EL CAMINO COLLEGE MINUTES OF THE COLLEGE CURRICULUM COMMITTEE March 24, 2009

Present: J. Davidson, A. Himsel, L. Kjeseth, M. Lipe, V. Lloyd, E. Martinez, C. Mosqueda, M. Odanaka, V. Rapp, C. Somin, J. Thompson, J. Young

Absent (excused): F. Arce, R. Hughes, S. Panski

Ex-Officio Members Present: Q. Chapman, M. Hall, J. Harmon, L. Suekawa

Ex-Officio Members Absent (unexcused): C. Brinkman, D. Charles, R. Smith, T. Stewart

Also Present: K. Adams, C. Fitzsimons, D. Goldberg, B. Jaffe, M. Leiby, J. Shankweiler

CALL TO ORDER

Chair Young called the College Curriculum Committee (CCC) meeting to order at 2:31 p.m.

CHAIR'S REPORT

Chair Young welcomed the Committee to today's meeting. She reminded the committee that she provides a report on CCC activities to the Academic Senate at each meeting. She reported the following:

• Course Review Workshops have been conducted

Three workshops have been conducted - two at ECC and one at the Compton Center. They were well-received. Three more workshops will be scheduled in April and May.

• Standard Review Sub-Committee

This committee, which reviews courses submitted for course review or minor changes, is working well and is allowing for additional courses to be reviewed at each meeting.

• Response to Recommendation Three

Chair Young was involved in the input for the response to the ACCJC and felt the response was well-crafted and accurate. She complimented those who reviewed and edited the final version.

• Six-Year Review Cycle Worksheet and Report Form

These forms were piloted by the CCC representatives and submitted to the Curriculum Office.

• Number of Courses Reviewed this Semester

The CCC reviewed and approved a total of 108 proposals at its first two meetings.

CURRICULUM REVIEW

Mathematical Sciences Proposals

- Chair Young introduced Dean of Mathematical Sciences D. Goldberg to present Mathematics 120, Mathematics 130, and Computer Science 60; and online versions of Mathematics 120 and Mathematics 130.
- She also announced that those presenting no longer needed to discuss typographical errors (unless newly discovered by the committee), only revisions of substance.
- D. Goldberg distributed an errata sheet to the committee.
- He presented Mathematics 120 and Mathematics 130 with no revisions or questions from the committee.
- Continuing with Computer Science 60, he acknowledged a grammatical and formatting correction.
- Chair Young called for a motion to approve the Mathematical Sciences proposals. V. Rapp moved, L. Kjeseth seconded, and the motion carried.
- Chair Young then called for a motion to approve the conditions of enrollment. V. Rapp moved, L. Kjeseth seconded, and the motion carried.
- She then called for a motion to approve the distance education versions. V. Rapp moved, A. Himsel seconded, and the motion carried.

Natural Sciences Proposals

- Dean J. Shankweiler distributed an errata sheet and took the podium to present Geography 6, Microbiology 33, and Physics 12.
- She began with Geography 6, discussing revisions made. The committee corrected an additional error in Section V. Part C of the course outline of record, and the revision was accepted.
- She continued with Microbiology 33 and fielded a question from the committee regarding Section II. #3. No revisions were made.
- J. Shankweiler continued with Physics 12. The committee corrected minor errors in the catalog description and Section V. Part B. #2.
- Chair Young then called for a motion to approve the Natural Sciences proposals. M. Lipe moved, J. Thompson seconded, and the motion carried.
- She called for a motion to approve the conditions of enrollment. M. Lipe moved, J. Thompson seconded, and the motion carried.

Humanities Proposals

- C. Fitzsimons distributed an errata sheet to the committee and took the podium to present English 15A, English 15B, and ESL 53B.
- She introduced English department faculty M. Leiby who authored English courses 15A and 15B.
- C. Fitzsimons presented the revisions to English 15A and 15B. There were no revisions or questions from the committee.
- She continued with ESL 53B. The committee posed a question regarding the CSU transfer date, to which Q. Chapman clarified this would eventually be the board approval date. There were no other revisions or questions.

