

SENATE RESOLUTION 21-01

Motion: to approve the Bachelor of Arts in Liberal Studies

Passed at the November 13, 2001 meeting of the Academic Senate

APPROVALS:


Date: 12/14/01
Dennis Muraoka
Chair, Academic Senate


Date: 12/19/01
Richard Rush
President, CSU Channel Islands

PROPOSAL TO OFFER A NEW ACADEMIC PROGRAM/ MAJOR IN FALL 2002
(LONG FORM)

Proposed Name of Degree: Bachelor of Arts in Liberal Studies

Options/ Emphases in the Degree: Option 1. Interdisciplinary Program
Option 2. Concentrated Studies
Option 3. Teaching and Learning

Faculty Proposing New Program: William H. Adams, Frank Barajas (Chair), Lillian Vega-Castaneda, William Cordeiro, Ivona Grzegorzcyk, Jacquelyn Kilpatrick, Joan Karp, Jack Reilly, Kevin Volkan

Review and Approval:

1. **Curriculum Committee Approval:**

Curriculum Chair: W. H. Adams Date: 11/3/01

2. **Academic Senate Approval:**

Chair, Academic Senate: Devi Kumar Date: 11/4/01

3. **Administration Approval:**

President (or designee): Richard A. Lee Date: 12/19/01

PROCEDURE FOR SUBMITTING PROPOSALS FOR NEW DEGREE MAJOR PROGRAMS

A campus, in accordance with its approved academic master plan, submits detailed proposals for new degree major programs to the Office of Academic Program Planning for review and approval in the academic year preceding projected implementation. Approval of any degree major program is subject to campus assurances that financial support, qualified faculty, physical facilities and library holdings sufficient to establish and maintain the program will be available within current budgetary support levels. The proposal must follow the format below, and four copies should be sent to Academic Program Planning, Office of the Chancellor.

1. Definition of the Proposed Degree Major Program

- a. Name of the campus submitting the request, the full and exact designation (degree terminology) for the proposed degree major program, and academic year of intended implementation.

California State University Channel Islands
Bachelor of Arts in Liberal Studies
Fall 2002

- b. Name of the department, departments, division or other unit of the campus that would offer the proposed degree major program. Identify the unit that will have primary responsibility.

Academic Affairs

- c. Name, title, and rank of the individual(s) primarily responsible for drafting the proposed degree major program.

Liberal Studies Program Committee:

William Hampton Adams, PhD, Associate Professor

Frank P. Barajas (Chair), PhD, Assistant Professor

Lillian Vega-Castaneda, EdD, Professor

William P. Cordeiro, PhD, Professor

Ivona Grzegorzczak, PhD, Associate Professor

Philip Hampton, PhD, Associate Professor

N. Jacquelyn Kilpatrick, PhD, Associate Professor

Joan M. Karp, PhD, Professor

Jack Reilly, MFA, Professor

Kevin Volkan, PhD, EdD, Associate Professor

- d. Objectives of the proposed degree major program.

In addition to the traditional objective of preparing teachers, the CSUCI Liberal Studies Program intends to give students the opportunity to experience knowledge, which resides at the intersection of traditional areas of study. This program also seeks to give students the opportunity for more in-depth study in a specific discipline under the direct tutoring of a faculty mentor. Upon graduation it is expected that Liberal Studies graduates will have a number of excellent career options including:

- becoming teachers with a multiple subject credential
- entering positions in public and private organizations
- entering into graduate and professional programs.

Total number of units required for the major. List of all courses, by catalog number, title, and units of credit, to be specifically required for a major under the proposed degree program. Identify those new courses that are (1) needed to initiate the program and (2) needed during the first two years after implementation. Include proposed catalog descriptions of all new courses.

120 Semester units required for the major.

Since CSUCI will only begin admitting students in Fall 2002, all courses are new and will be needed to initiate the program. These courses will be offered during the first two years (and subsequent years) after program implementation. See the following pages for Courses and Catalog Descriptions.

Courses required for the Liberal Studies Degree

Liberal Studies Core by Area and Capstone (36 units)

For the *Interdisciplinary Option* and the *Concentrated Studies Option* a minimum of 3 units is required in each subject area listed below. For the *Teaching and Learning Option* specific core courses will be required. Please see the section below describing the Teaching and Learning Option for more detail. Course descriptions for the Liberal Studies Core are listed in Appendix A.

A.	Reading, Literature & language.	3
B.	History & Social Sciences	3
C.	Mathematics	3
D.	Science.....	3
E.	Visual Arts.....	3
F.	Physical Education.....	3
G.	Human Development	3
H.	Humanities.....	3
I.	Multicultural Studies.....	3
J.	Performing Arts.....	3
K.	Computer Literacy	3

As a capstone experience for all options: 3 units are required from the following courses. Descriptions for these courses are in Appendix A.

LS 492 Service Learning/Internship (1-3)
LS 494 Independent Research (1-3)
LS 497 Directed Studies (1-3)
LS 499 Capstone Project (1-3)

- f. List of elective courses, by catalog number, title, and units of credit, which can be used to satisfy requirements for the major. Identify those new courses that are (1) needed to initiate the program and (2) needed during the first two years after implementation. Include proposed catalog descriptions of all new courses.

Since CSUCI will only begin admitting students in Fall 2002, all courses are new and will be needed to initiate the program. These courses will be offered during the first two years (and subsequent years) after program implementation. See the following pages for Courses and Catalog Descriptions.

Liberal Studies Options:

Students are required to choose one of the three Liberal Studies options.

Option 1. Interdisciplinary Option (21 units)

This option allows students to choose from the wide variety of interdisciplinary courses offered at CSUCI. In addition to the Liberal Studies Core Courses, student choosing this option are required

to take 21 units of interdisciplinary courses. Students select 21 units from among upper division courses (300-400 level courses). Course descriptions for the Liberal Studies *Interdisciplinary Option* are listed in Appendix A. Note that courses counted for the 21 units for this option cannot be double counted for General Education credit.

- ANTH 320. World Cultures: Peoples, Places, and Things (3)
- ANTH 321. World Cultures: Ethnicity in the United States (3)
- ANTH 322. World Cultures: North America (3)
- ANTH 323. World Cultures: California to the 1850s (3)
- ANTH 324. World Cultures: African-American Culture History (3)
- ANTH 330. Ecology and the Environment (3-4)
- ANTH 331. Wars and Conflicts in the Modern World (3)
- ANTH 332. Population and Resource Constraints (3)
- ANTH 333. Civilizations of an Ancient Landscape (3)
- ANTH 335. American Ethnic Images in Novels and Film (3)
- ANTH 341. Culture and Personality (3)
- ANTH 343. Anthropology of Organizations (3)
- ANTH 345. Bioanthropology: Human Evolution and Diversity (3)
- ANTH 346. Scientific and Professional Ethics (3)
- ANTH 441. Space and Time: Cross-Cultural Perspectives (3)
- ANTH 443. Medical Anthropology: Cross-Cultural Perspectives on Health and Healing (3)
- ART 330. Critical Thinking in a Visual World (3)
- ART 331. Art and Mass Media (3)
- ART 332. Multicultural Art Movements (3)
- ART 333. History of Southern California Chicana/o Art (3)
- ART 334. The Business of Art (3)
- ART 335. American Ethnic Images in Novels and Film (3)
- ART 337. Psychology of Art and Artists (3).
- ART 430. Modern and Contemporary Art (3)
- ART 431. European Renaissance Literature and Art (3)
- ART 432. Arts of the Harlem Renaissance (3)
- ART 433. Women in the Arts (3)
- BIOL 100. General Biology (4)
- BIOL 200. Principles Of Organismal And Population Biology (4)
- BIOL 201. Principles Of Cell And Molecular Biology (4)
- BIOL 210. Human Anatomy And Physiology I (4)
- BIOL 211. Human Anatomy And Physiology II (4)
- BIOL 301. Microbiology (4)
- BIOL 302. Genetics And Evolution (3)
- BIOL 310. Animal Biology And Ecology (4)
- BIOL 311. Plant Biology And Ecology (4)
- BIOL 312. Marine Biology (4)
- BIOL 330. Ecology and the Environment (4)
- BIOL 331. Biotechnology in the Twenty-First Century (2)
- BIOL 332. Cancer and Society (2)
- BIOL 333. Emerging Public Health Issues (2)
- BIOL 344. Health Psychology (3)
- BIOL 346. Scientific and Professional Ethics (3)
- BUS 339. The Business of Art (3)
- BUS 340. Business and Money in the American Novel (3)
- BUS 343. Anthropology of Organizations (3)
- BUS 349. History of Business & Economics in North America. (3)
- BUS 424. Business in Its Social Setting (3)
- CHEM 100. Chemistry and Society (4)
- CHEM 110. Who Done it? An Introduction to Forensics (3)
- CHEM 121. General Chemistry I and Laboratory (4)

CHEM 122. General Chemistry II and Laboratory (4)
 CHEM 170. Physical Sciences for the Elementary School Teacher (4)
 CHEM 341. Drug Discovery and Development
 CHEM 343. Forensic Science
 CHEM 344. Energy and Society
 CHEM 346. Scientific and Professional Ethics (3)
 CHEM 349. Symmetry and Science (3)
 CHEM 430. Scientific Experimental Design and Data Analysis (3)
 ECON 340. Business and Money in the American Novel (3)
 ECON 342. History of Business and Economics in North America. (3)
 ENGL 337. Literature of the Environment (3)
 ENGL 339. Psychopathology in Literature (3)
 ENGL 340. Business and Money in the American Novel (3)
 ENGL 431. European Renaissance Literature and Art (3)
 ENGL 432. Arts of the Harlem Renaissance (3)
 GEOL 300. Foundations of Earth Science (4)
 GEOL 331. Environmental Geology
 HIST 331. History of Mathematics (3)
 HIST 333. History of Southern California Chicana/o Art (3)
 MATH 308. Modern Math for Elem Teachers (2) – Geometry, Probability and Statistics
 MATH 330. Mathematics for Artists (3)
 MATH 331. History of Mathematics (3)
 MATH 346. Scientific and Professional Ethics (3)
 MGT 346. Scientific & Professional Ethics (3)
 PSY 335. Psychology of Art and Artists (3)
 PSY 341. Culture and Personality (3)
 PSY 344. Health Psychology (3)
 PSY 441. Space and Time: Cross-cultural Perspectives (3)
 PSY 450. Neural Science (3)

GENERAL EDUCATION	48
TITLE V COURSES	6
LIBERAL STUDIES CORE	36
INTERDISCIPLINARY OPTION	21
UPPER DIVISION ELECTIVES	9
TOTAL UNITS	120

Option 2. Concentrated Studies Option (21 units)

This option allows a student to work closely with a faculty advisor to design a program of courses that enable a student to make a concentrated study in a specific discipline. Students select 21 units of coursework within a discipline or specified area of study with the help of a faculty advisor. This option will draw on courses throughout all CSUCI programs. For example, a student may concentrate in anthropology or psychology, two areas for which majors are planned in the future. A student may be able to also satisfy the requirements of a minor, if offered in that discipline. Students may draw upon the full breadth of courses offered at CSUCI. Course descriptions are available from the catalog.

GENERAL EDUCATION	48
TITLE V COURSES	6
LIBERAL STUDIES CORE	36
CONCENTRATED STUDIES OPTION ...	21

UPPER DIVISION ELECTIVES.....9
TOTAL UNITS 120

Option 3. Teaching and Learning Option

This option prepares students for the multiple subject teaching credential. Courses required under this option are set by CSUCI and state regulations governing credentialing of teachers. The following courses fulfill the California Commission on Teacher Credentialing standards for the subject matter preparation of teachers for Kindergarten to Grade 8 (Multiple Subject Credential). Core courses and options have been specified so that all of the California teacher preparation standards will be met. In addition to the listed courses, students must select nine units in a specified area of emphasis and a capstone course. Courses meeting both General Education and the Teaching and Learning Option may be counted as meeting both requirements.

GENERAL EDUCATION (48 units total)	25*
TITLE V COURSES 6
LIBERAL STUDIES TEACHING and LEARNING OPTION ...	89*
Reading, language and literature.....	15
History and Social Science.....	24
Mathematics.....	6
Science	15
Visual and Performing Arts.....	6
Physical Education and Health.....	5
Human Development, Learning, and Cognition.....	9
Emphasis	9
TOTAL UNITS.....	120

* 23 units of General Education are double counted within the Option.

