EL CAMINO COLLEGE MINUTES OF THE COLLEGE CURRICULUM COMMITTEE JUNE 1, 2010

Present: J. Davidson, S. Gates, A. Himsel, R. Hughes, L. Kjeseth, M. Lipe, E. Martinez, V. Lloyd, S. Panksi, V. Rayford, J. Thompson

Absent: F. Arce, B. Jaffe, M. Odanaka, J. Sims

Ex-Officio Members Present: Q. Chapman, L. Suekawa

Ex-Officio Members Absent: R. Brown, J. Casper, M. Hall, R. Smith, J. Young

Also Present: R. Elton Collett, E. French-Preston, V. Rapp, S. Rodriguez

CALL TO ORDER

• Chair Kjeseth called the College Curriculum Committee (CCC) meeting to order at 2:30 p.m.

APPROVAL OF MINUTES

• The minutes from the May 25th meeting were sent via email and approved before today's meeting. Chair Kjeseth again thanked the committee for the continued success of reviewing and approving the minutes electronically in a timely manner. The minutes from today's meeting and the Consent Agenda will be sent electronically to all committee members the week of June 7th.

CURRICULUM REVIEW

Business Proposals

- V. Rapp, Dean of Business, distributed revised degrees and certificates to the committee, due to the inactivation of some courses.
- Chair Kjeseth commented that the Real Estate degrees and certificates are now aligned, and V. Rapp concurred.
- Chair Kjeseth called for a motion to approve the major and certificate revisions. J. Thompson moved, S. Panski seconded, and the motion was carried.

Industry and Technology Proposals

- S. Rodriguez, Dean of Industry and Technology, distributed errata sheets to the committee with the Welding major and certificate revisions.
- There were no questions, and all recommendations were accepted and completed.
- Chair Kjeseth called for a motion to approve the major and certificate revisions. R. Hughes moved, J. Thompson seconded, and the motion was carried.

TITLE 5 COMPLIANCE

- On behalf of the College Curriculum Committee, Q. Chapman presented the 'Candy Award' to the following divisions, for achieving 100% Title 5 compliance:
 - Business, accepted by V. Rapp
 - Industry and Technology, accepted by S. Rodriguez
 - Health Sciences and Athletics, accepted by M. Lipe
 - Fine Arts, accepted by J. Davidson
 - Humanities, accepted by S. Gates
- Congratulations to all! Great job!

CHAIR'S REPORT

- Re-assignment time for the Chair is still under discussion between the Academic Senate and the Office of Academic Affairs. The committee agreed a definitive answer is needed from the Academic Senate by the end of summer. Chair Kjeseth will keep the committee updated during the summer.
- Chair Kjeseth fielded a question from the committee regarding the Curriculum Handbook. Chair Kjeseth and J. Young will be working on the handbook this summer, and the major tasks should be complete by the end of summer. The committee was requested to keep their current handbooks – do not throw them away, but do not pass them on, either. The Program and Course Approval handbook (PACA) should also be retained.
- Chair Kjeseth will be concentrating on Title V Grant matters in the next two weeks, thus taking a break from everything curriculum.
- Chair Kjeseth fielded an inquiry from the committee questioning the difference between an 'activity course' and a 'lab course'. Apparently, there are separate lines for these on CurricUNET. A discussion ensued, and as Chair Kjeseth felt that while the distinction between the two is primarily a faculty load issue, it was decided more discussion was required and this topic should be revisited in the fall.

ADJOURNMENT

• Chair Kjeseth called for a motion to adjourn the meeting. S. Panski moved, M. Lipe seconded, and the motion was carried. The meeting was adjourned at 3:10 p.m.

Note: Proposed curriculum changes will be effective Fall 2011. All major/certificate revisions were board approved July 19, 2010 to be implemented with the 2011-2012 El Camino College requirements.