- Chair Young called for a motion to approve the Humanities proposals. C. Somin moved, L. Kjeseth seconded, and the motion carried.
- She then called for a motion to approve the conditions of enrollment. C. Somin moved, L. Kjeseth seconded, ant the motion carried.

CONSENT AGENDA PROPOSALS

- Chair Young directed the committee's attention to today's Consent Agenda handout. She gave them time to read and review the recommendations for approval.
- Q. Chapman noted that the courses which underwent course review are now bolded and therefore the rest (not bolded) are course inactivations.
- The handout included twelve course inactivations from the Fine Arts division and 20 from the Humanities division, recommended by department faculty.
- There were also eight course reviews conducted in the Humanities division, four in Mathematical Sciences, and seven in Natural Sciences. These included revisions to catalog descriptions, descriptive titles, prerequisites, recommended preparation, and transfer status.
- V. Lloyd noticed that Chemistry '21A' was inadvertently repeated. The committee corrected the agenda to read Chemistry '21B' on p.6 for the appropriate course, "Survey of Organic and Biochemistry."
- Given the change, and with no further questions, Chair Young called for a motion to adopt the recommended actions. J. Thompson moved, V. Lloyd seconded, and the motion carried.
- She then called for a motion to approve the conditions of enrollment outlined in the consent agenda. J. Thompson moved, M. Lipe seconded, and the motion carried.

SIX-YEAR COURSE REVIEW CYCLE UPDATE

- Chair Young began an update and discussion of the six-year course review process.
- She discussed blanket review courses, clarifying that these courses are cooperative career education, special topics, and independent studies courses.
- She then asked the committee to share their thoughts and concerns of the process; discussion ensued.

ANNOUNCEMENTS

- L. Kjeseth and Q. Chapman provided an update about the transition to CurricUNET software, announcing that the conversion of course data from the old software (CurricuWare) to the new system is going to be possible.
- Discussion ensued regarding the capabilities of CurricUNET, the timeline for the conversion (to begin use in fall 2009) and the forthcoming walk-through of the system.
- Current CurricuWare issues and concerns were also discussed.

ADJOURNMENT

Chair Young the called for a motion to adjourn the meeting. M. Lipe moved, A. Himsel seconded, and the motion carried. The meeting was adjourned at 3:32 p.m.

EL CAMINO COLLEGE COLLEGE CURRICULUM COMMITTEE

Proposed Curriculum Changes March 24, 2009

FINE ARTS DIVISION

INACTIVATE COURSES

- 1. Dance 18abcd Asian and Pacific Dance
- 2. Dance 96abcd Cooperative Work Experience Education
- 3. Photography 60ab Wilderness Photography
- 4. Theatre 20ab Styles of Acting
- 5. Theatre 30 Movement for the Actor
- 6. Theatre 34ab Voice and Articulation for the Actor
- 7. Theatre 36 Stage Dialects
- 8. Theatre 40B Applied Intermediate Stage Direction
- 9. Theatre 192ab Setup of Intelligent Lighting Systems
- 10. Theatre 193ab Programming and Lighting Design with Intelligent Lighting Systems
- 11. Theatre 194ab Computer Applications for the Entertainment Lighting Industry
- 12. Theatre 195 Industry Analysis and Portfolio Planning for the Entertainment Lighting Industry

HUMANITIES DIVISION

INACTIVATE COURSES

- 1. Academic Strategies 27 Creative Problem Solving Workshop
- 2. Academic Strategies 50 Special Topics in Academic Strategies
- 3. Communications 1abcd Student Leadership