1. Reading, language and literature (15 units)

- COMM 210 Interpersonal Communication (3)
- ENGL 100 Composition and Rhetoric (3)
- ENGL 312 Children's Literature (3)
- ENGL 315 Introduction to Language Structure and Linguistics (3)
- ENGL 475 Language in Social Context (3)

2. History and social science (24 units)

- HIST 211 World History Origins to 1500 (3)
- Or ANTH 333 Civilizations of an Ancient Landscape: World Archeology
- HIST 212 World History Since 1500 (3)
- HIST 270 The United States to 1877 (3)
- HIST 369 California History and Culture (3)
- Or ANTH 323 World Cultures: California to 1850s
- ECON 111 Principles of Macroeconomics (3)
- Or ECON 300 Fundamentals of Economics (3)
- ANTH 102 Cultural Anthropology (3)
- EDUC 101 Introduction to Education (3)
- EDUC 320 Education in Modern Society (3)

3. Mathematics (6 units)

- MATH 208 Modern Math for Elementary Teachers Numbers and Problem Solving (3)
- MATH 308 Modern Math for Elementary Teachers Geometry, Probability and Statistics (3)

4. Science (15 units)

GEOL 300 Foundations of Earth Science (4)
BIOL 201 Principles of Cell and Molecular Biology (4)
CHEM 170 Physical Sciences for the Elementary School Teacher (4)
COMP 101 Computer Literacy (3)

5. Visual and performing arts (6 units)

ART 100 Understanding Fine Art Processes (3)
Or ART 102 Children's Art Media and Methods (3)
MU 333 Varieties of Musical Experiences (3)
Or TH 333 Multicultural Drama (3)
Or TH 410 Shakespeare (3)

6. Physical education and health (5 units)

PE 302 Motor Learning, Fitness and Development in Children (3)
HLTH 322 Health for Educators (2)

7. Human development, learning and cognition (9 units)

PSY 200 Introduction to Psychology (3)
PSY 210 Learning, Cognition and Development (3)
SPED 123 Individuals with Disabilities in Society (3)

Emphasis (9 units)

Select 9 additional units to form an emphasis from among the following areas:

Reading, language and literature
History and Social Science
Mathematics
Science
Visual and Performing Arts
Physical Education and Health
Human Development, Learning, and Cognition

List of elective courses, by catalog number, title, and units of credit that can be used to satisfy requirements for the major. Identify those new courses that are (1) needed to initiate the program and (2) needed during the first two years after implementation (Complete Table 1). Include proposed catalog descriptions of all new courses.

Students majoring in Liberal Studies will draw on courses throughout all CSUCI programs to fulfill the elective requirement. Students may draw upon the full breadth of upper division (300-400 level) courses offered at CSUCI. Course descriptions are available from the catalog (see Appendix A). The 9 required elective units cannot be double-counted with General Education or other courses required for the Liberal Studies Major.

- g. If any formal options, concentrations, or special emphases are planned under the proposed major, explain fully.

The Liberal Studies program has three options described below:

Interdisciplinary Option – This option allows students to choose from the wide variety of interdisciplinary courses offered at CSUCI. In addition to the Liberal Studies Core Courses, student choosing this option are required to take 21 units of interdisciplinary courses.

Concentrated Studies Option – This option allows a student to work closely with a faculty advisor to design a program of courses that enable a student to make a concentrated study in a specific discipline.

Teaching & Learning Option – This option prepares students for the multiple subject teaching credential. Courses required under this option are set by CSUCI and state regulations governing credentialing of teachers.

Course prerequisites and other criteria for admission of students to the proposed degree major program, and for their continuation in it.

- h. Course prerequisites and other criteria for admission of students to the proposed degree major program, and for their continuation in it.

All courses are open to matriculated students of the University. Students must have declared themselves as majors in Liberal Studies and remain in good academic standing throughout their enrollment at CSUCI.

Explanation of special characteristics of the proposed degree major program, e.g., in terminology, units of credit required, types of course work, etc.

The Liberal Studies major is different from other programs in the university because it draws course work almost exclusively from other programs. This degree program allows students the opportunity to experience knowledge that resides at the intersection of traditional academic disciplines as well as the possibility of studying in depth in an area of particular interest. The options provide students with special interests a means for delving more in-depth into an area of study. This program also implements the distinguishing characteristics of all CSUCI programs: an interdisciplinary and service learning approach to higher education.

- j. For undergraduate programs, provisions for articulation of the proposed major with community college programs.

The creation of articulation agreements for Liberal Studies with community colleges is in progress. Liberal Studies will accept General Education Certification from community colleges. Articulation for courses in specific subject disciplines will be subject to the articulation agreements established by those disciplines. Other courses will be considered on a case-by-case basis. The development of articulation agreements will be addressed during 2002.

- k. Provision for meeting accreditation requirements, where applicable, and anticipated date of accreditation request.

No provisions are necessary for the Interdisciplinary Option and the Concentrated Studies Option beyond WASC standards. The faculty is preparing documents for specialty accreditation required by the Teaching and Learning Option, from the CA Commission of Teacher Credentialing.

2. Need for the Proposed Degree Major Program

- a. List of other California State University campuses currently offering or projecting the proposed degree major program; list of neighboring institutions, public and private, currently offering the proposed degree major program.

Most other CSU campuses offer a Bachelor of Arts in Liberal Studies. In addition, a number of nearby private institutions (e.g., California Lutheran, Azusa Pacific) offer the programs leading to the multiple subject teaching credential. The CSUN@CI Program offers liberal studies degree as well. The CSUCI program proposed here will continue to meet these needs of these students as the CSUN@CI Program phases out.

b. Differences between the proposed program and programs listed in Section 2a above.

The liberal studies program at CSUCI differs from other liberal studies programs offered statewide by its inclusion of the *Interdisciplinary Option* and *Concentrated Studies Option*. These options allow students much more flexibility and creativity in designing their path through the major than liberal studies programs at other campuses. It is also expected that this flexibility will better accommodate non-traditional students than the typical Liberal Studies majors found elsewhere. The *Teaching and Learning Option* is constrained by state regulations to have similar coursework at all institutions. However, the CSUCI *Teaching and Learning Option* will be different in that it specifically addresses the needs of the Channel Islands educational service area.

f. Professional uses of the proposed degree major program.

Liberal studies graduates are also in demand by for-profit, non-profit and government organizations. These graduates have been found to have flexible problem solving skills and breadth of knowledge allowing them to excel in positions that require rapid on-the-job acquisition of knowledge and experience.

Students in the *Concentrated Studies Option* will have an opportunity to study in-depth with specific faculty members. This option will appeal to students who want greater flexibility in designing their course of study or for non-traditional students who need the greater flexibility this degree offers in order to complete their education. It is also expected that some students in the *Concentrated Studies Option* will use the Liberal Studies Program to 'test the waters' of other degree programs and that this major will provide a jumping off point into the traditional majors. All options are expected to provide an excellent broad-based background for entry into professional or graduate programs.

Liberal Studies majors have traditionally gone on to teaching careers. The need for teachers who can draw from many areas of knowledge is especially acute and it is expected that graduates from the *Teaching and Learning Option* will be in high demand.

g. The expected number of majors in the year of initiation and three years and five years thereafter. The expected number of graduates in the year of initiation and three years and five years thereafter.

	<u>Number of Majors*</u>	<u>Number of Graduates</u>
Initiation Year	150	5
Third year	328	130
Fifth year	465	275

* Data extrapolated from CSUN at CI / FTES Enrollment Transition Plan, February 2001

3. Existing Support Resources for the Proposed Degree Major Program

a. Faculty members, with rank, appointment status, highest degree earned, date and field of highest degree, and professional experience (including publications if the proposal is for a graduate degree), who would teach in the program.

New hires for the 2002-2003 school year will be made in many disciplines contributing to the Liberal Studies major. In addition, the following faculty will contribute courses:

William H. Adams
Associate Professor of Anthropology

PhD in Anthropology, 1976
Anthropology Professor since 1976
Extensive experience teaching anthropology and conducting anthropological research in eight countries since 1971.

Frank Barajas

Assistant Professor of History
PhD in History 2001
History Professor since 1992
Experience in American history and multicultural education since 1992.

Lillian Vega Castaneda

Professor of Elementary Education
Ed.D. Teaching, Curriculum, and Learning Environments, 1989
Teacher, teacher educator, extensive training in ethnography and sociolinguistics, biliteracy and second language acquisition and learning.

William P. Cordeiro

Professor of Management
PhD in Executive Management, 1986
CSU Professor since 1988
Extensive experience as employee and consultant in private and public organizations since 1969.

Ivona Grzegorzcyk

Associate Professor of Mathematics
PhD in Mathematics, 1990
Mathematics Professor since 1992
Extensive experience in mathematics and its applications and mathematics education since 1982.

Philip Hampton

Associate Professor of Chemistry
PhD in Chemistry, 1989
Chemistry Professor since 1991
Extensive experience in interdisciplinary teaching & research

Joan M. Karp

Professor of Education
PhD in Special Education, 1982
Special Education professor since 1972
Experience in teaching children with disabilities and preparing educators since 1969

N. Jacquelyn Kilpatrick

Associate Professor English
PhD in English, 1996
English Professor since 1981
Extensive experience in British Literature, American Literature, and Integrative Studies, with a specialty in Native American Literature and Cultures.

Louise H. Lutze-Mann

Associate Professor of Biology
PhD in Biology, 1983
Biology Professor since 1994
Extensive experience in interdisciplinary teaching & research

Dennis Muraoka

Professor of Economics

PhD in Economics, 1981
CSU Professor since 1982
Extensive as employee and consultant in private and public sectors since 1975.

Jack Reilly
Professor of Fine Arts
Master of Fine Arts, 1977
CSU Professor since 1987
Extensive experience in museum and gallery exhibitions, public art and digital art technology since 1979.

Kevin Volkan
Associate Professor
PhD, 1991; EdD, 1987; MPH, 1998
Psychology professor since 1987
Extensive experience in interdisciplinary teaching & research

Ching-Hua Wang
Professor of Biology
PhD in Biology, 1986
Biology Professor since 1990
Extensive experience in interdisciplinary teaching & research

This program will require classroom space, library materials, library electronic databases and the use of Information Technology (IT) resources. The IT requirements will not be extensive—mainly PCs for faculty and student use and “smart classrooms” wired for PCs screen projections and Web-based instruction. There are no special laboratory needs.

The program assumes the development of campus resources for students, faculty and staff: parking, offices, food service, health services and key academic support resources (admission, advising, records, etc).

4. Additional Support Resources Required

- b. Any special characteristics of the additional faculty or staff support positions needed to implement the proposed program.**

Part time lecturers will be needed in a variety of subject areas. This is especially true for courses such as health and physical education required for the Teaching and Learning Option.

- c. The amount of additional lecture and/or laboratory space required to initiate and sustain the program over the next five years. Indicate any additional special facilities that will be required. If the space is under construction, what is the projected occupancy date? If the space is planned, indicate campus-wide priority of the facility, capital outlay program priority, and projected date of occupancy.**

The program will use the existing classroom space being used for “CSUN @ CI” as enrollments shift to CSUCI students. The need for space and lab facilities will grow with the needs of courses in each discipline that provides coursework for the Liberal Studies degree program.

- d. Additional library resources needed. Indicate the commitment of the campus to purchase or borrow through interlibrary loan these additional resources.**

We anticipate that the current library acquisition program will meet the needs of the Liberal Studies Program. The faculty is working with the Library staff to assure an appropriate level and subject distribution of library resources.

- e. Additional equipment or specialized materials that will be (1) needed to implement the program and (2) needed during the first two years after initiation. Indicate the source of funds and priority to secure these resource needs.

We anticipate that the current equipment acquisition program will meet the needs of the Liberal Studies Program.

1. Abstract of the Proposal and Proposed Catalog Description

Liberal Studies

The Liberal Studies program provides an education that allows students the opportunity to experience knowledge residing at the intersection of traditional areas of study. Students choose from three options; Interdisciplinary Program, Concentrated Studies, or Teaching and Learning.

Liberal Studies Interdisciplinary Option students will be in demand by corporations as well as non-profit and government organizations. These graduates will have flexible problem solving skills and breadth of knowledge allowing them to excel in positions that require rapid on-the-job acquisition of knowledge and experience.