EL CAMINO COLLEGE COLLEGE CURRICULUM COMMITTEE June 1, 2010 Proposed Curriculum Changes

BUSINESS DIVISION

COURSE REVIEW; CHANGE IN CATALOG DESCRIPTION

1. Law 17 – Legal Research and Writing

Current Status/Proposed Change

The focus of this course is on the techniques of effective legal writing. This course is an introduction to the practical writing skills and necessary analytical skills required in the law office. Topics include analysis of cases, analysis of statutes and administrative regulations, drafting and generating objective documents used in the legal environment, and generating and drafting persuasive documents submitted by attorneys to the trial and appellate courts.

Recommendation:

This course is an introduction to the practical writing skills and necessary analytical skills required in the law office. Topics include analysis of cases, analysis of statutes and administrative regulations, drafting and generating objective documents used in the legal environment, and generating and drafting persuasive documents submitted by attorneys to the trial and appellate courts.

2. Real Estate 14B – Advanced Real Estate Finance

Current Status/Proposed Change

This course covers <u>provides instruction on</u> the more advanced methods of financing real estate projects, including non-residential commercial and industrial property. The material presented includes <u>Emphasis is placed on</u> the instruments of finance, types of structured loans, discounting leases, and the sale-leaseback transaction. Note: The California Department of Real Estate (DRE) has approved this course as one of the elective courses for the real estate broker license. The Office of Real Estate Appraisal (OREA) has approved this course for 54 hours of basic education (BE) eredit. OREA has approved this course for 51 hours of continuing education (CE) eredit for license renewal provided the student has 90% attendance and passes a closed book final exam.

Recommendation:

This course provides instruction on the more advanced methods of financing real estate projects, including non-residential commercial and industrial property. Emphasis is placed on the instruments of finance, types of structured loans, discounting leases, and the sale-leaseback transaction.

Note: The California Department of Real Estate (DRE) has approved this course as one of the elective courses for the real estate broker license.

3. Real Estate 21 – Real Estate Investment

Current Status/Proposed Change

This course discusses the acquisition phase, holding period and disposition analysis for real estate investment property. The course covers a review of pro forma statements, the effects of leverage and cash flow operating statements. <u>Students develop</u> <u>Ss</u>trategies on for decision making alternatives of for a sale, exchange, continuation of operations, and capital restructure, using depreciation, installment sale and tax basis are covered.

Note: The Office California Department of Real Estate (DRE) Appraisal (OREA) has approved this course for 54 hours of basic education (BE) credit. OREA has approved this course for 51 hours of continuing education (CE) credit for license renewal provided the student has 90% attendance and passes a closed book final exam as one of the elective courses that may be completed for the salesperson license in addition to the required courses of Real Estate Principles and Real Estate Practice. The California Department of Real Estate (DRE) has approved this course as one of the elective courses for the real estate broker license. The DRE requires a copy of the college course outline or catalog description along with transcript showing proof of course completion.

Recommendation:

This course discusses the acquisition phase, holding period and disposition analysis for real estate investment property. The course covers a review of pro forma statements, the effects of leverage and cash flow operating statements. Students develop strategies for decision making alternatives for a sale, exchange, continuation of operations, and capital restructure using depreciation, installment sale and tax basis. Note: The California Department of Real Estate (DRE) has approved this course as one of the elective courses that may be completed for the salesperson license in addition to the required courses of Real Estate (DRE) has approved this course as one of the elective courses that may be completed for the salesperson license in addition to the required courses of Real Estate (DRE) has approved this course as one of the elective courses for the real estate broker license. The DRE requires a copy of the college course outline or catalog description along with transcript showing proof of course completion.

COURSE REVIEW; DISTANCE EDUCATION UPDATE; CHANGE IN CATALOG DESCRIPTION

1. Business 17 – Personal Finance

Current Status/Proposed Change

In this course<u>, students examine the</u> basic economic issues applied to individual and family management, such as financial planning, record keeping, budgeting, managing money, credit, and taxes, are covered. <u>Emphasis is placed</u> on Hhousing and other major expenditures, protecting assets through insurance and other means, investing in

stocks, bonds, mutual funds, and real estate, as well as retirement planning are emphasized.

Recommendation

In this course, students examine the basic economic issues applied to individual and family management, such as financial planning, record keeping, budgeting, managing money, credit, and taxes. Emphasis is placed on housing and other major expenditures, protecting assets through insurance and other means, investing in stocks, bonds, mutual funds, and real estate, as well as retirement planning.

