

CALIFORNIA POLYTECHNIC STATE UNIVERSITY  
San Luis Obispo, California 93407  
**ACADEMIC SENATE**  
805.756.1258

**MEETING OF THE ACADEMIC SENATE EXECUTIVE COMMITTEE**  
**Tuesday, April 30, 2002**  
**UU220, 3:00 to 5:00pm**

- I. Minutes: Approval of minutes for the January 15, 2002 Executive Committee meeting (pp. 2-3).
- II. Communication(s) and Announcement(s):
- III. Reports:
  - A. Academic Senate Chair:
  - B. President's Office:
  - C. Provost's Office:
  - D. Statewide Senators:
  - E. CFA Campus President:
  - F. ASI Representatives:
  - G. Other:
- IV. Consent Agenda:
- V. Business Item(s):
  - A. **Academic Senate committee vacancies for 2002-2004:** (pp.4-7).
  - B. **Appointment of committee chairs to Senate committees:** (pp. 8-9).
  - C. **Universitywide committee vacancies for 2002-2003:** (pp. 10-12).
  - D. **Curriculum proposal for NRM B.S. in Environmental Management and Protection:** R Thompson, Professor (pp. 13-17).
  - E. **Resolution to Change Administrative Status for Liberal Studies Program:** Hellenbrand, CLA Dean (pp. 18-19).
- VI. Discussion Item(s):
- VII. Adjournment:

CALIFORNIA POLYTECHNIC STATE UNIVERSITY  
San Luis Obispo, California 93407  
ACADEMIC SENATE

MINUTES OF  
The Academic Senate Executive Committee  
Tuesday January 15, 2002  
UU 220, 3:00 to 5:00 pm

Preparatory: the meeting was convened at 3:15 p.m.

- I. Minutes: None.
- II. Communications and Announcements: John Battenburg from the English Department received the most votes and has been elected as the Academic Council on International Programs representative for the 2001-2004 term.
- III. Reports:
  - A. Academic Senate Chair Report: None.
  - B. President's Report: None.
  - C. Provost's Report: None.
  - D. Statewide Senate: None.
  - E. CFA: None.
  - F. ASI: None.
  - G. Other: None.
- IV. Discussion Item:
- V. Business Items:
  - A. Academic Senate Vacancies: M/S/P to approve the appointment of John Maxwell from Chemistry and BioChemistry as COSAM Senator for the 2001-2003 term. Sandra Stannard from Architecture was appointed to the Academic Senate Grants Review Committee for the 2001-2003 term.
- VI. Discussion Item(s): **Discussion on Budget. President Baker presented an update on the budget based on the Governor's January 2002 statements on the budget outlook. There was extensive discussion with President Baker, Zingg, Dalton, Menon, Greenwald, Ahern, Hood, Reich, Heidersbach, Kipe, Love, Hunt, and Hacker. Please go to the Academic Senate web site at [www.calpoly.edu/~acadsen](http://www.calpoly.edu/~acadsen) and click on Senate Meetings for full transcript.**

**Baker** – Two issues are of concern to us in the current year budget. One is the position that we were put in at the beginning of the year even before we were faced with the economic downturn and then the acceleration that is the result of September 11. We had to make a budget reduction of \$1.8 million. The money has not been deallocated from the campus yet and will require a special session of the legislature to address the Governor's recommended reductions.

**Zingg** – The 1.4% allocated one-time decrease to all of the campuses in the system translated into \$1.8 million on our campus. What we were able to do was to identify a funding process basically half of that through excess fee revenues in order to cancel half of that allocated reduction of \$900,000 and then the second half, the other \$900,000, we then allocated to the divisions of the university according to their pro-rata share of the budget. Therefore, for Academic Affairs, which has about 65% of the budget, we were responsible for retiring about \$560,000 of that \$900,000 budget reduction and that in turn was distributed to the colleges and the units within the division.

**Baker** – We will be required to carry that reduction over into next year, under the Governor's budget. As presently constructed, the Governor's budget appears to be a workable budget; it will however require the cooperation of the legislature. The campus will receive \$3.8 million in additional funding for enrollment, which will pay for presently unfounded enrollment and this will give us a much different situation than we have this year. The budget also has provided for a 1% compensation increase. What we have done this year is to maintain a prudent position; putting into place a hiring freeze for all non-faculty positions. This will be retained. We will plan for the target enrollment of 16,800 and that will essentially be a stable enrollment target, that will extend out to 2006. We have over the past several years talked about a three-legged stool in supporting this: private funding, seeking improvements in state enrollment growth ("marginal cost") funding, and the Centennial Campaign. The Centennial Campaign seeks to boost us up to an annual level of philanthropic donations to the campus substantially greater than we had in the past. The difficulty in relying on that is that the money does not always come where the need is greatest. There are different solutions to different parts of the problem, but solving any one part of it does not solve all of the problem.