Students in the Concentrated Studies Option will have an opportunity to study in-depth with a specific faculty member. This option will appeal to students who want greater flexibility in designing their course of study or for non-traditional students who need the greater flexibility this degree offers in order to complete their education. It is also expected that some students in the Concentrated Studies Option will use the Liberal Studies program to 'test the waters' of more other degree programs and that this major will provide a jumping off point into the traditional majors.

Liberal Studies majors have traditionally gone on to teaching careers. The need for teachers who can draw from many areas of knowledge is especially acute and it is expected that graduates from the Teaching and Learning option will be in high demand.

All Liberal Studies options will provide an excellent broad-based background for entry into professional and/or graduate programs.

In addition to the program options, all Liberal Studies students will choose from core courses in the following areas: Reading, Literature & Language, History & Social Science, Math, Science, Visual Arts, Physical Education, Human Development, Humanities, Multicultural Studies, Performing Arts, and Computer Literacy.

DEGREES OFFERED:

Bachelor of Arts in Liberal Studies

CREDENTIAL INFORMATION:

The Liberal Studies Teaching and Learning Option has been designed to meet the state-approved Multiple Subject Subject-Matter Preparation Program. Completion of Liberal Studies Option 3, a passing score on the MSAT, and completion of pre-requisite courses are required for entrance into CSUCI's Multiple Subject Credential Program. State-approval of the Multiple Subject-matter Preparation Program is pending. For more information about credential programs, please contact Professors Lillian Vega Castaneda or Joan Karp in the Education Program.

CONTACT INFORMATION

Frank Barajas, PhD, Assistant Professor of History

Phone: (805) 437-8862 Fax: (805) 437-8864

Web Page: <http://www.csuci.edu>

Email: frank.barajas@csuci.edu

REQUIREMENTS FOR THE BACHELOR OF ARTS DEGREE (Options 1&2):

GENERAL EDUCATION	48
TITLE V COURSES	6
LIBERAL STUDIES CORE	36
LIBERAL STUDIES OPTION.....	21
UPPER DIVISION ELECTIVES	9
TOTAL UNITS.....	120

LIBERAL STUDIES REQUIRED CORE COURSES for Options 1 & 2: (33 units):

Three units are required in each of the following areas:

Reading, Literature & language	3
History & Social Sciences	3
Mathematics	3
Science	3
Visual Arts.....	3
Physical Education	3
Human Development	3
Humanities	3
Multicultural Studies	3
Performing Arts	3
Computer Literacy	3

Students must have 3 units from some combination of these courses.

LS 492 Individual Research	1-3
LS 494 Service Learning/Internship	1-3
LS 497 Directed Studies	1-3
LS 499 Capstone Project	1-3

LIBERAL STUDIES OPTIONS REQUIRED COURSES (21 units):

Students must choose one Liberal Studies Option. :

Interdisciplinary Option – 21 units of interdisciplinary courses

Concentrated Studies Option– 21 units of concentrated study in a specific discipline with faculty guidance

Teaching & Learning Option– 90 total units of Multiple Subject Teaching Credential preparation. These units include General Education, Liberal Studies Core, Teaching and Learning Option, and Capstone Courses. The following courses fulfill the California Commission on Teacher Credentialing standards for the subject matter preparation of teachers, Kindergarten to Grade 8 (Multiple Subject Credential). **Core courses and options have been specified so that all of the California teacher preparation standards will be met.** In addition to the listed courses, students must select nine units in a specified area of emphasis and a capstone course. Courses meeting both General Education and the Teaching and Learning Option may be counted as meeting both requirements.

GENERAL EDUCATION (48 units total).....	25*
TITLE V COURSES 6
LIBERAL STUDIES TEACHING and LEARNING OPTION ...	89*
Reading, language and literature.....	15
History and Social Science.....	24
Mathematics.....	6
Science	15
Visual and Performing Arts.....	6
Physical Education and Health.....	5
Human Development, Learning, and Cognition.....	9
Emphasis	9
TOTAL UNITS	120

* 23 units of General Education are double counted within the Option.

1. Reading, language and literature

COMM 210 Interpersonal Communication (3)
ENGL 100 Composition and Rhetoric (3)
ENGL 312 Children's Literature (3)
ENGL 315 Introduction to Language Structure and Linguistics (3)
ENGL 475 Language in Social Context (3)

2. History and social science

HIST 211 World History Origins to 1500 (3)
Or ANTH 333 Civilizations of an Ancient Landscape: World Archeology
HIST 212 World History Since 1500 (3)
HIST 270 The United States to 1877 (3)
HIST 369 California History and Culture (3)
Or ANTH 323 World Cultures: California to 1850s
ECON 111 Principles of Macroeconomics (3)
Or ECON 300 Fundamentals of Economics (3)
ANTH 102 Cultural Anthropology (3)
EDUC 101 Introduction to Education (3)
EDUC 320 Education in Modern Society (3)

3. Mathematics

MATH 208 Modern Math for Elementary Teachers Numbers and Problem Solving (3)
MATH 308 Modern Math for Elementary Teachers Geometry, Probability and Statistics (3)

4. Science

GEOL 300 Foundations of Earth Science (4)
BIOL 201 Principles of Cell and Molecular Biology (4)
CHEM 170 Physical Sciences for the Elementary School Teacher (4)
COMP 101 Computer Literacy (3)

5. Visual and performing arts

ART 100 Understanding Fine Art Processes (3)
Or ART 102 Children's Art Media and Methods (3)
MU 333 Varieties of Musical Experiences
Or TH 333 Multicultural Drama (3)
Or TH 410 Shakespeare (3)

6. Physical education and Health

PE 302 Motor Learning, Fitness and Development in Children (3)
HLTH 322 Health for Educators (2)

7. Human development, learning and cognition

PSY 200 Introduction to Psychology (3)
PSY 210 Learning, Cognition and Development (3)
SPED 123 Individuals with Disabilities in Society (3)

Emphasis (9)

Select 9 additional units to form an emphasis from among the following areas:

Reading, language and literature
History and Social Science
Mathematics
Science
Visual and Performing Arts
Physical Education and Health
Human Development and Psychology

UNIVERSITY ELECTIVES (9 units):

Select from only 300 or 400 level courses

TOTAL UNITS IN THE MAJOR: 54 units

APPENDIX A

COURSES FOR LIBERAL STUDIES CORE

READING, LITERATURE & LANGUAGE

ENGL 120 American Literature I (3)

Prerequisite: Completion of lower division writing requirement or permission of instructor.

Study of major works of American literature from colonial times through 1850, with special attention to literary movements. Major writers will be addressed, as well as lesser known writers from various cultural and regional backgrounds.

ENGL 150 British and European Literature I (3)

Prerequisite: Completion of lower division writing requirement or permission of instructor.

Survey of major authors in English and European literature from earliest times to about 1650, with special emphasis on the intellectual backgrounds of the Medieval and Renaissance periods.

ENGL 220. American Literature II (3)

Prerequisite: Completion of lower division writing.

Study of major works of American literature from 1850 to the present, with special attention to literary movements. Major writers will be addressed, as well as lesser known writers from various cultural and regional backgrounds.

ENGL 250. British and European Literature II (3)

Prerequisite: Completion of lower division writing requirement.

Study of major works of English and European literature from approximately 1650 to the present, with special attention to various literary movements.

ENGL 312. Introduction to Children's Literature (3)

An inquiry into children's literature. Includes a survey of children's and adolescent literature. Students analyze narrative and expository texts. Questions raised in this course may include: What purpose does literature serve in the cultural life of a community? What are the cultural patterns and symbols found in rituals, mythologies and traditions? Focus will be on critical reading for K-12 students and analysis of the author's or narrator's perspective, in fiction and non-fiction works. Specific works studied will be representative of several genres, cultures, and periods of literature. Students understand and evaluate the use of elements of persuasive argument in print, speech, videos, and in other media.

ENGL 328 Mythology (3) (repeatable by topic)

Prerequisites: one writing course and one literature course.

Study of mythology and the influence it has had on literature, art, music, and the development of cultures. Course topics may include Classical Mythology, Eastern Mythology, Mythology of the Americas, Egyptian Mythology, and others.

ENGL 400 Contemporary Literature (3) (repeatable by topic)

Prerequisites: one writing course and one upper division literature course.

Survey of world trends in literature, possibly including fiction, non-fiction, poetry and/or drama. Specific topics vary from term to term; the class is therefore repeatable for credit.

HISTORY & SOCIAL SCIENCES

ANTH 102. Cultural Anthropology (3)

Three hours per week.

Prerequisites: None.

The study of recent and modern societies using a cross-cultural perspective, to gain an understanding on the range of human expression in culture and society. Issues discussed include ethnicity, gender, family structure, kinship, sex and marriage, socio-economic class, religion and the supernatural, language and culture, economics, political and social organization, art, and culture change.

GenED D.

ANTH 103. Human Beginnings: Biological and Cultural Evolution (3)

Three hours per week.

Prerequisites: None.

Human biological and cultural evolution from 5 million years ago to the present using archaeological and physical anthropology. How and when did we become human? What physical and cultural adaptations were necessary as we spread across the Earth? How did hunters and gatherers become sedentary horticulturalists and pastoralists? What role did humans play in the domestication of plants and animals?

GenED D.

ANTH 120. The World Eaters: Co-evolution of Human and Natural Systems (3)

Three hours per week.

Prerequisites: None.

Are natural systems real, or have humans so altered the Earth to meet our needs that no purely natural systems survive? This course examines the human impact on the environment from the discovery of fire to the present, using case studies from throughout the world, including fire farming in Australia, deforestation in Africa, Asia, and America; human role in faunal and floral extinctions through time.

Same as ESRM 120. GenED B2 and D.

ANTH 320. World Cultures: Peoples, Places, and Things (3)

Three hours per week.

Prerequisites: None.

This course examines the ethnology of cultures from throughout the world. Using archaeological, historical, and ethnographic sources, this course introduces the methods and theories used in placing comparative cross-cultural analysis in an ecological context. Focuses on issues of cultural history, environmental adaptations, political and economic systems, population, family, gender, religion, ideology, and contemporary issues in culturally distinct regions of the world.

GenED D.

ANTH 321. World Cultures: Ethnicity in the United States (3)

Three hours per week.

Prerequisites: None.

This course surveys the diversity of the United States from an historical perspective, tracing the various ethnic groups who came to the US and were variously assimilated. The myth of the American Melting Pot will be explored. Why did some groups

cast off their ethnicity (or did they really?) while others maintained their ethnic identity for generations?
Same as HIST 321. GenED D.

ANTH 322. World Cultures: North America (3)

Three hours per week.

Prerequisites: None.

This course examines the development of Native American peoples and cultures as they adapted to their environments. The environmental history of the last glacial and post-glacial periods will be examined to provide a backdrop for human history. Using archaeological, historical, and ethnographic sources, the culture history of these peoples will be traced from antiquity to the present, to provide the student with a broad context for understanding the region.

GenED D.

ANTH 323. World Cultures: California to the 1850s (3)

Three hours per week.

Prerequisites: None.

This course examines the development of Native American peoples and cultures in California as they adapted to the diverse environments there. The environmental history of the last glacial and post-glacial periods will be examined to provide a backdrop for human history. Using archaeological, historical, and ethnographic sources, the culture history of California's Native Americans will be traced from antiquity to the 1850s. The impact of Spanish exploration, colonization, and the mission system will be traced from the perspectives of both the Native Americans and their colonizers.

GenED D.

ANTH 324. World Cultures: African-American Culture History (3)

Three hours per week.

Prerequisites: None.

From the 16th century onward, Africans were brought to the United States and elsewhere to serve as laborers in chattel slavery. This course traces that history and explores how African-Americans adapted their cultures under slavery and following Emancipation to contribute to the development of America. The Civil Rights movement is traced from its beginnings to the present.

Same as HIST 324.

ANTH 331. Wars and Conflicts in the Modern World (3)

Three hours per week.

Prerequisites: None.

Cross-cultural perspectives on the development of the modern world in the future. Can the Earth sustain an American style culture for everyone? How do Third and Fourth World countries view the developed countries? Can conflicts over resources be resolved peacefully? This course exams war and terrorism in the context of resources and modernity.

GenED D.

ANTH 333. Civilizations of an Ancient Landscape: World Archaeology (3)

Three hours per week.

Prerequisites: None.