- 4. Communications 50 Special Topics in Communications
- 5. English 11 Introduction to Drama
- 6. English 50 Special Topics in English
- 7. English 72 Technical Report Writing
- 8. English as a Second Language 50 Special Topics in English as a Second Language
- 9. French 35 Introduction to Francophone Literature in Translation
- 10. French 50 Special Topics in French
- 11. German 4 Intermediate German II
- 12. German 5 Advanced German I
- 13. Humanities 50 Special Topics in Humanities
- 14. Japanese 50 Special Topics in Japanese
- 15. Journalism 50 Special Topics in Journalism
- 16. Journalism 100 Supervised Tutoring: Journalism Laboratory
- 17. Library Information Science 101 Introduction to Libraries for Library Technicians
- 18. Library Information Science 105 Information Services and Resources
- 19. Library Information Science 110 Technical Services in Libraries
- 20. Spanish 50 Special Topics in Spanish

COURSE REVIEW; CHANGE IN CATALOG DESCRIPTION

1. Academic Strategies 1abcd – Individualized Academic Strategies *Current Status/Proposed Change*

A <u>This</u> laboratory <u>class emphasizing course emphasizes</u> self-paced individual<u>ized approaches to learning in college, including instruction based on computerized diagnoses of difficulties through tests and observations. Offered as a support system utilizing multimedia workshops and learning contracts to students enrolled in content area courses <u>in reading and/or mathematical computation</u>. After diagnoses, individualized instructor-led and computer-based interventions are offered to improve reading or math skills.</u>

Recommendation:

This laboratory course emphasizes self-paced individualized instruction based on computerized diagnoses of difficulties in reading and/or mathematical computation. After diagnoses, individualized instructor-led and computer-based interventions are offered to improve reading or math skills.

2. Academic Strategies 22ab – Vocabulary Building for College Students Current Status/Proposed Change

This course is designed to increase the student's reading, <u>listening</u>, writing, <u>listening</u> and speaking vocabularies by introducing words and concepts that are essential to academic success. <u>by emphasizing a systemized A systematic</u> method for continued vocabulary development <u>is emphasized</u>.

Recommendation:

This course is designed to increase the student's reading, listening, writing, and speaking vocabularies by introducing words and concepts that are essential to academic success. A systematic method for continued vocabulary development is emphasized.

3. Academic Strategies 30ab – Test-Taking Strategies

Current Status/Proposed Change

<u>In</u> <u>Tthis</u> course, is designed to assist the students in acquiring confidence and competency in understanding the principles of test development and then use the examine how testing instruments (such as true/false, multiple choice, and essay questions) are structured. <u>Students learn</u> techniques necessary for successful mastery of taking designed to increase success on various types of achievement tests.

Recommendation:

In this course, examine how testing instruments (such as true/false, multiple choice, and essay questions) are structured. Students learn techniques designed to increase success on various types of achievement tests.

4. English as a Second Language 51A – Introduction to English in Conversation *Current Status/Proposed Change*

This is an introductory course is designed to activate a student's oral/aural English-speaking and English-comprehension skills in a supportive atmosphere. The student works to develop communicative competence in an atmosphere free of criticism. The course includes cross-cultural communication topics; role playing, an and other small group activities; introduction to common American idioms; and expressions; pronunciation exercises designed to improve intelligibility; and listening comprehension practice.

Recommendation:

This introductory course is designed to activate a student's English-speaking and English-comprehension skills in a supportive atmosphere. The course includes cross-cultural communication topics; role play and other small group activities; introduction to common American idioms and expressions; pronunciation exercises designed to improve intelligibility; and listening comprehension_practice.

5. English as a Second Language 51B – Intermediate Listening, Speaking and Pronunciation *Current Status/Proposed Change*

This intermediate course helps ESL sStudents in this course gain greater confidence and skill in listening to and speaking English. Students participate in a wide range of by participating in activities such as listening to mini-lectures and taking notes, presenting impromptu speeches, prepared speeches, and oral reports; conducting group out-of-class surveys and one-on-one interviews; and planning, performing, role plays and dramas; and eritiquing debates discussing and debating controversial topics. Students are taught listening and speaking strategies, shown how to improve their pronunciation, intonation and stress, and are introduced to listening comprehension, and knowledge of idiomatic expressions and American culture, idioms and humor.

