, students are introduced to the societal importance of apparel and personal appearance. Emphasis is placed on social, psychological, cultural and

physical clothing needs. Additional topics include elements and principles of design, wardrobe planning, apparel quality and clothing care, fit, and apparel purchasing.

4. Welding 15 – Basic Welding for Allied Fields

Current Status/Proposed Changes

This is a basic course to support trade skills for students in allied fields ~~that utilize welding processes. Students will be introduced.~~ The course introduces students to welding equipment, nomenclature, safety, oxy acetylene welding, shielded metal arc welding, and gas metal arc welding. Skills will be developed in cutting and welding in the flat and horizontal positions. plasma and mechanical cutting, metallurgical exploration of ferrous and non-ferrous material, ductility of materials, effects of cold-working and heat treating.

Recommendation

This is a basic course to support trade skills for students in allied fields. The course introduces students to welding equipment, nomenclature, safety, plasma and mechanical cutting, metallurgical exploration of ferrous and non-ferrous material, ductility of materials, effects of cold-working and heat treating.

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

1. Air Conditioning and Refrigeration 5 – Electrical Applications

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~~

Recommended Preparation: Air Conditioning and Refrigeration 21

Recommendation

Recommended Preparation: Air Conditioning and Refrigeration 21

2. Administration of Justice 106 – Criminal Justice Recruitment and Selection

Current Status/Proposed Changes

Recommended Preparation: English 84

Recommendation

Recommended Preparation: English 84

3. Administration of Justice 130 – Criminal Procedures

Current Status/Proposed Changes

Recommended Preparation: ~~eligibility for English 1A~~ English A

Recommendation

Recommended Preparation: English A

4. Computer Aided Design/Drafting 43 – Design Process and Concepts

Current Status/Proposed Changes

Prerequisite: Computer Aided Design/Drafting 5 7 or Computer Aided Design/Drafting 28 or Computer Aided Design/Drafting 31 with a minimum grade of C or equivalent

Recommendation

Prerequisite: Computer Aided Design/Drafting 7 or Computer Aided Design/Drafting 28 or Computer Aided Design/Drafting 31 with a minimum grade of C or equivalent

5. Fashion 35 – Applied Color Theory

Current Status/Proposed Changes

Recommended Preparation: ~~eligibility for~~ English 84

Recommendation

Recommended Preparation: English 84

6. Fire and Emergency Technology 10 – Hazardous Materials

Current Status/Proposed Changes

Recommended Preparation: Fire and Emergency Technology 1 or Fire and Emergency Technology 15 ~~or equivalent~~ and ~~Fire and Emergency Technology 14 or equivalent and English 84 or eligibility for~~ and English 1A

Recommendation

Recommended Preparation: Fire and Emergency Technology 1 or Fire and Emergency Technology 15 and English 1A

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

1. Administration of Justice 111 – Criminal Investigation

Current Status/Proposed Changes

Prerequisite: Administration of Justice 109

Recommended Preparation: English A

Recommendation

Prerequisite: Administration of Justice 109

Recommended Preparation: English A

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

1. Air Conditioning and Refrigeration 23 - Commercial Refrigeration Applications
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

This course explores refrigeration theory, characteristics of refrigerants, temperature and pressure, tools and equipment, soldering, brazing, commercial refrigeration systems, system components, compressors, evaporators, and metering devices. Students will learn to charge commercial systems with new Environmental Protection Agency (EPA) refrigerants and evaluate the proper operation of systems. Troubleshooting techniques are explained with the use of wiring diagrams and electric meters. Students will learn to service and troubleshoot commercial refrigeration ice machines, coolers, walk-ins, refrigerators, and freezers. Students will be introduced to a variety of commercial refrigeration systems and components.

Recommendation

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

This course explores refrigeration theory, characteristics of refrigerants, temperature and pressure, tools and equipment, soldering, brazing, commercial refrigeration systems, system components, compressors, evaporators, and metering devices. Students will learn to charge commercial systems with new Environmental Protection Agency (EPA) refrigerants and evaluate the proper operation of systems. Troubleshooting techniques are explained with the use of wiring diagrams and electric meters. Students will learn to service and troubleshoot commercial refrigeration ice machines, coolers, walk-ins, refrigerators, and freezers. Students will be introduced to a variety of commercial refrigeration systems and components.