Traces the relationship between the physical geography and the development of ancient civilizations in Pre-Columbian America, Africa, Asia, and Europe, beginning with the post-glacial period and ending with the rise of feudalism in Europe and Japan. The change from hunting and gathering groups to sedentary agriculturalists and pastoralists giving rise to later complex social organizations. Art, architecture, science, religion, trade economic and social systems.

GenED D.

ANTH 335. American Ethnic Images in Novels and Film (3)

Three hours per week.

Prerequisites: None.

American Ethnic Images in Novels and Film examines the portrayal of ethnic groups from an interdisciplinary perspective that includes, but is not limited to, the literary, historical, and anthropological. The course highlights how artistic works have shaped the intellectual landscape of the United States as they relate to ethnic peoples.

Same as ENGL 335. GenED C2.

ANTH 341. Culture and Personality (3)

Three hours per week.

Prerequisites: None.

This course provides a cross-cultural perspective on the relationships between culture and personality. The nature/nurture debate is examined in different cultures. Is personality culture writ small? Team taught with psychology.

Same as PSCH 341 GenED D.

ANTH 343. Anthropology of Organizations (3)

Anthropological perspective on human organizations in terms of communication, spatial relations, product development, technology, marketing, group behavior. Explores principles of effectively organizing and directly work groups.

Same as BUS 343.

EDUC 101. Introduction to Education (3)

The elementary teaching profession; personal goals, teaching-learning environment, and career opportunities. Experiences that assist students gain accurate knowledge schooling in the 21st century. Field experience in elementary school programs of 2 hours per week required.

EDUC 320. Education in Modern Society (3)

Survey of educational institutions and practices used in different sectors of society. Historical and philosophical foundations of American education.

HIST 211. World History: Origins to 1500 (3)

This survey examines world civilizations beginning with Neolithic age. Topics include the development and growth of religions, economics, and other cultural institutions.

HIST 212. World History: Since 1500 (3)

This survey examines world civilizations from both regional and global perspectives. The intellectual, political, and cultural development of nations will be among the major themes of the course.

HIST 270. The United States to 1877 (3)

Survey of the political, social, economic as well as cultural institutions of the United States from the pre-colonial era to reconstruction. Issues of multiculturalism, race, sexuality, and gender frame many of the problems examined in the course.

HIST 271. The United States since 1865 (3)

Survey of the political, social, economic as well as cultural institutions of the United States from the gilded age to the present. Issues of multiculturalism, race, sexuality, and gender frame many of the problems examined in the course.

HIST 333. History of Southern California Chicana/o Art (3)

A survey of the Southern California Chicana/o culture exploring the genesis, vitality and diversity represented in the painting, sculpture and artistic traditions of Mexican American artists. Historical movements, politics, cultural trends and Mexican folklore underlying the development of this dynamic style of art will be investigated within a variety of contexts. Same as ART 333.

HIST 370. United States Colonial History (3)

Examines the European colonization of the United States from the 1600s to the French and Indian War. The transformation of social, political, and cultural institutions of Europe in North America are studied.

HIST 371. The Founding of the United States (3)

Study of the Revolutionary era and its influence on the constitution of the nation politically as well as socially.

HIST 372. United States Industrialization and Progressivism (3)

This course examines the nation's geographic and industrial expansion. Social and political problems are concurrently examined to the end of World War I.

HIST 369. California History and Culture (3)

Examines the cultural and institutional development of California prior to the 16th century and since.

HIST 401. United States Immigration History, 1840-1945 (3)

Traces the relationship of the entrance and restriction of immigrant groups with the development of the nation's industrial economy.

ECON 111. Principles of Macroeconomics (3)

Study of the workings of the economy. Topics include national income accounting, business cycles, employment and unemployment, inflation, economic growth, financial institutions, fiscal and monetary policy, international trade.

Note: This course has no prerequisites. It provides an introduction to capitalism and the American economy and world economies. It will be offered every semester.

ECON 300. Fundamentals of Economics (3)

Basic economic training for citizens who wish to exercise a reasoned judgment about economic issues in public affairs. Content generally same as ECON 110, 111 in condensed form. Not open to students with credit in ECON 110 or 111. Note: This course has no prerequisites. It is a one semester treatment of the two semester principles of economics sequence. As such, it focuses on both macro- and microeconomics.

PSY 341. Culture and Personality (3)

This course provides a cross-cultural perspective on the relationships between culture and personality. The nature/nurture debate is examined in different cultures. Is personality culture writ small? Team taught with Anthropology. Same as ANTH 341.

MATHEMATICS

MATH 108. Mathematical Thinking (3).

A course presents the diversity of mathematics and the spirit, in which it is employed in various situations, including different problem solving strategies, inductive- deductive reasoning, paradoxes, puzzles and mathematical modeling. The contributions of various cultures and influences of other disciplines are studied. At least one significant writing assignment is required.

MATH 140. or 150/151 Calculus (3)

Functions, limits, derivatives, integrals and their application are studied in problem solving context.

MATH 208. Modern Math for Elementary Teachers (1) - Numbers and Problem Solving

Current issues of modern math curriculum including abstract thinking and problem solving approaches to teaching. Content covers systems of numeration, nature of numbers and fundamental operations, relations and functions, properties of integers, rational and real numbers, and mathematical modeling. Problem solving strategies and geometric interpretations are stressed. Designed for students intending to teach in K-8.

MATH 230. Logic (3)

Introduction to modern deductive logic; includes abstract and number sets, relations, propositional logic- including common language cases, and theory of quantification.

MATH 233. Bio-statistics (3)

Introduction to modern statistical methods in biosciences, especially in studies of population and experimental data analysis. Topics include: sampling, data organizing, probability, various distributions, correlation and regression, statistical inference for means and proportions. Same as BIOL 233.

MATH 300. Fundamentals of Mathematics (3)

The course provides an introduction into the language and methods of higher mathematics. Sets, relations, functions, algebraic systems and other abstract ideas are discussed using axioms, definitions, propositions and proofs. Students are expected to write mathematical proofs, and communicate mathematical ideas clearly in written and oral form.

MATH 308. Modern Math for Elementary Teachers (2) - Geometry, Probability and Statistics

Current issues of modern math curriculum including abstract thinking and problem solving approaches to teaching. Content covers systems of geometry and geometric interpretation of real numbers, mathematical modeling, basic probability and statistics. Problem solving strategies are stressed. Designed for students intending to teach.

SCIENCE

ANTH 110. Who Done it? An Introduction to Forensics (3)

Three hours per week.

Prerequisites: None.

Interdisciplinary approaches to forensic science, with lectures based on Anthropology, Art, Biology, Chemistry, Computer Science, History, Literature, Physics, Psychology, Sociology. How have fictional detectives in novels, TV, and film reflected and influenced forensics? How have scientific and archaeological methods been incorporated into crime scene analysis? How have crimes been viewed and punished through time? How have different cultures defined crimes? How do forensic specialists identify forgeries in art, cartography, and documents? How have computer scientists contributed to forensics? How are cybercrimes solved? How do psychologists profile criminals? How do biologists use DNA, pollen, seeds, and insects to solve crimes? How do chemists and physicists analyze forensic materials?

Same as CHEM 110. GenED B1 & D.

ANTH 120. The World Eaters: Co-evolution of Human and Natural Systems (3)

Three hours per week.

Prerequisites: None.

Are natural systems real, or have humans so altered the Earth to meet our needs that no purely natural systems survive? This course examines the human impact on the environment from the

discovery of fire to the present, using case studies from throughout the world, including fire farming in Australia, deforestation in Africa, Asia, and America; human role in faunal and floral extinctions through time.

Same as ESRM 120. GenED B2 and D.

ANTH 345. Bioanthropology: Human Evolution and Diversity (3)

Three hours per week.

Prerequisites: None.

Human biological evolution from the African savannah of 5 million years ago to the present, focusing upon adaptation to environmental conditions, disease, diet. Includes segments on ecology, evolutionary theory, genetics, natural selection, non-human primates. Discusses the concept of race from an anthropological perspective. Includes issues of speciation and race, adaptation to cold, heat, desert, tropics, diseases. Compares ethnicity vs. race.

GenED B1.

ANTH 330. Ecology and the Environment (3-4)

Three hours lecture per week; three hours lab per week if enrolled for 4 credits.

Prerequisites: None.

Ecological characteristics of natural ecosystems and basic effects of human society upon those systems. Plant and animal distribution patterns in relation to past and present physical and biotic factors. Issues of resource management, population, food production, global environmental problems will also be emphasized to explore future directions. A standard lab fee is required.

Same as BIOL 330. GenED B1 & B2.

ANTH 332. Population and Resource Constraints (3)

Three hours per week.

Prerequisites: None.

This human ecology course places humans into the environment in historical and global contexts. Discusses systems theory as it applies to human adaptation to the environment. Studies the relations between political power, ideology, and resources, integrating concepts from ecology with those from social sciences. Theories and forecasts of human population growth and migration among regions and cultures. Social and environmental impacts of population and age distribution. Natural resource constraints on growth. Topics from land development, resource planning, environmental quality, politics, economic growth, conflicts and wars.

GenED B2 & D.

BIOL 100. General Biology (4)

An introduction to organismal biology, including the diversity, structure, and function of prokaryotes, protists, fungi, plants, and animals. Also includes the principles of evolution, ecology and population biology. No credit given toward the biology major. Weekly three-hour lectures and three-hour laboratories. A standard lab fee is required.

BIOL 200. Principles Of Organismal And Population Biology (4)

An introduction to organismal biology, including the diversity, comparative structure, organ system function, development, phylogeny, taxonomy and systematics of prokaryotes, protists, fungi, plants, and animals. Discussion of the principles of evolution including speciation and natural selection, the environmental impact and ecosystem interaction of plants and animals, the behavior of animals, population genetics and population biology. Weekly three-hour lectures and three-hour laboratories. A standard lab fee is required.

BIOL 201. Principles Of Cell And Molecular Biology (4)

Prerequisite: CHEM 121; BIOL 200 with "C" or better grade for biology majors. (No prerequisite for students in Liberal Studies, Teaching and Learning Option.)

This course will cover principles and applications of basic chemistry, biological macromolecules, prokaryotic and eucaryotic cell structure and function, homeostasis, metabolism including both respiration and photosynthesis, cell cycling, signal transduction, Mendelian genetics, molecular genetics including transcription and translation, and a brief introduction to virology and immunology. The philosophy of science, scientific method and experimental design are foundational to the course. Weekly three-hour lectures and three-hour laboratories. A standard lab fee is required.

BIOL 210. Human Anatomy And Physiology I (4)

Prerequisite: BIOL 100.

Gross and microscopic anatomy and organ system of human body with integrated physiological functions of the nine body organ systems studied from organ system through cellular levels of organization including basic chemistry, cell metabolism, acid-base relationships, membrane function, basic genetics, alleles and inherited disorders. No credit given toward the biology major. Weekly three-hour lectures and three-hour laboratories. A standard lab fee is required.

BIOL 211. Human Anatomy And Physiology II (4)

Prerequisite: BIOL 210.

Continuation of BIOL 210. No credit given toward the biology major. Weekly three-hour lectures and three-hour laboratories. A standard lab fee is required.

BIOL 301. Microbiology (4)

Prerequisites: CHEM 122; BIOL 201 with "C" or better grades.

Study of microorganisms of the environment, including disease-causing organisms, their structures and functions and their interactions to their host animals and the environment. Weekly three-hour lectures and two one-and-a-half hour-laboratories. A standard lab fee is required.

BIOL 302. Genetics And Evolution (3)

Prerequisites: CHEM 122; BIOL 201 with "C" or better grades.

Principles of classical transmission genetics, population genetics and evolution, with an introduction to modern molecular genetics. Weekly three-hour lectures.

BIOL 310. Animal Biology And Ecology (4)

Prerequisites: BIOL 100 or BIOL 201.

Animal adaptation and diversity and their relationship to the development of evolutionary theory and the environment. Identification of common invertebrate and vertebrate animals. No credit given toward the biology major. Weekly three-hour lectures and three-hour laboratories with periodic field trips in local ecosystem and its animals. A standard lab fee is required.

BIOL 311. Plant Biology And Ecology (4)

Prerequisite: BIOL 100 or BIOL 201.