2. Real Estate 16 – Real Estate Economics

Current Status/Proposed Change

This course provides instruction on the aspects that tie economics and politics to real estate land use. Emphasis is on the factors which create values in real estate, including urban development, governmental policies, and requirements for development, as well as the business and real estate cycles.

Note: This course, or an accounting course, is approved by t<u>The California</u> Department of Real Estate (DRE) <u>has approved this course</u> as one of the optional <u>elective</u> courses that must be completed within 18 months of conditional salesperson licensure for the salesperson license in addition to the required courses of Real Estate Principles and Real Estate Practice. This course, or an accounting course, is statutorily required for the <u>The California Department of Real Estate</u> (DRE) broker license. The Office of Real Estate Appraisal (OREA) has approved this course for 54 hours of basic education (BE) credit. OREA has approved this course for 51 hours of continuing education (CE) credit for as one of the elective courses for the real estate broker license. renewal provided the student has 90% attendance and passes a closed book final exam.

Recommendation:

This course provides instruction on the aspects that tie economics and politics to real estate land use. Emphasis is on the factors which create value in real estate, including urban development, governmental policies and requirements for development, as well as the business and real estate cycles.

Note: The California Department of Real Estate (DRE) has approved this course as one of the elective courses for the salesperson license in addition to the required Real Estate Principles and Real Estate Practice. The California Department of Real Estate (DRE) has approved this course as one of the elective courses for the real estate broker license.

3. Real Estate 40 – Real Estate Appraisal

Current Status/Proposed Change

This course provides instruction on <u>in</u> the valuation principles of real estate appraisal, including architectural styles, types of construction, lot valuation, depreciation, the approaches to value, and appraisal standards and ethics.

CCC MINUTES 6/1/10

Note: The California Department of Real Estate (DRE) has approved this course as one of the optional courses that must be completed within 18 months of conditional salesperson licensure in addition to the required courses of Real Estate Principles and Real Estate Practice. This course is statutorily required for the California DRE real estate broker license. The Office of Real Estate Appraisal (OREA) has approved this course for 54 hours of basic education (BE) credit. OREA has approved this course for 51 hours of continuing education (CE) credit for license renewal provided the student has 90% attendance and passes a closed book final exam.

Recommendation:

This course provides instruction in the valuation principles of real estate appraisal, including architectural styles, types of construction, lot valuation, depreciation, the approaches to value, and appraisal standards and ethics.

Note: The California Department of Real Estate (DRE) has approved this course as one of the optional courses that must be completed within 18 months of conditional salesperson licensure in addition to the required courses of Real Estate Principles and Real Estate Practice. This course is statutorily required for the California real estate broker license. The Office of Real Estate Appraisal (OREA) has approved this course for 54 hours of basic education (BE) credit. OREA has approved this course for 51 hours of continuing education (CE) credit for license renewal provided the student has 90% attendance and passes a closed book final exam.

4. Real Estate 41 – Advanced Real Estate Appraisal

Current Status/Proposed Change

This course is a continuation of Real Estate 40. This course provides instruction on in advanced concepts of the valuation process, residential income, commercial and industrial income approach to value process for real property, appraisals in addition to appraisal standards and ethics, operating expenses, capitalization, analyzing operating expenses, capitalization, and depreciation. Students develop proficiency in utilizing residential income and commercial and industrial property appraisal guidelines to create a standard appraisal form. Emphasis is placed on the advanced cost approach valuation, in addition to the Uniform Standards of Professional Appraisal Practice (USPAP) ethics.

Note: The California Department of Real Estate (DRE) has approved this course as one of the elective courses for the real estate broker license. The Office of Real Estate Appraisal (OREA) has approved this course for 54 hours of basic education (BE) eredit. OREA has approved this course for 51 hours of continuing education (CE) eredit for license renewal provided the student has 90% attendance and passes a closed book final exam. This course is not approved by DRE for the educational requirements for the salesperson license.