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

Current Status/Proposed Changes

1. Fashion 14 – ~~Pattern Grading~~ Apparel Production Techniques

~~Prerequisite: Fashion 4, Fashion 10, Fashion 15 and Fashion 26A and Mathematics 40 or Mathematics 43 with a minimum grade of C or equivalent~~

Recommended Preparation: Fashion 1, Fashion 20 and Mathematics 40

~~This course is an introduction designed to acquaint the manual grading of patterns with reference to computer grading. The class will define tools, terminology and basic materials and skills necessary for the pattern grading process. This course covers sizing commercial and individual patterns for a run of sizes student with the activities and documentation necessary to mass-produce a garment or accessory item. In a semi-simulated design room environment, students design, produce, and advertise a product. Grading, documents, tech packs, production, and promotion principles are emphasized.~~

Recommendation

Fashion 14 – Apparel Production Techniques

~~Prerequisite: Fashion 4, Fashion 10, Fashion 15 and Fashion 26A~~

~~Recommended Preparation: Fashion 1, Fashion 20 and Mathematics 40~~

~~This course is designed to acquaint the student with the activities and documentation necessary to mass-produce a garment or accessory item. In a semi-simulated design room environment, students design, produce, and advertise a product. Grading, documents, tech packs, production, and promotion principles are emphasized.~~

CTE TWO-YEAR COURSE REVIEW; CHANGES IN DESCRIPTIVE TITLE, COURSE UNITS, LENGTH, LECTURE HOURS, LAB HOURS, FACULTY LOAD, CATALOG DESCRIPTION

Current Status/Proposed Changes

1. Automotive Collision Repair/Painting 6 - ~~Automotive Collision Repair Applications for Non-Majors~~

Units: ~~3.0~~ 2.0 Lecture hours: ~~6.0~~ 1.0 Lab hours: ~~10.0~~ 3.0

Faculty Load: ~~28.33%~~ 21.67% Course length: ~~6 weeks~~ Full term

~~This course provides instruction on the principles is designed to provide students with a brief, hands-on introduction to all facets of automotive collision repair and painting, including. Topics include safety practices; vehicle construction, gas, and Metal Inert Gas (MIG) welding; sheet metal repair; High Volume Low Pressure (HVLP) guns; undercoat materials and complete painting, customer rights and the collision repair~~

process, auto parts nomenclature, dent removal, plastic repair, filler application and shaping, priming, painting and detailing.

Recommendation

Automotive Collision Repair/Painting 6 - Automotive Collision Repair for Non-Majors

Units: 2.0 Lecture hours: 1.0 Lab hours: 3.0 Faculty Load: 21.67%

Course length: Full term

This course is designed to provide students with a brief, hands-on introduction to all facets of automotive collision repair. Topics include safety practices, customer rights and the collision repair process, auto parts nomenclature, dent removal, plastic repair, filler application and shaping, priming, painting and detailing.

NEW DISTANCE EDUCATION ONLINE/HYBRID COURSE VERSION

1. Administration of Justice 107 – Crime and Control - An Introduction to Corrections
2. Administration of Justice 130 – Criminal Procedures

CHANGE IN MAJOR; COURSE REQUIREMENTS

1. Numerical Control Programmer Option A.S. Degree

Current Status/Proposed Changes

At least 50% of the courses required for the major must be completed at El Camino College.

Major Requirements

Units

MTT 2	Manufacturing Print Reading	3
MTT 10A	Introduction to CAD/CAM	3
MTT 10B	Computer Numerical Control Programming	3
MTT 10J	Numerical Control Graphics Programming	3
<u>MTT 10K</u>	<u>3D Numerical Control Graphics Programming</u>	<u>3</u>
MTT 16	General Metals	3
MTT 40	Machine Shop Calculations	3
MTT 101	Introduction to Conventional and CNC Machining	4
MTT 103	Conventional and CNC Turning	4
MTT 105	Conventional and CNC Milling	4

~~one course from:~~

MTT 10K	3D Numerical Control Graphics Programming	3
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MTT 11~~abed~~ Numerical Control Graphics Programming with CATIA 3
Total Units: 33

Recommended Electives:

- CADD 5 - Introduction to Mechanical Drafting
- CADD 7 - Solid Modeling, Assemblies and Two Dimensional (2D) Drawings
- CADD 31 - Orientation to CATIA
- CADD 45 - Geometrical Dimensioning and Tolerancing
- MTT 95~~abed~~ - Cooperative Work Experience Education
- MTT 99 - Independent Study
- WELD 15 - Basic Welding for Allied Fields

CHANGE IN CERTIFICATE; COURSE REQUIREMENTS

1. Numerical Control Programmer Certificate of Achievement

Current Status/Proposed Changes

At least 50% of the courses required for the certificate must be completed at El Camino College.