A general introduction of diverse structures and functions of plants and their relationship to the environment. Identification of common, local native plants and plant communities, uses of native plants by Native Americans, and human and environmental impacts on native plant communities. No credit given toward the biology major. Weekly three-hour lecture and three-hour laboratories with periodic field trips. A standard lab fee is required.

BIOL 312. Marine Biology (4)

Prerequisite: BIOL 201.

Overview of complexity of marine life including marine plants and animals and the processes that underlie their distribution and abundance in open oceans, coastal regions, estuaries, and wetlands. Diverse interactions of organisms in the intertidal

zone, over the continental shelves and in the open oceans. Weekly three-hour lectures and three-hour laboratories with periodic field trips. A standard lab fee is required.

BIOL 330. Ecology And The Environment (4)

Ecological characteristics of natural ecosystems and basic effects of human society upon those systems. Plant and animal distribution patterns in relation to past and present physical and biotic factors. Issues of resource management, population, food production, global environmental problems will also be emphasized to explore future directions. Weekly three-hour lectures and three-hour laboratories, including periodic field trips. A standard lab fee is required. (Same as ANTH 330)

BIOL 346. Scientific And Professional Ethics (3)

Discussion of ethical issues and societal challenges derived from scientific research and professional activities. Examines the sources, fundamental principles, and applications of ethical behavior; the relationship between personal ethics and social responsibility of organizations; and the stakeholder management concept. Applies ethical principles to different types of organizations: business, non-profits, government, health care, science/technology, and other professional groups. Topics also include integrity of scientific research and literature and responsibilities of scientists to society, intellectual property, ethical practices in professional fields, ethical dilemmas in using animal or human subjects in experimentation, gene cloning, animal cloning, gene manipulation, genetic engineering, genetic counseling, and ethical issues of applying biotechnology in agricultural fields. Emphasizes cases to explore ethical issues. Weekly three-hour lectures and discussions. (Same as MGT 346)

CHEM 100. Chemistry and Society (4)

An introduction to the basic principles of chemistry and a consideration of the benefits and problems arising from applications of chemistry. Discussions of foods and food additives, drugs, plastics and other materials of everyday life, fuel sources, the atmosphere, and fresh water. Suitable for general education credit. Three hours of lecture and three hours of laboratory. A lab fee is required. Intended for the non-chemistry major.

CHEM 110. Who Done it? An Introduction to Forensics (3)

Interdisciplinary approaches to forensic science, with lectures based on Anthropology, Art, Biology, Chemistry, Computer Science, History, Literature, Physics, Psychology, Sociology. How have fictional detectives in novels, TV, and film reflected and influenced forensics? How have scientific and archaeological methods been incorporated into crime scene analysis? How have crimes been viewed and punished through time? How have different cultures defined crimes? How do forensic specialists identify forgeries in art, cartography, and documents? How have computer scientists contributed to forensics? How are cybercrimes solved? How do psychologists profile criminals? How do biologists use DNA, pollen, seeds, and insects to solve crimes? How do chemists and physicists analyze forensic materials? Cross-listed as ANTH 110. Intended for the non-chemistry major.

CHEM 121. General Chemistry I and Laboratory (4)

Prerequisite: A passing score on the Chemistry Placement Examination or credit in CHEM 100 within the preceding year. One year of high school chemistry is strongly recommended. An introductory chemistry course which provides an overview of the chemical and physical behavior of matter with a focus on qualitative and quantitative general inorganic, physical, and analytical chemistry. Three hours of lecture and one three-hour laboratory each week. Laboratory fee required.

CHEM 122. General Chemistry II and Laboratory (4)

Prerequisites: CHEM 121 with a grade of C or better.

This is an introductory chemistry course which provides an overview of the chemical and physical behavior of matter with a focus on quantitative general inorganic, physical, and analytical chemistry including kinetics and thermodynamics of reactions, gas phase and solution equilibria, and qualitative aspects of radiochemistry, organic chemistry, and polymer chemistry. Three hours of lecture and three hours of laboratory each week. Laboratory fee required.

CHEM 170. Physical Sciences for the Elementary School Teacher (4)

Designed to provide K-6 elementary school teachers with an understanding of the physical sciences (Chemistry and Physics) with a focus on (1) the structure and properties of matter and (2) the principles of motion and energy. The areas covered in this course include the physical properties of solids, liquids, and gases; physical and chemical changes in matter; atomic theory and the periodic table; the principles of motion and energy; forces and the motion of particles; sources and transformations of energy including heat, electricity, magnetism, light, and sound; renewable and non-renewable energy sources; and the conservation of energy resources. Three hours of lecture with a discovery-based approach and three hours of a laboratory that focuses on demonstrations for the K-6 classroom. Laboratory fee required. Intended for the non-chemistry major.

CHEM 341. Drug Discovery and Development (3)

How are drugs discovered? What determines the price for a drug? What is the difference between a generic and non-generic drug? These questions will be examined with an interdisciplinary approach. Topics to be covered may include the isolation of compounds from natural sources, the screening of compounds for biological activity, structure-activity relationships of drugs, computer-assisted drug design, combinatorial chemistry, bioinformatics, the FDA approval process for new drugs, and the economic and business aspects of pharmaceutical development. Three hours of lecture each week.

CHEM 343. Forensic Science (3)

A survey of the various chemical and biological techniques used in obtaining and evaluating criminal evidence. Topics include: chromatography; mass spectrometry (LC-MS, GC-MS); atomic absorption, IR, UV, fluorescence, and X-ray spectroscopy; fiber comparisons; drug analysis; arson/ explosive residue analysis; toxicological studies; psychological profiling; blood typing; DNA analysis; population genetics; firearm identification; and fingerprint analysis. Two hours of lecture and one hour of laboratory each week. A lab fee is required. Same as BIOL 343; students may not receive credit more than once for this cross-listed course. Intended for the non-chemistry major.

CHEM 344. Energy and Society (3)

Survey of the physical, chemical, and engineering principles involved in the production of energy from current and potential sources and the economical, environmental, and political issues surrounding energy production. The course will also examine factors that influence worldwide energy policy. Examples of topics that may be included in this course include fossil fuels, solar energy, biomass, fuel cells, and nuclear (fission and fusion) processes. Three hours of lecture each week. Intended for the non-chemistry major.

GEOL 101. Physical Geology (3)

This course examines the basic composition of the Earth and the dynamic forces which have altered the Earth's surface through time, including sedimentation, erosion, volcanism, earthquakes, plate tectonics, and mountain-building. Students will gain an

appreciation for the immense processes affecting their environment.

GEOL 102. Historical Geology (3)

This course focuses upon the geological history of the Earth and the Solar System from the origin of the cosmos to the explosion of Mt. St. Helens, tracing the evolution of the continents and ocean basins, and the broad development of plants and animals through time. Surveys events in Earth's past of relevance to present environmental issues.

GEOL 300. Foundations of Earth Science (4)

Prerequisites: CHEM 170. An analysis of the Earth's physical systems and the solar system/ universe. Selected topics include climates of the world, minerals and rocks, flood hazards, aspects of physical oceanography, plate tectonics, natural resources, and the motion of planets and planetary bodies. Three hours lecture and one three-hour lab a week. Meets General Education category B2.

GEOL 327. Oceans and the Global Environment (3)

Oceanography is explored to present the student with an understanding of the interrelationship between oceans and global climate. Other topics include marine geology, plate tectonics, evolution of ocean basins, coastal erosion and sea level changes, energy resources.

GEOL 321. Environmental Geology (3)

Interrelationships between human and natural geologic hazards: tsunami, earthquakes, landslides, subsidence, volcanoes. Explores environmental impact of resource extraction and usage. Importance of understanding the geologic processes and landscape in land use planning. Means of using geology to minimize conflicts in resource management and disaster preparation.

PHYS 200. General Physics I (4)

Prerequisites: MATH 150

An introduction to the properties of matter, classical mechanics, wave motion and thermal physics. Three hours of lecture and three hours of laboratory each week. Laboratory fee.

PHYS 201. General Physics II (4)

Prerequisites: PHYS 200

An introduction to electromagnetic theory, light, and atomic and nuclear physics. Three hours of lecture and three hours of laboratory each week. Laboratory fee.

development of Western artistic traditions. Three hours lecture per week.

ART 111. Renaissance to Contemporary Art (3)

Survey of the history of art and architecture from the European Renaissance through contemporary times. Cultural and conceptual contexts will examine the evolution of the art object as a form of Western cultural expression. Three hours lecture per week.

ART 112. Arts of the Eastern World (3)

Survey of the painting, architecture and crafts of India, China, Japan and Southeast Asia. An examination of artistic, cultural, and historical events explore the exchange of influences and ideas related to Eastern cultures. Three hours lecture per week.

ART 330. Critical Thinking in a Visual World (3)

A critical look at subjective responses and objective reasoning in the assessment of visual images that permeate every day aspects of contemporary life. Comparative studies evaluate psychological impact of corporate logos, religious iconography and secular symbolism. The genesis of cultural icons are investigated from a historical perspective in relationship to their role in a global society. Three hours lecture per week.

ART 331. Art and Mass Media (3)

The study of synergetic relationships between visual art and human communication dating back to the roots of civilization. Comparative studies in art and communication link ancient traditions to the development of contemporary mass media including print, photography, film, television and the internet.

ART 332. Multicultural Art Movements (3)

A survey of the arts and crafts originating in African, Asian, Latin American, Middle Eastern and Native American cultures. Emphasis is on the understanding of traditions and historical contexts as well as the exploration of random intersections of indigenous methods and aesthetics. Three hours lecture per week.

ART 430. Modern and Contemporary Art (3)

From nineteenth century Impressionism, through twentieth century Cubism, Expressionism and Pop Art, this course explores the gamut of concepts, periods, trends, and "isms" culminating in international Post Modernism and New Genre art of the twenty-first century. Three hours lecture per week.

ART 431. European Renaissance Literature and Art (3)

Prerequisite: Upper division standing.

The study of literary and artistic works produced in Europe and England in the fifteenth and sixteenth centuries. This "re-birth" of the human spirit is viewed from historical, philosophical and aesthetic perspectives, emphasizing the relationship between literary and artistic traditions found in Renaissance literature and visual art forms. Same as ENGL 431. Three hours lecture per week.

ART 432. Arts of the Harlem Renaissance (3)

Prerequisite: Upper division standing.

Study focusing on the dramatic upsurge of creativity in art, music and literature resulting from social and political undercurrents in the African American cultural revolution in New York during the 1920s. Historical geneses and subsequent artistic legacies will be also be explored. Same as ENGL 432. Three hours lecture per week.

ART 433. Women in the Arts (3)

Prerequisite: Upper division standing.

An investigation into the historical roles and influences of women artists in Western and non-Western traditions. Women as subject matter in painting, sculpture, photography, film and video will be explored as related to artistic, social, historical and political issues.

VISUAL ARTS

ART 100. Understanding Fine Arts Processes (3)

(Not available for Fine Arts major credit).

Entry level experience for the non major. This course integrates elements of drawing, painting, sculpture and mixed media techniques. Students gain an understanding of the function of the Fine Arts in everyday life through participation in the artistic process.

ART 102. Children's Art Media and Methods (3)

Hands-on creation of artistic projects emphasize the importance of art in the child's development. Projects explore basic concepts and materials leading to the student's development of primary skills and an aesthetic appreciation for the creative process. Two hours lecture and two hours laboratory per week.

ART 110. Prehistoric Art to the Middle Ages (3)

Survey of the history of art, artifacts and architecture from the Prehistoric era through the Gothic period. The examination of cultural and conceptual contexts will trace the early

PHYSICAL EDUCATION

PE 101. Walking for Health (1)

Knowledge of cardiovascular fitness, including walking as aerobic exercise. Physical development through cardiovascular training, muscle strengthening, and stretching.

PE 102. Seminar in Traditional Asian Martial Arts - Tai Ji (1).

Development of personal skills in traditional martial and health arts. Understanding history, cultural background, patterns, and strategies for participation in and effects on personal health.

PE 103. Yoga (1)

Development of personal skills in yoga. Understanding of effects on strength, flexibility and mind body connections.

PE 105. Zen of Surfing (1)

Exploration into the physiological and psychological benefits that result from human interaction with forces of nature. Students develop an increased understanding of the ocean and complex dynamics that underlie the sport of surfing. The interrelationship between physical activity and personal aesthetics are explored through weekly surfing activities.