Recommendation:

Students in this course gain greater confidence and skill in listening to and speaking English by participating in activities such as listening to mini-lectures and taking notes, presenting impromptu speeches, prepared speeches, and oral reports; conducting surveys and interviews; performing role plays and dramas; and discussing and debating controversial topics. Students improve their pronunciation, intonation and stress, listening comprehension, and knowledge of idiomatic expressions and American culture and humor.

6. English as a Second Language 52A – Introduction to Reading and Vocabulary Building *Current Status/Proposed Change*

This is an introductory course designed to transfer literacy in the first language to English by building basic reading skills and expanding vocabulary. Through the use of <u>reading texts</u>, reading kits, main idea exercises, and skimming and scanning activities, the foundation skills are developed through regular application. The aim of the course is to identify and reinforce good reading habits and to free students from over-dependence on dictionaries, with a focus on context as the key to meaning.

Recommendation:

This is an introductory course designed to transfer literacy in the first language to English by building basic reading skills and expanding vocabulary. Through the use of reading texts, reading kits, main idea exercises, and skimming and scanning activities, the foundation skills are developed through regular application. The aim of the course is to identify and reinforce good reading habits and to free students from over-dependence on dictionaries, with a focus on context as the key to meaning.

7. English as a Second Language 52B – Intermediate Reading and Vocabulary Building *Current Status/Proposed Change*

This is an intermediate level course designed to teach appropriate reading skills, such as the ability to make inferences, to draw conclusions, to understand the meaning of vocabulary words in context through word <u>analysis</u> and <u>study exercise</u>, <u>contextual clues</u>, and to determine the main idea from a passage. Students read from a variety of sources,

including the newspapers, the essays, the short story stories, and the novels. Students also increase their academic vocabulary through vocabulary building activities.

Recommendation:

This is an intermediate level course designed to teach appropriate reading skills, such as the ability to make inferences, draw conclusions, understand the meaning of vocabulary words in context through word analysis and contextual clues, and determine the main idea from a passage. Students read from a variety of sources, including newspapers, essays, short stories, and novels. Students also increase their academic vocabulary through vocabulary building activities.

COURSE REVIEW; CHANGES IN DESCRIPTIVE TITLE, CATALOG DESCRIPTION

Current Status/Proposed Change

1. English 15A – Survey of English British Literature

This course introduces students to English is a survey of British literature from the Anglo-Saxon period through the 18th century. Particular attention will be given to tracing the growth of English, Irish, Scottish and Welsh culture and identity in relation to the literature. The selections may include "Beowulf", "The Táin," and "Everyman," as well as readings from Chaucer, Julian of Norwich, Kempe, Spenser, Lanyer, Shakespeare, Cary, Donne, Herbert, Milton, Cavendish, Dryden, Behn, Pope, Swift, Johnson, and Sheridan.

Recommendation:

This course is a survey of British literature from the Anglo-Saxon period through the 18th century. Particular attention will be given to tracing the growth of English, Irish, Scottish and Welsh culture and identity in relation to the literature. The selections may include "Beowulf", "The Táin," and "Everyman," as well as readings from Chaucer, Julian of Norwich, Kempe, Spenser, Lanyer, Shakespeare, Cary, Donne, Milton, Cavendish, Dryden, Behn, Pope, Swift, Johnson, and Sheridan.

Current Status/Proposed Change

2. English 15B – Survey of English British Literature

English 15B This course is a survey of British literature by English, Irish, Scottish, and Welsh writers that begins with the Romantic Age and continues to the present. The course includes selections from major Romantic, Victorian, and mModern and Postmodern authors, including which may include Equiano, Burns, Blake, the Wordsworths, Coleridge, Byron, the Shelleys, Keats, Tennyson, the Brownings, the Brontës, Arnold, Browning, Hardy, Yeats, Conrad, Joyce, Eliot, Woolf, Lawrence, Beckett, Heaney, Pinter, and others.