Recommendation:

This course provides instruction in advanced concepts of the income approach to value process for real property, analyzing operating expenses, capitalization, and depreciation. Students develop proficiency in utilizing residential income and

CCC MINUTES 6/1/10

commercial and industrial property appraisal guidelines to create a standard appraisal form. Emphasis is placed on the advanced cost approach valuation, in addition to the Uniform Standards of Professional Appraisal Practice (USPAP) ethics. Note: The California Department of Real Estate (DRE) has approved this course as one of the elective courses for the real estate broker license. This course is not approved by DRE for the educational requirements for the salesperson license.

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

1. Real Estate 26 – Principles of Escrows

Current Status/Proposed Change

Recommended Preparation: Real Estate 11, 12A, or California Department of Real Estate (DRE) license or equivalent experience; Business 1A or Business 15 This course introduces provides instruction in the functions and types of an escrow. Students are introduced to the procedures used in the escrow industry. Students develop proficiency in common terms of escrow business terminology and the basic escrow steps in a real estate property transaction. Emphasis is on residential escrow, with transactional variations studied for an escrow involving a seller, a buyer, refinance or loan, mobile home, and non-residential specialty escrows including commercial and industrial property, liquor license, impound account, probate and securities transaction. The course covers title insurance, prorations, and escrow settlement closing statements.

Note: The California Department of Real Estate (DRE) has approved this course as one of the optional elective courses that must may be completed within 18 months of conditional for the salesperson licensure license in addition to the required courses of Real Estate Principles and Real Estate Practice. The <u>California Department of Real Estate (DRE)</u> has approved this course as one of the elective optional courses for the real estate broker license.

Recommendation:

Real Estate 26 - Escrows

Recommended Preparation: Real Estate 11

This course provides instruction in the functions of an escrow in a real property transaction. Emphasis is on residential escrow, with transactional variations studied for an escrow involving a seller, a buyer, refinance or loan, mobile home, and non-residential specialty escrows including commercial and industrial property, liquor license, impound account, probate and securities transaction. The course covers title insurance, prorations, and escrow settlement closing statements.

Note: The California Department of Real Estate (DRE) has approved this course as one of the elective courses that may be completed for the salesperson license in addition to the required Real Estate Principles and Real Estate Practice. The California Department of Real Estate (DRE) has approved this course as one of the optional courses for the real estate broker license.

CHANGE IN MAJOR

1. Real Estate

Current Status/Proposed Change Real Estate 11, 14A, 40 and one of the following three options:

Real Estate Option: Real Estate 12A, 13; complete one course from: Real Estate 16 or Business 1A; complete two courses from: Law 5, Real Estate 12B, 14B, 17, 18, 19, 20, 21, 26, <u>28,</u> 31, 41 Total Units: 24-25

Real Estate Appraisal Option: Real Estate 16, 25, 41; complete two courses from: Real Estate 14B, 19, 21, 31; complete two courses from: <u>Architecture 150A</u>, Business 15, 28, Computer Information Systems 13, Law 6 Total Units: 33 <u>27</u>

Mortgage Brokerage Option: Business 1A, <u>or Real Estate 16;</u> Real Estate 13, 16, 25, 31; complete two courses from: Real Estate 12A; Real Estate 14B <u>or Business 17;</u> Real Estate-17, 19, 26; complete one course from: Business 5A, 15, 28 Total Units: 34-35 27-29

Recommendation:

Real Estate 11, 14A, 40 and one of the following three options:

Real Estate Option: Real Estate 12A, 13; Business 1A or Real Estate 16; complete two courses from: Law 5, Real Estate 14B, 18, 19, 20, 21, 26, 28, 31, 41 Total Units: 24-25

Real Estate Appraisal Option: Real Estate 16, 41; complete two courses from: Real Estate 14B, 19, 21, 31; complete two courses from: Architecture 150A, Business 15, 28, Computer Information Systems 13, Law 6 Total Units: 27 Mortgage Brokerage Option: Business 1A or Real Estate 16; Real Estate 13, 31; complete two courses from: Real Estate 12A; Real Estate 14B or Business 17; Real Estate 19, 26; complete one course from: Business 5A, 15, 28 Total Units: 27-29

CHANGE IN CERTIFICATE OF ACHIEVEMENT

1. Mortgage Loan Brokerage

Current Status/Proposed Change Real Estate 11, 13, 14A, 25, 31, <u>40</u>; Business 1A or Real Estate 16; complete two courses from: Business 17 or Real Estate 14B; Real Estate 12A, 19, 26, 40; complete one course from: Business 5A, 15, 28 Total Units: 27-29 Courses must be completed with a 3.0 (B) average. A minimum of ten units for the Mortgage Loan Certificate of Achievement must be complete at El Camino College.