PE 302. Motor Learning, Fitness and Development in Children (2)

Factors affecting motor learning; theories of learning and their application to the learning of physical skills; motor learning at beginning through advanced skill levels; health, fitness and activities for children; planning and teaching age appropriate developmental movement experiences.

HUMAN DEVELOPMENT

HLTH 322. Health for Educators (2)

Survey of school health programs with in-depth study of selected health education curricula and topic areas, including alcohol, tobacco, drugs, communicable diseases and nutrition. Development of strategies and methods for teaching controversial areas.

PSY 200. Introduction to Psychology (3)

The purpose of this course is to introduce the theories, research and applications that constitute the field psychology as it is broadly defined. Students will learn about the field of psychology through lectures, discussions, demonstrations, group activities, and multi-media presentations. Emerging issues in the field of psychology, what different types of psychologists do, and how to critically evaluate psychological literature will be covered.

PSY 210. Learning, Cognition and Development (3)

This course presents an overview of the theories of learning and human development. Major theories of learning and of psychological, emotional, and ethical development will be addressed across the lifespan from birth to old age, with consideration given to the application of these theories in real life setting such as schools and other organizations. Not open to Psychology Majors

PSY 212. Neurobiology and Cognitive Science (3)

Prerequisite. BIOL 100.

Principles of brain organization and function underlying behavior. Topics include neuroanatomy and physiology of language, vision, sexual behavior, memory and abnormal behavior. No credit given toward the biology or psychology major. Same as BIOL 212.

PSY 220. Human Sexual Behavior (3)

This course covers knowledge about the processes and variations in: sexual functions and reproduction; intimate relationships; sexual and gender role development and behavior; and the social, cultural, historical and moral contexts of sex and love. Psychopathology related to sexuality will also be examined and related to cultural definitions of deviance.

PSY 300. History of Psychology (3)

Prerequisites: Admission to the Psychology or Liberal Studies Major or permission of the instructor.

This course examines past and present understandings of human experience and how these evolved in to what is now known as the field of psychology. Areas covered include epistemology, traditional scientific and clinical methodologies, and behavioral, humanistic, psychoanalytic, and Gestalt psychologies.

PSY 310. Developmental Psychology (3)

This course covers in-depth theories of human development across the lifespan from infancy to old age. Topics such as research methods in developmental psychology, prenatal development, sensation and perception, memory, thinking, emotions, gender, and social development will be covered.

PSY 320. Cognitive Psychology (3)

An in-depth overview of theories of cognition, including cognitive development, human information processing models, consciousness, machine learning, and current neurological research on cognition.

PSY 315. Psychology of Learning (3)

A study of the learning process, including a survey of major theories of learning and their application to an understanding of problem-solving behavior and developmental processes.

PSY 341. Culture and Personality (3)

This course provides a cross-cultural perspective on the relationships between culture and personality. The nature/nurture debate is examined in different cultures. Is personality culture writ small? Same as ANTH 341.

PSY 370. Clinical Psychology (3)

This course offers an examination of the techniques and processes used by clinical psychologists and other mental health professionals to treat various forms of maladjustment and psychopathology. Various psychotherapeutic approaches and methods will be considered. Prerequisites: PSY300 or consent of instructor.

SPED 123. Individuals With Disabilities in Society (3)

Major types of disabilities and giftedness, including definitions, causes, characteristics, and educational implications. Disability perspectives. Social, legal, and educational considerations of disability issues.

HUMANITIES

ENGL 100. Composition and Rhetoric (3)

Instruction and practice in writing university-level expository prose. The subject matter of the course will be thematic and variable. The focus of the course is development of proficiency in conceptualizing, analyzing and writing academic papers.

ENGL 310. Research Methods (3)

Prerequisite: Completion of lower division writing requirement and one literature course. Fulfills upper-division writing requirement. Comprehensive investigation of research modalities, including the various forms of electronic research. Writing intensive.

ENGL 315. Introduction to Language Structure and Linguistics (3)

Prerequisite: Completion of lower division writing requirement. An examination of the basic components of human language, including phonology, morphology, syntax and semantics, and the differences/similarities between languages. Students will identify examples of speech parts, their function, morphology, and syntax.

ENGL 330. Writing in the Disciplines (3)

Fulfills upper-division writing requirement. Prerequisite: Completion of lower division writing requirement. Individual and collaborative writing in a variety of styles and forms. Students will learn writing and research techniques of various types, with special emphasis on writing for their chosen majors. Oral presentations form a portion of the course.

ENGL 420. Literary Theory (3)

Prerequisites: one writing course and one upper division literature course. Survey of literary theory and critical study, which investigates various approaches, perspectives, and modes of inquiry. Literary Criticism extends beyond literature to intersect with anthropology, philosophy, psychology, linguistics, political science, and other disciplines, and critical analysis by "literary" scholars encompass all forms of cultural production, literary and non-literary.

ENGL 475. Language in Social Context (3)

Focuses on the nature of literacy with emphasis on literacy development for English Only (EO) and English Language Learners (ELLs), investigation and knowledge of the development and acquisition of English literacy, and understanding the role of concepts and contexts in word meanings, vocabulary development, and multiple meanings. Also stressed will be development of an awareness of the differences between English and other languages that most greatly impact the acquisition of English literacy by ELLs, understanding the role of primary language literacy on the development of English language among ELLs, and the investigation of the impact of disabilities on oral and written English language development as well as understanding the basic social, cultural, regional, and historical context and variations in both oral and written English.

ENGL 476. Language Development and Assessment (3)

Introduction to language development issues for first and second language speakers. Examination of the linguistic theories of language acquisition including the study of child language development and situated in a cognitive, social, and cultural context. Study of second language acquisition in children, adolescents and adults. Includes the nature of assessment for language development, including speaking, reading, and writing.

ENGL 477. Literature for English Secondary Education (3)

An inquiry into adolescent literature. A survey of adolescent literature in which students analyze narrative and expository texts. Questions raised may include: What purpose does literature serve in the cultural milieu of a community? What cultural patterns, symbols, mythologies and traditions are included? Focus will be on critical reading for single subject matter preparation. Specific works studied will be representative of several genres, cultures, and periods of literature.

ENGL 478. Writing for English Secondary Education (3)

Introduction to current theory and practice of teaching writing in the secondary schools, in a writing context and across the curricula. Special attention to advanced critical reading, thinking, and writing skills.

BIOL/CHEM/MGT/MATH. 346 Scientific and Professional Ethics (3)

Examines the sources, fundamental principles, and applications of ethical behavior; the relationship between personal ethics and social responsibility of organizations; and the stakeholder management concept. Applies ethical principles to different types of organizations: business, non-profits, government, health care, science/technology, and other professional groups. Emphasizes cases to explore ethical issues. Same as BIOL 346, MGT 346, and MATH 346; students may not receive credit more than once for this cross-listed course.

MULTICULTURAL STUDIES

ANTH 102. Cultural Anthropology (3)

Three hours per week.
Prerequisites: None.
The study of recent and modern societies using a cross-cultural perspective, to gain an understanding on the range of human expression in culture and society. Issues discussed include ethnicity, gender, family structure, kinship, sex and marriage, socio-economic class, religion and the supernatural, language and culture, economics, political and social organization, art, and culture change.
GenED D.

ANTH 320. World Cultures: Peoples, Places, and Things (3)

Three hours per week.
Prerequisites: None.
This course examines the ethnology of cultures from throughout the world. Using archaeological, historical, and ethnographic sources, this course introduces the methods and theories used in placing comparative cross-cultural analysis in an ecological context. Focuses on issues of cultural history, environmental adaptations, political and economic systems, population, family, gender, religion, ideology, and contemporary issues in culturally distinct regions of the world.
GenED D.

ANTH 321. World Cultures: Ethnicity in the United States (3)

Three hours per week.
Prerequisites: None.
This course surveys the diversity of the United States from an historical perspective, tracing the various ethnic groups who came to the US and were variously assimilated. The myth of the American Melting Pot will be explored. Why did some groups cast off their ethnicity (or did they really?) while others maintained their ethnic identity for generations?
Same as HIST 321. GenED D.

ANTH 322. World Cultures: North America (3)

Three hours per week.
Prerequisites: None.
This course examines the development of Native American peoples and cultures as they adapted to their environments. The environmental history of the last glacial and post-glacial periods will be examined to provide a backdrop for human history. Using archaeological, historical, and ethnographic sources, the culture history of these peoples will be traced from antiquity to

the present, to provide the student with a broad context for understanding the region.

GenED D.

ANTH 323. World Cultures: California to the 1850s (3)

Three hours per week.

Prerequisites: None.

This course examines the development of Native American peoples and cultures in California as they adapted to the diverse environments there. The environmental history of the last glacial and post-glacial periods will be examined to provide a backdrop for human history. Using archaeological, historical, and ethnographic sources, the culture history of California's Native Americans will be traced from antiquity to the 1850s. The impact of Spanish exploration, colonization, and the mission system will be traced from the perspectives of both the Native Americans and their colonizers.

GenED D.

ANTH 324. World Cultures: African-American Culture History (3)

Three hours per week.

Prerequisites: None.

From the 16th century onward, Africans were brought to the United States and elsewhere to serve as laborers in chattel slavery. This course traces that history and explores how African-Americans adapted their cultures under slavery and following Emancipation to contribute to the development of America. The Civil Rights movement is traced from its beginnings to the present.

Same as HIST 324.

ANTH 341. Culture and Personality (3)

This course provides a cross-cultural perspective on the relationships between culture and personality. The nature/nurture debate is examined in different cultures. Is personality culture writ small? Same as PSY 341.

ANTH 441. Space and Time: Cross-cultural Perspectives (3)

Three hours per week.

Prerequisites: None.

This course examines how different cultures view, define, and organize space and time. Is time linear or circular? How has the American house changed spatially through the centuries? How do other cultures organize the same spaces?

Same as PSCH 441. Offered Spring 2004 and alternate years thereafter.

ANTH 443. Medical Anthropology: Cross-Cultural Perspectives on Health and Healing (3)

Three hours per week.

Prerequisites: None.

This course provides a cross-cultural perspective on human health issues. Uses biological, cultural, and behavioral approaches to understanding the concepts of diseases and their treatment, ethnoscience, health, and alternative medicine placed in a global perspective.

Offered Spring 2003 and alternate years thereafter.

ART 332. Multicultural Art Movements (3)

A survey of the arts and crafts originating in African, Asian, Latin American, Middle Eastern and Native American cultures. Emphasis is on the understanding of traditions and historical contexts as well as the exploration of random intersections of indigenous methods and aesthetics.

ENGL 333. Multi-Cultural Drama in Performance/Production (3)

America is a country of many cultures, and each of these has brought legacies of its roots to the American stage. In this course we will read plays written by Native Americans,

Hispanic Americans, Asian Americans, African Americans and others. We will also stage mini-productions of one or more of those plays. Same as TH 333.

ENGL 334. Narratives of Southern California (3)

Ours is a region made up of many cultures which produce the one we call "Southern Californian." In this class we will take a historical approach to study of the narratives--oral, written and filmed--of Southern California. Course work may also include obtaining oral histories and compiling them. Same as HIST 334.

ENGL 335. American Ethnic Images in Novels and Film (3)

American Ethnic Images in Novels and Film examines the portrayal of ethnic groups from an interdisciplinary perspective that includes, but is not limited to, the literary, historical, and anthropological modes of analysis. The course highlights the ways in which artistic works have shaped the intellectual landscape of the United States as they relate to ethnic peoples. Same as ART 337, HIST 335 and ANTH 335.

ENGL 449. Perspectives on Multi-Cultural Literature (3)

Prerequisite: upper-division writing and Research Methods.

Each of the cultures present in America today has its own set of qualities, which make it different from that of other cultures. In this class, we will study some of those, but the focus of the class will be on issues and/or ideas, which affect each of these literatures and discover ways in which they inform each other.

ENGL 450. Native American Literature (3)

Prerequisite: upper division writing and ENGL 449: Perspectives on Multi-Cultural Literature.

In this course students study the novels and poetry written by Native American authors. In order to understand the development of the literature, we will also read essays relevant to the events, issues and concerns attending the historical interactions between Native Americans and Euro-Americans in North America.

ENGL 451. African/African American Literature (3)

Prerequisite: upper division writing and ENGL 449: Perspectives on Multi-Cultural Literature.