Recommendation:

English 15B – Survey of British Literature

This course is a survey of British literature by English, Irish, Scottish, and Welsh writers that begins with the Romantic Age and continues to the present. The course includes

selections from major Romantic, Victorian, Modern and Postmodern authors, which may include Equiano, Burns, Blake, the Wordsworths, Coleridge, Byron, the Shelleys, Keats, Tennyson, the Brownings, the Brontës, Arnold, Hardy, Yeats, Conrad, Joyce, Eliot, Woolf, Lawrence, Beckett, Heaney, Pinter, and others.

Current Status/Proposed Change

3. English as a Second Language 53A – Elementary Writing/Grammar and Writing This entry-level academic composition elass course offers students an intensive writing experience. Students will write a minimum of 15 well-organized, and coherent paragraphs transitioning to multi-paragraph essays., including critical reactions to readings. Students will identify and address Ggrammar problems identified in student their writing will be addressed.

Recommendation:

English as a Second Language 53A – Elementary Grammar and Writing This entry-level academic composition course offers students an intensive writing experience. Students will write well-organized and coherent paragraphs transitioning to multi-paragraph essays. Students will identify and address grammar problems in their writing.

COURSE REVIEW; CHANGES IN DESCRIPTIVE TITLE, TRANSFER STATUS, CATALOG DESCRIPTION

Current Status/Proposed Change

1. English as a Second Language 53B – Intermediate Writing/ and Grammar No Transfer CSU Proposed Transfer CSU

This intermediate-level academic composition elass <u>course</u> offers students an intensive <u>writing</u> experience, <u>moving from the paragraph to an emphasis on the in writing college</u> essays. Students will <u>learn to</u> write <u>a minimum of ten</u> well-organized, coherent <u>expository</u> essays, including critical reactions to readings, <u>and employing various</u> rhetorical modes. Basic rules of grammar are reviewed and more advanced rules are <u>introduced</u>. Grammar problems identified in student writing will be addressed.

Recommendation:

English as a Second Language $53B-Intermediate\ Writing\ and\ Grammar\ Proposed\ Transfer\ CSU$

This intermediate-level academic composition course offers students an intensive experience in writing college essays. Students will learn to write well-organized, coherent expository essays, including critical reactions to readings, and employing various rhetorical modes. Basic rules of grammar are reviewed and more advanced rules are introduced.

MATHEMATICAL SCIENCES DIVISION

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

1. Computer Science 60 – Programming with ASP.NET and C# in Web-Based Computer Science Applications

Current Status/Proposed Change

Prerequisite: Computer Science 2, 3, 4 or 30 with a minimum grade of C in prerequisite or equivalent

No Transfer CSU Proposed Transfer CSU

Recommendation:

Prerequisite: Computer Science 2, 3, 4 or 30 with a minimum grade of C in prerequisite or equivalent

Proposed Transfer CSU

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

1. Mathematics 111 – Mathematics for Elementary School Teachers – Geometry, Probability and Statistics

Current Status/Proposed Change

Prerequisite: Mathematics 60 with a minimum grade of C or equivalent; <u>and</u> Mathematics 70 73 or Mathematics 80 with a minimum grade of C <u>in prerequisite</u> or equivalent

Recommendation:

Prerequisite: Mathematics 60 with a minimum grade of C or equivalent; and Mathematics 73 or Mathematics 80 with a minimum grade of C in prerequisite or equivalent

2. Mathematics 170 - Trigonometry

Current Status/Proposed Change

Prerequisite: Mathematics 60 <u>and Mathematics 80</u> with a minimum grade of C <u>in prerequisite</u>, and Mathematics 70 73 with a minimum grade of C or qualification by testing (El Camino College Mathematics Placement Test) and assessment

Recommendation:

Prerequisite: Mathematics 60 and Mathematics 80 with a minimum grade of C in prerequisite, or qualification by testing (El Camino College Mathematics Placement Test) and assessment

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

1. Mathematics 120 – Nature of Mathematics

Current Status/Proposed Change

Prerequisite: Mathematics 70 73 or Mathematics 80 with a minimum grade of C in prerequisite or qualification by testing (El Camino College Mathematics Placement Test) and assessment

This course surveys general ideas and concepts of mathematics, including alternate and ancient numbering systems, inductive and deductive reasoning, geometries, mathematics of finance, set theory, probability, statistics, voting systems, logic, and mathematics of finance types of geometries.