Recommendation:

Real Estate 11, 13, 14A, 31, 40; Business 1A or Real Estate 16; complete two courses from: Business 17 or Real Estate 14B; Real Estate 12A, 19, 26; complete one course from: Business 5A, 15, 28 Total Units: 27-29 Courses must be completed with a 3.0 (B) average. A minimum of ten units for the Mortgage Loan Certificate of Achievement must be complete at El Camino College.

2. Real Estate

Current Status/Proposed Change

Real Estate 11, 12A, 13, 14A, 40; Business 1A or Real Estate 16; complete two courses from: Law 5, Real Estate 12B, 14B, 17, 18, 19, 20, 21, 26, 27, 28, 31, 41

Total Units: 24-25

Courses must be completed with a 3.0 (B) average. A minimum of ten units for the Real Estate Certificate of Achievement must be complete at El Camino College.

Recommendation:

Real Estate 11, 12A, 13, 14A, 40; Business 1A or Real Estate 16;

complete two courses from: Law 5, Real Estate 14B, 18, 19, 20, 21, 26, 28, 31, 41 Total Units: 24-25

Courses must be completed with a 3.0 (B) average. A minimum of ten units for the Real Estate Certificate of Achievement must be complete at El Camino College.

3. Real Estate Appraisal

Current Status/Proposed Change Real Estate 11, 14A, 16, 25, 40, 41; complete two courses from: Real Estate 14B, 19, 21<u>, 31</u>; complete two courses from: Architecture 150A, Business 15, 28, Computer Information Systems 13, Law 6 Total Units: 30 <u>27</u> Courses must be completed with a 3.0 (B) average. A minimum of ten units for the Real Estate Appraisal Certificate of Achievement must be complete at El Camino College.

Recommendation:

Real Estate 11, 14A, 16, 40, 41; complete two courses from: Real Estate 14B, 19, 21, 31; complete two courses from: Architecture 150A, Business 15, 28, Computer Information Systems 13, Law 6 Total Units: 27 Courses must be completed with a 3.0 (B) average. A minimum of ten units for the Real Estate Appraisal Certificate of Achievement must be complete at El Camino College.

4. Real Estate Assistant (pending approval by the California Community Colleges System Office)

Current Status/Proposed Change

Real Estate 11;

complete two courses from: Real Estate 12A, 13, 14A, 26, 40;

complete one course from: Business 11, 12, 27, 28, 43;

complete one course: Computer Information Systems 13, Physical Education 260, Real Estate 25

Total Units: 13-15

<u>Courses must be completed with a 3.0 (B) average.</u> A minimum of ten units for the Real Estate Assistant Certificate of Achievement must be complete at El Camino College.

Recommendation:

Real Estate 11;

complete two courses from: Real Estate 12A, 13, 14A, 26, 40;

complete one course from: Business 11, 12, 27, 28, 43;

complete one course from: Computer Information Systems 13, Physical Education 260 Total Units: 13-15

Courses must be completed with a 3.0 (B) average. A minimum of ten units for the Real Estate Assistant Certificate of Achievement must be complete at El Camino College.