In this course students study the novels and poetry written by African American authors. In order to understand the development of the literature, we will also read essays relevant to the events, issues and concerns attending the historical interactions between African Americans and other peoples in North America. Authors writing in African countries may also be included in order to gain a more global perspective on the literature.

ENGL 452. Asian/Asian American Literature (3)

Prerequisite: upper division writing and ENGL 449: Perspectives on Multi-Cultural Literature.

In this course students study the novels and poetry written by Asian American authors. In order to understand the development of the literature, we will also read essays relevant to the events, issues and concerns attending the historical interactions between Asian Americans and other peoples in North America. Authors writing in Asian countries may also be included in order to gain a more global perspective on the literature.

ENGL 453. Hispanic/Hispanic American Literature (3)

Prerequisite: upper division writing and ENGL 449: Perspectives on Multi-Cultural Literature.

In this course students study the novels and poetry written by Hispanic American authors. In order to understand the development of the literature, we will also read essays relevant to the events, issues and concerns attending the historical interactions between Hispanic Americans and other peoples in North America. Authors writing in Spain, Mexico, Central

America and South American countries may also be included in order to gain a more global perspective on the literature.

PSY 341. Culture and Personality (3)

This course provides a cross-cultural perspective on the relationships between culture and personality. Team taught with psychology. Same as ANTH 341.

PERFORMING ARTS

ENGL 410. Shakespeare's Plays (3) (repeatable by topic)

Prerequisites: one writing course and one upper division literature course.

Study of the many aspects of Shakespeare's plays as literature— language, context, form and style—as well as the ways in which these elements work as parts of a whole, which includes spoken speech and other sounds as well as physical form and movement. Choices are: Shakespeare's Early Plays (pre-1600) and Shakespeare's Later Plays (post-1600). Same as TH 410.

ENGL 333 Multi-Cultural Drama in Performance/Production (3) (interdisciplinary GE)

America is a country of many cultures, and each of these has brought legacies of its roots to the American stage. In this course we will read plays written by Native Americans, Hispanic Americans, Asian Americans, African Americans and others. We will also stage mini-productions of one or more of those plays. Same as TH 333.

TH 410 Shakespeare's Plays (3) (repeatable by topic)

Prerequisites: one writing course and one upper division literature course.

Study of the many aspects of Shakespeare's plays as literature— language, context, form and style—as well as the ways in which these elements work as parts of a whole, which includes spoken speech and other sounds as well as physical form and movement. Choices are: Shakespeare's Early Plays (pre-1600) and Shakespeare's Later Plays (post-1600). Same as ENGL 410.

TH 333 Multi-Cultural Drama in Performance/Production (3) (interdisciplinary GE)

America is a country of many cultures, and each of these has brought legacies of its roots to the American stage. In this course we will read plays written by Native Americans, Hispanic Americans, Asian Americans, African Americans and others. We will also stage mini-productions of one or more of those plays. Same as ENGL 333.

MUSIC

MU 333 Varieties of Musical Experiences (3)

The study of music in its cultural and historical contexts, with an emphasis on the role of music as a form of human expression. A broad range of musical styles will be studied, including, but not limited to, European, Asian, and Middle Eastern classical music; American jazz and popular music; and folk music of Western and non-Western cultures. Students will study the unifying and authenticating nature of music within groups of people, as well as study the experience of music on a personal level.

COMPUTER LITERACY

COMP 100. Computers: Their Impact and Use (3)

An introduction to the uses, concepts, techniques, and terminology of computing. Places the possibilities and problems of computer use in historical, economic, and social contexts. Shows how computers can assist in a wide range of personal, commercial, and organizational activities. Typical computer applications, including word processing, spreadsheets, and databases. Not open to Computer Science majors.

COMP 101. Computer Literacy (3)

An introduction to computer applications, including web applications, word processing, spreadsheets, databases and programming. Includes service learning component. Not open to Computer Science majors.

COMP 102. Introduction to Algorithms (2)

An introduction to the design, development and expression of algorithms. Algorithms and their stepwise refinement. Expression of algorithms in a formal language. This course is intended to be a first course in a two-course sequence, the second being a programming language laboratory. Not open to students who have completed Comp. 150.

COMP 103. Computer Programming (1)

Prerequisite: Comp. 102 or Instruction and practice in a particular computer programming language as listed below. One three hour laboratory per week per unit. Languages TBA

COMP 150. Object Oriented Programming (3)

Introduction to algorithms, their representation, design, structuring, analysis and optimization. Implementation of algorithms as structured programs in a high level language (JAVA).

COURSES FOR LIBERAL STUDIES OPTION 1: INTERDISCIPLINARY PROGRAM

ANTH 320. World Cultures: Peoples, Places, and Things (3)

Three hours per week.

Prerequisites: None.

This course examines the ethnology of cultures from throughout the world. Using archaeological, historical, and ethnographic sources, this course introduces the methods and theories used in placing comparative cross-cultural analysis in an ecological context. Focuses on issues of cultural history, environmental adaptations, political and economic systems, population, family, gender, religion, ideology, and contemporary issues in culturally distinct regions of the world.

GenED D.

ANTH 321. World Cultures: Ethnicity in the United States (3)

Three hours per week.

Prerequisites: None.

This course surveys the diversity of the United States from an historical perspective, tracing the various ethnic groups who came to the US and were variously assimilated. The myth of the American Melting Pot will be explored. Why did some groups cast off their ethnicity (or did they really?) while others maintained their ethnic identity for generations?

Same as HIST 321. GenED D..

ANTH 322. World Cultures: North America (3)

Three hours per week.

Prerequisites: None.

This course examines the development of Native American peoples and cultures as they adapted to their environments. The environmental history of the last glacial and post-glacial periods will be examined to provide a backdrop for human history. Using archaeological, historical, and ethnographic sources, the culture history of these peoples will be traced from antiquity to the present, to provide the student with a broad context for understanding the region.

GenED D.

ANTH 323. World Cultures: California to the 1850s (3)

Three hours per week.

Prerequisites: None.

This course examines the development of Native American peoples and cultures in California as they adapted to the diverse environments there. The environmental history of the last glacial and post-glacial periods will be examined to provide a backdrop for human history. Using archaeological, historical, and ethnographic sources, the culture history of California's Native Americans will be traced from antiquity to the 1850s. The impact of Spanish exploration, colonization, and the mission system will be traced from the perspectives of both the Native Americans and their colonizers.

GenED D.

ANTH 324. World Cultures: African-American Culture History (3)

Three hours per week.

Prerequisites: None.

From the 16th century onward, Africans were brought to the United States and elsewhere to serve as laborers in chattel slavery. This course traces that history and explores how African-Americans adapted their cultures under slavery and

following Emancipation to contribute to the development of America. The Civil Rights movement is traced from its beginnings to the present.

Same as HIST 324.

ANTH 330. Ecology and the Environment (3-4)

Three hours lecture per week; three hours lab per week if enrolled for 4 credits.

Prerequisites: None.

Ecological characteristics of natural ecosystems and basic effects of human society upon those systems. Plant and animal distribution patterns in relation to past and present physical and biotic factors. Issues of resource management, population, food production, global environmental problems will also be emphasized to explore future directions. A standard lab fee is required.

Same as BIOL 330. GenED B1 & B2.

ANTH 331. Wars and Conflicts in the Modern World (3)

Three hours per week.

Prerequisites: None.

Cross-cultural perspectives on the development of the modern world in the future. Can the Earth sustain an American style culture for everyone? How do Third and Fourth World countries view the developed countries? Can conflicts over resources be resolved peacefully? This course exams war and terrorism in the context of resources and modernity.

GenED D.

ANTH 332. Population and Resource Constraints (3)

Three hours per week.

Prerequisites: None.

This human ecology course places humans into the environment in historical and global contexts. Discusses systems theory as it applies to human adaptation to the environment. Studies the relations between political power, ideology, and resources, integrating concepts from ecology with those from social sciences. Theories and forecasts of human population growth and migration among regions and cultures. Social and environmental impacts of population and age distribution. Natural resource constraints on growth. Topics from land development, resource planning, environmental quality, politics, economic growth, conflicts and wars.

GenED B2 & D.

ANTH 333. Civilizations of an Ancient Landscape: World Archaeology (3)

Three hours per week.

Prerequisites: None.

Traces the relationship between the physical geography and the development of ancient civilizations in Pre-Columbian America, Africa, Asia, and Europe, beginning with the post-glacial period and ending with the rise of feudalism in Europe and Japan. The change from hunting and gathering groups to sedentary agriculturalists and pastoralists giving rise to later complex social organizations. Art, architecture, science, religion, trade economic and social systems.

GenED D.

ANTH 335. American Ethnic Images in Novels and Film (3)

Three hours per week.

Prerequisites: None.

American Ethnic Images in Novels and Film examines the portrayal of ethnic groups from an interdisciplinary perspective that includes, but is not limited to, the literary, historical, and anthropological. The course highlights how artistic works have shaped the intellectual landscape of the United States as they relate to ethnic peoples.

Same as ENGL 335. GenED C2.

ANTH 341. Culture and Personality (3)

Three hours per week.

Prerequisites: None.

This course provides a cross-cultural perspective on the relationships between culture and personality. The nature/nurture debate is examined in different cultures. Is personality culture writ small? Taught with psychology.

Same as PSCH 341 GenED D.

ANTH 343. Anthropology of Organizations (3)

Anthropological perspective on human organizations in terms of communication, spatial relations, product development, technology, marketing, group behavior. Explores principles of effectively organizing and directly work groups.

Same as BUS 343.

ANTH 345. Bioanthropology: Human Evolution and Diversity (3)

Three hours per week.

Prerequisites: None.

Human biological evolution from the African savannah of 5 million years ago to the present, focusing upon adaptation to environmental conditions, disease, diet. Includes segments on ecology, evolutionary theory, genetics, natural selection, non-human primates. Discusses the concept of race from an anthropological perspective. Includes issues of speciation and race, adaptation to cold, heat, desert, tropics, diseases. Compares ethnicity vs. race.

GenED B1.

ANTH 346. Scientific and Professional Ethics (3)

Three hours per week.

Prerequisites: None.

Discussion of ethical issues and societal challenges derived from scientific research and professional activities. Examines the sources, fundamental principles, and applications of ethical behavior; the relationship between personal ethics and social responsibility of organizations; and the stakeholder management concept. Applies ethical principles to different types of organizations: business, non-profits, government, health care, science/technology, and other professional groups. Topics also include integrity of scientific research and literature and responsibilities of scientists to society, intellectual property, ethical practices in professional fields, ethical dilemmas in using animal or human subjects in experimentation, gene cloning, animal cloning, gene manipulation, genetic engineering, genetic counseling, and ethical issues of applying biotechnology in agricultural fields. Emphasizes cases to explore ethical issues. Weekly three-hour lectures and discussions.

Same as MGT 346. GenED A3.

ANTH 441. Space and Time: Cross-cultural Perspectives (3)

Three hours per week.

Prerequisites: None.

This course examines how different cultures view, define, and organize space and time. Is time linear or circular? How has the American house changed spatially through the centuries? How do other cultures organize the same spaces?

Same as PSCH 441. Offered Spring 2004 and alternate years thereafter.

ANTH 443. Medical Anthropology: Cross-Cultural Perspectives on Health and Healing (3)

Three hours per week.

Prerequisites: None.

This course provides a cross-cultural perspective on human health issues. Uses biological, cultural, and behavioral approaches to understanding the concepts of diseases and their treatment, ethnoscience, health, and alternative medicine placed in a global perspective.

Offered Spring 2003 and alternate years thereafter.

ART 330. Critical Thinking in a Visual World (3)

A critical look at subjective responses and objective reasoning in the assessment of visual images that permeate every day aspects of contemporary life. Comparative studies evaluate psychological impact of corporate logos, religious iconography and secular symbolism. The genesis of cultural icons are investigated from a historical perspective in relationship to their role in a global society. Meets General Education Category A3 and C1.

ART 331. Art and Mass Media (3).

The study of synergetic relationships between visual art and human communication dating back to the roots of civilization. Comparative studies in art and communication link ancient traditions to the development of contemporary mass media including print, photography, film, television and the internet. Meets General Education Category C1 and D.

ART 332. Multicultural Art Movements (3)

A survey of the arts and crafts originating in African, Asian, Latin American, Middle Eastern and Native American cultures. Emphasis is on the understanding of traditions and historical contexts as well as the exploration of random intersections of indigenous methods and aesthetics. Meets General Education Category C1 and C3.