Certificate Requirements		Units
MTT 2	Manufacturing Print Reading	3
MTT 10A	Introduction to CAD/CAM	3
MTT 10B	Computer Numerical Control Programming	3
MTT 10J	Numerical Control Graphics Programming	3
<u>MTT 10K</u>	<u>3D Numerical Control Graphics Programming</u>	<u>3</u>
MTT 16	General Metals	3
MTT 40	Machine Shop Calculations	3
MTT 101	Introduction to Conventional and CNC Machining	4
MTT 103	Conventional and CNC Turning	4
MTT 105	Conventional and CNC Milling	4
 <i>one course from:</i>		
MTT 10K	3D Numerical Control Graphics Programming	3
MTT 11abed	Numerical Control Graphics Programming with CATIA	3
Total Units: 33		

INACTIVATE PROGRAMS

1. Industrial Computer Control Technician Certificate of Achievement
2. Power Electronics Certificate A Certificate of Accomplishment

NATURAL SCIENCES

CTE TWO-YEAR COURSE REVIEW; NON-SUBSTANTIVE CHANGES

1. Biotechnology 1 – Basic Techniques of Biological Technology
2. Biotechnology 2 – Advanced Techniques of Biological Technology

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

1. Chemistry 20 - Fundamentals of Chemistry

Current Status/Proposed Changes

Prerequisite: Mathematics 40 or Mathematics 43 with a minimum grade of C in prerequisite or qualification by testing (El Camino College Mathematics Placement Test) and assessment

Recommended Preparation: ~~eligibility for~~ English 84

Recommendation

Prerequisite: Mathematics 40 or Mathematics 43 with a minimum grade of C in prerequisite or qualification by testing (El Camino College Mathematics Placement Test) and assessment

Recommended Preparation: English 84

2. Geology 15 – Natural Disasters

Current Status/Proposed Changes

Recommended Preparation: ~~eligibility for English 84~~ English 82

Recommendation

Recommended Preparation: English 82

NEW DISTANCE EDUCATION ONLINE/HYBRID COURSE VERSION

1. Geology 15 – Natural Disasters

CHANGE IN MAJOR; COURSE REQUIREMENTS

1. Physical Science A.S. Degree

Current Status/Proposed Changes

Major Requirements

Units

Required Core: 7-10 units

One of the following two-semester sequences:

CHEM 1A	General Chemistry I	5
CHEM 1B	General Chemistry II	5
or		
PHYS 1A	Mechanics of Solids	4
PHYS 1B	Fluids, Heat and Sound	3
or		
PHYS 1A	Mechanics of Solids	4
PHYS 1C	Electricity and Magnetism	4
or		
PHYS 2A	General Physics	4
PHYS 2B	General Physics	4
or		
PHYS 3A	General Physics With Calculus	5
PHYS 3B	General Physics With Calculus	5

~~An additional 10-13 units from the following courses to reach a total of 20 units:~~

10-13 units from:

ASTR 12	Astronomy Laboratory	1
ASTR 20	The Solar System	3
ASTR 25	Stars and Galaxies	3
CHEM 4	Beginning Chemistry	5
CHEM 7A	Organic Chemistry I	5
CHEM 7B	Organic Chemistry II	5
CSCI 1	Problem Solving and Program Design Using C++	4
ESCI 10	Computer Programming with FORTRAN	4
GEOL 1	Physical Geology	3
GEOL 2	History of Planet Earth	3
GEOL 3	Physical Geology Laboratory	1
GEOL 4	History of Planet Earth Laboratory	1
GEOL 15	Natural Disasters	3
MATH 150	Elementary Statistics with Probability	4
MATH 180	Pre-Calculus	5
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
MATH 270	Differential Equations with Linear Algebra	5
PHYS 1C	Electricity and Magnetism	4
PHYS 1D	Optics and Modern Physics	3 4

Total Units: 20