CCC MINUTES 6/1/10 HEALTH SCIENCES AND ATHLETICS DIVISION

COURSE REVIEW

1. Physical Education 6abc - Off-Season Training for Men's Intercollegiate Baseball

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

 Physical Education 76abc – Off-Season Training for Men's Intercollegiate Track and Field Team *Current Status/Proposed Change* Enrollment Limitation: tryout (high school varsity experience or equivalent skill) <u>None</u>

Recommendation: Enrollment Limitation: None

 Physical Education 131abc – Off-Season Training for Women's Intercollegiate Track and Field Team *Current Status/Proposed Change* Enrollment Limitation: tryout (high school varsity experience or equivalent skill) <u>None</u>

Recommendation: Enrollment Limitation: None

COURSE REVIEW; CHANGE IN CATALOG DESCRIPTION

1. Nursing 150 – Beginning Nursing Process and Fundamental Skills *Current Status/Proposed Change*

<u>In this course, students gain</u> T the knowledge and skills necessary to study provide <u>basic</u> nursing <u>care</u> and nursing's effect on to the individual are presented <u>and family</u>. The concepts of basic human needs and structural variables such as age, sex, and ethnicity are studied. The nursing process is introduced with emphasis on assessment in the geriatric population. Fundamental skills, such as medication administration, are introduced in the lab and practiced in a clinical setting.

Recommendation

In this course, students gain the knowledge and skills necessary to provide basic nursing care to the individual and family. The concepts of basic human needs and structural variables such as age, sex, and ethnicity are studied. The nursing process is introduced with emphasis on assessment in the geriatric population. Fundamental skills, such as medication administration, are introduced in the lab and practiced in a clinical setting. INDUSTRY AND TECHNOLOGY DIVISION

COURSE REVIEW; CATALOG DESCRIPTION

1. Machine Tool Technology 46 – Basic Machine Tool Operation *Current Status/Proposed Change*

In this course <u>sS</u>tudents are introduced to the basic principles and operation of machine tools with <u>emphasis a focus</u> on bench operations, drilling, engine lathe<u>s</u>, mill<u>ings</u>, and grinding machines. Standard industry practices and tool set<u>ups used</u> are emphasized. Laboratory projects and exercises related to the lectures and demonstrations will be assigned.

Recommendation:

Students are introduced to the basic principles and operation of machine tools with a focus on bench operations, drilling, engine lathes, mills, and grinding machines. Standard industry practices and tool set-ups used are emphasized. Laboratory projects and exercises related to the lectures and demonstrations will be assigned.

COURSE REVIEW; CHANGES IN CATALOG DESCRIPTION

1. Administration of Justice 48 – Laws of Arrest – Penal Code 832 *Current Status/Proposed Change*

This course is designed to meet the minimum requirements for training as required under Penal Code Section provide an education and understanding of the laws of arrest according to Penal Code 832. The course is certified by the California Commission of Peace Officer Standards and Training (P.O.S.T.) and will provide the student with Students will learn the basic fundamentals of the laws of arrest; search and seizure; search and handcuffing techniques; and constitutional law.

Note: Letter grade or pass/no pass option

Note: Students who have earned credit in Administration of Justice 49 cannot receive unit credit for Administration of Justice 48.

Recommendation:

This course is designed to provide an education and understanding of the laws of arrest according to Penal Code 832. Students will learn the basic laws of arrest; search and seizure; search and handcuffing techniques; and constitutional law. Note: Letter grade or pass/no pass option

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

Current Status/Proposed Change

1. Machine Tool Technology 48abcd – NIMS Level II Credential Preparation <u>Machining</u> <u>for Robotics</u>

Prerequisite: Machine Tool Technology 13A with a minimum grade of C None In this course sStudents develop their machining skills in preparation for the six categories of NIMS (National Institute for Metalworking Skills) Level II credential examinations. by preparing parts and components for the FIRST (For Inspiration and Recognition of Science and Technology) Robotics competition. Skill development activities will focus on safe machining practices; blueprint reading, engineering drawings; machine tool calculations; workpiece inspection; and set up, and operation of conventional and CNC (Computer Numerically Controlled) (CNC) machine tools.

Recommendation:

Machine Tool Technology 48abcd – Machining for Robotics Prerequisite: None

Students develop their machining skills by preparing parts and components for the FIRST (For Inspiration and Recognition of Science and Technology) Robotics competition. Skill development activities focus on safe machining practices; engineering drawings; machine tool calculations; workpiece inspection; and set up and operation of conventional and Computer Numerically Controlled (CNC) machine tools.