ART 333. History of Southern California Chicana/o Art (3)

A survey of the Southern California Chicana/o culture exploring the genesis, vitality and diversity represented in the painting, sculpture and artistic traditions of Mexican American artists. Historical movements, politics, cultural trends and Mexican folklore underlying the development of this dynamic style of art will be investigated within a variety of contexts. Meets General Education Category C1 and C3.

ART 334. The Business of Art (3)

Exploration into aspects of "art world" business including the financial activities of art consultants, private dealers, commercial galleries, public museums and international auction houses. Case studies in art marketing, gallery and museum management, contracts and commissions, as well as public image and career development will be investigated. Meets General Education Category C1 and D.

ART 335. American Ethnic Images in Novels and Film (3)

American Ethnic Images in Novels and Film examines the portrayal of ethnic groups from an interdisciplinary perspective that includes, but is not limited to, the literary, historical, and anthropological modes of analysis. The course highlights the ways in which artistic works have shaped the intellectual landscape of the United States as they relate to ethnic peoples. Same as ANTH 335, HIST 335 and ENGL 335. Meets General Education Category C3 and D.

ART 337. Psychology of Art and Artists (3).

An inquiry into the mind of the artist and the emotional dynamics that underlie the creative process. Emphasis is placed on deciphering personal allegory and universal symbolism hidden within a wide range of visual and conceptual genres in painting, sculpture, film and music. The self-image of the artist

will be examined from private and public viewpoints. Same as PSY 335. Meets General Education Category C1 and E.

ART 430. Modern and Contemporary Art (3)

From nineteenth century Impressionism, through twentieth century Cubism, Expressionism and Pop Art, this course explores the gamut of concepts, periods, trends, and "isms" culminating in international Post Modernism and New Genre art of the twenty-first century.

ART 431. European Renaissance Literature and Art (3)

Prerequisite: Upper division standing.

The study of literary and artistic works produced in Europe and England in the fifteenth and sixteenth centuries. This "re-birth" of the human spirit is viewed from historical, philosophical and aesthetic perspectives, emphasizing the relationship between literary and artistic traditions found in Renaissance literature and visual art forms. Meets General Education Category C1 and C2.

ART 432. Arts of the Harlem Renaissance (3)

Prerequisite: Upper division standing.

Study focusing on the dramatic upsurge of creativity in art, music and literature resulting from social and political undercurrents in the African American cultural revolution in New York during the 1920s. Historical geneses and subsequent artistic legacies will be also be explored. Meets General Education Category C1 and C2.

ART 433. Women in the Arts (3)

An investigation into the historical roles and influences of women artists in Western and non-Western traditions. Women as subject matter in painting, sculpture, photography, film and video will be explored as related to artistic, social, historical and political issues. Three hours lecture per week. Meets General Education Category C1.

BIOL 330. Ecology and the Environment (4)

Three hours lecture per week; three hours lab per week if enrolled for 4 credits.

Prerequisites: None.

Ecological characteristics of natural ecosystems and basic effects of human society upon those systems. Plant and animal distribution patterns in relation to past and present physical and biotic factors. Issues of resource management, population, food production, global environmental problems will also be emphasized to explore future directions. A standard lab fee is required.

Same as BIOL 330. GenED B1 & B2.

BIOL 344. Health Psychology (3)

This course will focus on those areas of psychology which related to health and medicine including, mind-body interactions, Psychoneuroimmunology, psychology as it relates to nutrition, psychology as it relates to illness, and behavioral medicine. Same as PSY 344 and HLT 344.

BIOL 346. Scientific and Professional Ethics (3)

Examines the sources, fundamental principles, and applications of ethical behavior; the relationship between personal ethics and social responsibility of organizations; and the stakeholder management concept. Applies ethical principles to different types of organizations: business, non-profits, government, health care, science/technology, and other professional groups. Emphasizes cases to explore ethical issues. Cross-listed as CHEM 346, MGT 346, and MATH 346; students may not receive credit more than once for this cross-listed course.

BUS 339. The Business of Art (3)

Explores various aspects of the "art world" business including the financial activities of art consultants, private dealers, commercial galleries, public museums and international auction

houses. Uses cases to investigate art marketing, gallery and museum management, contracts and commissions, public image and career development. Analyzes the management elements needed to successfully manage an "art world" business. Same as ART 339. Meets General Education Category C1 and D.

BUS 340. Business and Money in the American Novel (3)

What is money, really? How does it work in our society and in our literature? These are the starting questions which will form the core of exploration as we read and discuss works of American literature. Meets General Education Category A3 and C2.

BUS 343. Anthropology of Organizations (3)

Anthropological perspective on human organizations in terms of communication, spatial relations, product development, technology, marketing, group behavior. Explores principles of effectively organizing and directly work groups. Same as ANTH 343. Meets General Education Category D.

BUS 349. History of Business & Economics in North America. (3)

Examines the growth and development of the economies of North America since colonial times. Addresses social, ethical, economic and management issues during the development of Canada, the United States, and Mexico. Analyzes the business principles underlying the growth and development of the economies. Same as HIST 349. Meets General Education Category D

BUS 424. Business in Its Social Setting (3)

Prerequisites: BUS 346 or consent of professor

Analytical and interdisciplinary investigation of the evolution and contemporary status of business, especially relative to its environment – political, social, ethical, legal and economic. The dynamic nature of these environmental elements and their inter-relationships are analyzed through case studies and research projects.

ECON 340. Business and Money in the American Novel (3)

What is money, really? How does it work in our society and in our literature? These are the starting questions which will form the core of exploration as we read and discuss works of American literature. Meets General Education Category A3 and C2.

ECON 342. History of Business and Economics in North America. (3)

Note: Frank has the course description here. This would be an excellent course for teachers, but I am concerned that it will not be offered frequently enough to make it a required course. Meets General Education Category D.

ENGL 337. Literature of the Environment (3)

Literature of the Environment is structured to involve the student in many forms of dialogue on issues pertinent to humanity's relationship with Earth. By reading works by writers from diverse fields and by writing in response, the student will gain a better understanding of our planet, its needs, and a better control of writing in response to learning. Meets General Education Category A3 and C2.

ENGL 339. Psychopathology in Literature (3)

Literature is filled with crazies, those unpredictable maniacs who terrify us. But what about other, less obvious forms of psychopathology? How do those work within the pages of the books we read? For that matter, could a book itself a manifestation of a disturbed mind? These are some of the questions addressed in this course. Same as PSY 339. Meets General Education Category C2 and E.

ENGL 340. Business and Money in the American Novel (3)
What is money, really? How does it work in our society and in our literature? These are the starting questions, which will form the core of exploration as we read and discuss works of American literature. Meets General Education Category A3 and C2.

ENGL 431. European Renaissance Literature and Art (3)
The Renaissance of the 15th and 16th centuries in Europe and England provided the world with a new way of looking at humankind and our surroundings. By reading the literature of this period and studying the art produced during that time, we will gain an understanding of this "re-birth" of the human spirit and a better understanding of the legacies of the Renaissance artists and writers. Same as ART 431. Meets General Education Category C1 and C2.

ENGL 432. Arts of the Harlem Renaissance (3)
The Harlem Renaissance was one of the most exciting epochs in American history. The art, literature and music produced in Harlem in the '20s and '30s has had enormous impact on American, and perhaps world, culture. In this class, we will study these art forms and their historical genesis and legacy. Same as ART 432. Meets General Education Category C1 and C2.

GEOL 300. Foundations of Earth Science (4)
Prerequisites: CHEM 170. An analysis of the Earth's physical systems and the solar system/ universe. Selected topics include climates of the world, minerals and rocks, flood hazards, aspects of physical oceanography, plate tectonics, natural resources, and the motion of planets and planetary bodies. Three hours lecture and one three-hour lab a week.

HIST 331. History of Mathematics (3)
Study of breakthrough mathematical ideas and their creators, including historical and scientific context. Important concepts of current mathematics are studied: inception, development, difficulties, significance and various viewpoints will be presented. Lecture-discussion. At least one significant writing assignment is required. Meets General Education Category B3 and D.

HIST 333. History of Southern California Chicana/o Art (3)
A survey of the Southern California Chicana/o culture exploring the genesis, vitality and diversity represented in the painting, sculpture and artistic traditions of Mexican American artists. Historical movements, politics, cultural trends and Mexican folklore underlying the development of this dynamic style of art will be investigated within a variety of contexts. Same as ART 333.

MATH 308. Modern Math for Elementary Teachers (2) - Geometry, Probability and Statistics
Current issues of modern math curriculum including abstract thinking and problem solving approaches to teaching. Content covers systems of geometry and geometric interpretation of real numbers, mathematical modeling, basic probability and statistics. Problem solving strategies are stressed. Designed for students intending to teach.

MATH 330. Mathematics for Artists (3)
The course is specially designed for students interested in fine arts, with the emphasis on understanding geometric patterns and concepts by self-explorations. Instead of concentrating on abstraction, the course creates a vast reservoir of art-related examples and hands-on experiences, and will give an innovative mathematical background for future artistic endeavors of students.

MATH 331. History of Mathematics (3)
Study of breakthrough mathematical ideas and their creators, including historical and scientific context. Important concepts of current mathematics are studied: inception, development, difficulties, significance and various viewpoints will be presented. Lecture-discussion. At least one significant writing assignment is required.

MATH 346. Scientific and Professional Ethics (3)
Examines the sources, fundamental principles, and applications of ethical behavior; the relationship between personal ethics and social responsibility of organizations; and the stakeholder management concept. Applies ethical principles to different types of organizations: business, non-profits, government, health care, science/technology, and other professional groups. Emphasizes cases to explore ethical issues. Same as BIOL346, MGT 346, and CHEM 346; students may not receive credit more than once for this cross-listed course.

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PSY 335. Psychology of Art and Artists (3)
An inquiry into the mind of the artist and the emotional dynamics that underlie the creative process. Emphasis is placed on deciphering personal allegory and universal symbolism hidden within a wide range of visual and conceptual genres in painting, sculpture, film and music. The self-image of the artist will be examined from private and public viewpoints. Same as ART 335. Meets General Education Category C1 and E.

PSY 341. Culture and Personality (3)
This course provides a cross-cultural perspective on the relationships between culture and personality. The nature/nurture debate is examined in different cultures. Is personality culture writ small? Same as ANTH 341. Meets General Education Category D and E.

PSY 344. Health Psychology (3)
This course will focus on those areas of psychology which related to health and medicine including, mind-body interactions, Psychoneuroimmunology, psychology as it relates to nutrition, psychology as it relates to illness, and behavioral medicine. Same as BIOL 344. Meets General Education Category E.

PSY 441. Space and Time: Cross-cultural Perspectives (3)
This course examines how different cultures view, define, and organize space and time. Is time linear or circular? How has the American house changed spatially through the centuries? How do other cultures organize the same spaces? Same as ANTH 441. Offered Spring 2004 and alternate years thereafter

PSY 450. Neural Science (3)
A study of the human and mammalian brain, covering nerve cells and how they work, synapses, neurotransmitters, pharmacology, sexuality, neuroanatomy, neurophysiology, evolution, neuropathology, sleep, language, left brain and right brain, higher consciousness, and much more.

LIBERAL STUDIES COURSES:

- LS 101. Learning in the University, Learning for Life (3)**
Learning how to learn and develop effective study habits that will last a lifetime.
- LS 492. Independent Research (1-3)**
Prerequisites: Upper Division Standing in the Liberal Studies Major.
Students design and implement a study project in conjunction with a faculty member.
- LS 494. Service Learning/Internship (1-3)**
Prerequisites: Upper Division Standing required in the Liberal Studies Major.
Students design a community project, individually or in small group, related to areas studied in Liberal Studies major. The project must respond to a community need, involve participants in reciprocal activities, provide opportunities for student's ongoing reflection, and evaluate the activity.
- LS 497. Directed Studies (1-3)**
Prerequisites: Upper Division Standing in the Liberal Studies Major.
Supervised project involving research or creative activity related to Liberal Studies.
- LS 499. Capstone Project (1-3)**
Prerequisites: Senior Standing in the Liberal Studies Major.
Provides an integration of prior subject matter by requiring teams of students to design, enlighten, and/or solve a problem. Also, provides interdisciplinary exposure to complex issues using web, library and community-based analytical processes.