Recommendation:

Prerequisite: Mathematics 73 or Mathematics 80 with a minimum grade of C in prerequisite or qualification by testing (El Camino College Mathematics Placement Test) and assessment

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

2. Mathematics 130 – College Algebra

Current Status/Proposed Change

Prerequisite: Mathematics 70 73 or Mathematics 80 with a minimum grade of C in prerequisite, or qualification by testing (El Camino College Mathematics Test) and assessment

Topics covered iIn this course, include linear and quadratic equations and inequalities; students will explore polynomial, radical, rational, exponential, and logarithmic functions and their graphs; as well as sequences, and series, combinatorics, and the Binomial Theorem.

Recommendation:

Prerequisite: Mathematics 73 or Mathematics 80 with a minimum grade of C in prerequisite, or qualification by testing (El Camino College Mathematics Test) and assessment

In this course, students will explore polynomial, radical, rational, exponential, and logarithmic functions and their graphs, as well as sequences, series, combinatorics, and the Binomial Theorem.

3. Mathematics 140 – Finite Mathematics for Business and Social Sciences *Current Status/Proposed Change*

Prerequisite: Mathematics 70 73 or Mathematics 80 with a minimum grade of C <u>in</u> <u>prerequisite</u> or qualification by testing (El Camino College Mathematics Placement Test) and assessment

This course consists of a study of equations, the Gauss-Jordan method, matrices, linear programming (from a geometrical approach), logic sets, eounting, combinatorics,

probability, probability distributions, Bayes' theorem, random variables, descriptive statistics, and Markov chains, and game theory.

Recommendation:

Prerequisite: Mathematics 73 or Mathematics 80 with a minimum grade of C in prerequisite or qualification by testing (El Camino College Mathematics Placement Test) and assessment

This course consists of a study of the Gauss-Jordan method, matrices, linear programming from a geometrical approach, logic sets, combinatorics, probability, Bayes' theorem, random variables, descriptive statistics, and Markov chains.

NEW DISTANCE EDUCATION COURSE VERSIONS FOR EXISTING COURSES

- 1. Mathematics 120 Nature of Mathematics (Online)
- 2. Mathematics 130 College Algebra (Online)

COURSE REVIEW; CHANGE IN CATALOG DESCRIPTION

1. Mathematics 210 – Introduction to Discrete Structures *Current Status/Proposed Change*

This course is a study of blends mathematical ideas and techniques to analyze reasoning, combinatorial analysis, discrete structures, algorithmic thinking and modeling to study the problems and algorithms which that occur in Computer Sscience and mathematics. Topics covered include: logic, sets, algebra, proofs, functions, algorithms, the integers, mathematical induction, elementary matrix algebra, mathematical reasoning, combinatorics, recurrence relations, relations, number theory, counting, graphs and trees.

Recommendation:

This course blends mathematical reasoning, combinatorial analysis, discrete structures, algorithmic thinking and modeling to study the problems that occur in computer science and mathematics. Topics covered include: logic, sets, proofs, functions, relations, number theory, counting, graphs and trees.

NATURAL SCIENCES DIVISION

COURSE REVIEW

- 1. Chemistry 21A Survey of General and Organic Chemistry
- 2. Chemistry 21B Survey of Organic and Biochemistry
- 3. Geography 6 Physical Geography Laboratory
- 4. Physics 1A Mechanics of Solids

5. Physics 1B – Fluids, Heat, and Sound

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

1. Geography 8 – Introduction to Geographic Information Systems

Current Status/Proposed Change

Recommended Preparation: basic computer skills

No Transfer UC Proposed Transfer UC

Recommendation:

Recommended Preparation: basic computer skills

Proposed Transfer UC

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

1. Microbiology 33 – General Microbiology

Current Status/Proposed Change

Prerequisite: Biology 10 or Anatomy 30 or Anatomy 32 or Physiology 31 or Anatomy and Physiology 34A; equivalent; and Chemistry 4 or Chemistry 20 or Chemistry 1A or Chemistry 21A or equivalent with a minimum grade of C in prerequisite

This course is a study of microbial anatomy and physiology, classification, microbes in water, air, soil, food, sewage, and medical aspects of microbiology. It also includes the study of fundamental techniques in the growth, culture, and identification of microorganisms. It also includes the study of microbial anatomy and physiology, elassification, microbes in water, air, soil, food, sewage and medical aspects of microbiology. Laboratory experiments are performed by students to reinforce principles of microbiology discussed in lecture. This course is designed for students planning to pursue careers in the health related and pre-professional sciences or other life sciences. majors.

Recommendation:

Prerequisite: Biology 10 or Anatomy 30 or Anatomy 32 or Physiology 31 or Anatomy and Physiology 34A; and Chemistry 4 or Chemistry 20 or Chemistry 1A or Chemistry 21A or equivalent with a minimum grade of C in prerequisite

This course is a study of microbial anatomy and physiology, classification, microbes in water, air, soil, food, sewage, and medical aspects of microbiology. It also includes the study of fundamental techniques in the growth, culture, and identification of microorganisms. Laboratory experiments are performed by students to reinforce principles of microbiology discussed in lecture. This course is designed for students planning to pursue careers in the health sciences or other life sciences.

COURSE REVIEW; CHANGE IN CATALOG DESCRIPTION

1. Physics 1C – Electricity and Magnetism

Current Status/Proposed Change

This course details the mathematical and physical description of Coulomb's Law, electric field and potential, Gauss's Law, DC circuit analysis with Ohm's Law and Kirchhoff's Law, AC circuit analysis with phase diagrams, elementary electronics, capacitance, magnetic fields and their effect of on moving charges and currents, magnetic fields produced by various current configurations, induced voltage, emf, mutual and self-inductance, basic theory of dielectrics, magnetic properties of materials and Maxwell's Equations in integral and differential form.

Recommendation:

This course details the mathematical and physical description of Coulomb's Law, electric field and potential, Gauss's Law, DC circuit analysis with Ohm's Law and Kirchhoff's Law, AC circuit analysis with phase diagrams, elementary electronics, capacitance, magnetic fields and their effect on moving charges and currents, magnetic fields produced by various current configurations, induced emf, mutual and self-inductance, basic theory of dielectrics, magnetic properties of materials and Maxwell's Equations in integral and differential form.

2. Physics 1D – Optics and Modern Physics

Current Status/Proposed Change

This is a calculus-based course details the mathematical and physical description of geometrical which covers geometric optics, which includes including reflection and refraction at plane and spherical surfaces, prisms, lenses, mirrors, and simple optical instruments, and photometry and physical optics, which includes including polarization, interference, diffraction, and introduction to introductory electromagnetic wave theory. Also included in this course is The modern physics which portion of this course covers special relativity, the particle nature of light, wave property properties of a particles, the Schrödinger equation, atomic physics and spectra, and nuclear physics., and fission and fusion.

Recommendation:

This is a calculus-based course which covers geometric optics, including reflection and refraction at plane and spherical surfaces, prisms, lenses, mirrors, and simple optical instruments, and physical optics, including polarization, interference, diffraction, and introductory electromagnetic wave theory. The modern physics portion of this course covers special relativity, the particle nature of light, wave properties of particles, the Schrödinger equation, atomic physics and spectra, and nuclear physics.

3. Physics 12 – Laboratory for Introductory Physics

Current Status/Proposed Change

This <u>laboratory</u> course is designed to give the student an opportunity to check experimentally <u>reinforce</u> some of the fundamental concepts of physics studied in <u>Introductory</u> Physics <u>11</u>.

Recommendation:

This laboratory course is designed to give the student an opportunity to experimentally reinforce some of the fundamental concepts of physics studied in Physics 11.