CHANGE IN CATALOG PROGRAM DESCRIPTION, CHANGE IN MAJOR

1. Welding Program

Current Status/Proposed Change

The welding program prepares <u>the</u> student for employment in the field and provides upgrade opportunities for currently employed personnel <u>to upgrade their skills</u>. By completing the degree or certificate requirements, students gain proficiency in the following welding processes: oxy-acetylene cutting, plasma arc cutting, brazing and welding, shielded metal arc welding, gas metal arc welding, gas tungsten arc welding, and flux cored welding. Students develop skills in welding ferrous and non-ferrous alloys in flat, horizontal, vertical, and overhead positions. Students also acquire proficiency in blueprint reading, <u>In addition, welding students gain skills in</u> layout, structural fabrication, <u>reading engineering drawings</u>, and pipe welding. Competencies will be assessed regularly in accordance with criteria established by the American Welding Society, American Petroleum Institute, the American Society of Mechanical Engineers, and the American National Standards Institute.

Recommendation:

The welding program prepares the student for employment in the field and provides opportunities for currently employed personnel to upgrade their skills. By completing the degree or certificate requirements, students gain proficiency in the following welding processes: oxy-acetylene cutting, plasma arc cutting, shielded metal arc welding, gas metal arc welding, gas tungsten arc welding, and flux cored welding. Students develop skills in welding ferrous and non-ferrous alloys in flat, horizontal, vertical, and overhead positions. In addition, welding students gain skills in layout, fabrication, reading engineering drawings, and pipe welding. Competencies will be assessed regularly in accordance with criteria established by the American Welding Society, the American Petroleum Institute, the American Society of Mechanical Engineers, and the American National Standards Institute.

2. Welding

Current Status/Proposed Change

Day Program: Complete a minimum of 24-25 units from: Welding 1, 2abc, Evening Program: complete a minimum of 24 units from: Welding 21, 23abc, 40abcd, 45ab

Recommended Electives: <u>Welding 23abd</u>, Computer Aided Design/Drafting 5, Machine Tool Technology 16ab<u>* (one semester)</u>, Technical Mathematics 1, English A or qualifying score for English 1A on the English Placement Test Total Units: 24-27 25

Recommendation:

Complete a minimum of 24-25 units from: Welding 2abc, 21, 40abcd, 45ab Recommended Electives: Welding 23abc, Computer Aided Design/Drafting 5, Machine Tool Technology 16ab* (one semester), Technical Mathematics 1 Total Units: 24-25

CHANGE IN CERTIFICATE OF ACHIEVEMENT

1. Welding H

Current Status/Proposed Change

Day Program: Complete 32 24-25 units from any course combination below: Welding 4, 2abc, 21, 40abcd, 45ab;

complete 9-12 units from: <u>Welding 23abc</u>,Computer Aided Design/Drafting 5, Machine Tool Technology 16ab*, Technical Mathematics 1, English A or qualifying score for English 1A on English Placement Test (*one semester) Total Units: 41-44 <u>24-25</u>

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

Evening Program: Complete a minimum of 32 units from: Welding 21, 23abc, 40abcd, 45abcd; complete 9–12 units from the following: Computer Aided Design/Drafting 5, Machine Tool Technology 16ab, Technical Mathematics 1, English A or qualifying score for English 1A on English Placement Test

Total Units: 41-44

Recommendation: Welding Complete 24-25 units from any course combination below: Welding 2abc, 21, 40abcd, 45ab; complete 9-12 units from: Welding 23abc, Computer Aided Design/Drafting 5, Machine Tool Technology 16ab*, Technical Mathematics 1, English A or qualifying score for English 1A on English Placement Test (*one semester) Total Units: 24-25 At least 50% of the courses required for the Welding Certificate of Achievement must be completed at El Camino College.

INACTIVATE CERTIFICATE OF ACHIEVEMENT

1. Welding I

Note: Proposed curriculum changes will be effective Fall 2011. All major/certificate revisions were board approved July 19, 2010 to be implemented with the 2011-2012 El Camino College requirements.