Finally, emerging from discussion with student leadership last year, is the issue of a college-based or departmental-based academic fee. This fee would focus in the first instance on access, meaning access to classes and timely process to graduation; it would permit us also to improve student faculty ratios, and would permit us to address to some extent the issue of workload. This initiative is unique and consistent with the principle that we tried to develop in the Cal Poly Plan of a partnership with students where they actually do have a significant role in allocation of funds. If we can succeed on each of these fronts, I think we can solve the problem. When I talk to presidents and chancellors of other institutions outside of this state, and talk to public policy people related to higher education the common concern is the need to increase revenues. This is important for quality and for access. They will have to come from multiple sources, but they are not going to come from traditional state allocations in the amounts that are necessary. I am far more optimistic now than I was three weeks ago. I think that we are in a manageable situation.

VII. Meeting adjourned at 5:00 pm.

Submitted by:



Gladys Gregory  
Academic Senate



**ACADEMIC SENATE COMMITTEES  
VACANCIES FOR 2002-2004**

**COLLEGE OF AGRICULTURE**

	<u>Department</u>	<u>Order of Preference</u>
<u>Faculty Awards Committee</u> Tom Ruehr	SoilSci	1 of 1
<u>Grants Review Committee</u> Joe Montecalvo	FdSci& Nut	1 of 1

**COLLEGE OF ARCHITECTURE AND ENVIRONMENTAL DESIGN**

	<u>Department</u>	<u>Order of Preference</u>
<u>Curriculum Committee</u>		
<u>Faculty Affairs Committee</u>		
<u>Fairness Board</u>		
<u>Library Committee</u>		
<u>Research and Professional Development Committee</u>		

**COLLEGE OF BUSINESS**

	<u>Department</u>	<u>Order of Preference</u>
<u>Curriculum Committee</u>		
<u>Instruction Committee</u>		

**COLLEGE OF ENGINEERING**

	<u>Department</u>	<u>Order of Preference</u>
<u>Faculty Awards Committee</u>		
<u>Instruction Committee</u>		

**COLLEGE OF LIBERAL ARTS**  
**Faculty Interest Questionnaires Received for**  
**Academic Senate Committee Vacancies for 2002-2004**

	<u>Department</u>	<u>Order of Preference</u>
<b><u>Budget and Long Range Planning Committee</u></b>		
Dugan, Timothy	Thea&Dnc	1 of 1
<b><u>Curriculum Committee</u></b>		
Fitzhenry, William	English	3 of 3
Keseey, Doug (Incumbent)	English	1 of 1
<b><u>Cultural Pluralism Requirement Subcommittee</u></b>		
No Vacancy		
<b><u>Faculty Affairs Committee</u></b>		
Arceneaux, Craig	PoliSci	1 of 2
Foroohar, Manzar	History	1 of 1
<b><u>Faculty Awards Committee</u></b>		
<b><u>Faculty Dispute Review Committee</u></b>		
No Vacancy		
<b><u>Fairness Board</u></b>		
No Vacancy		
<b><u>Grants Review Committee</u></b>		
No Vacancy		
<b><u>Instruction Committee</u></b>		
McKim, Patrick (Incumbent)	SocSci	1 of 1
<b><u>Library Committee</u></b>		
Fitzhenry, William	English	2 of 3
Schwartz, Debora* (Incumbent)	English	1 of 1
<b><u>Research and Professional Development Committee</u></b>		
Arceneaux, Craig	PoliSci	2 of 2
Fitzhenry, William	English	1 of 3
Jones, Terry	SocSci	1 of 1
Levenson, Harvey*	GraphComm	1 of 1
<b><u>Student Grievance Board</u></b>		
No Vacancy		

\* Willing to chair if release time were available

**COLLEGE OF SCIENCE AND MATHEMATICS/UCTE**  
**Faculty Interest Questionnaires Received for**  
**Academic Senate Committee Vacancies for 2002-2004**

	<u>Department</u>	<u>Order of Preference</u>
<b><u>Budget and Long Range Planning Committee</u></b>		
Walker, John	Stats	1 of 1
<b><u>Curriculum Committee</u></b>		
No Vacancy		
<b><u>Cultural Pluralism Requirement Subcommittee</u></b>		
Jacques, Jodi	UCTE	1 of 3
<b><u>Faculty Affairs Committee</u></b>		
No Vacancy		
<b><u>Faculty Awards Committee</u></b>		
No Vacancy		
<b><u>Faculty Dispute Review Committee</u></b>		
Baldwin, Marylud	UCTE	1 of 1
<b><u>Fairness Board</u></b>		
No Vacancy		
<b><u>Grants Review Committee</u></b>		
Chance, Beth	Stats	1 of 1
Jacques, Jodi	UCTE	3 of 3
<b><u>Instruction Committee</u></b>		
No Vacancy		
<b><u>Library Committee</u></b>		
No Vacancy		
<b><u>Research and Professional Development Committee</u></b>		
Jacques, Jodi	UCTE	2 of 3
<b><u>Student Grievance Board</u></b>		
No Vacancy		

\* Willing to chair if release time were available

**PROFESSIONAL CONSULTATIVE SERVICES**  
**Faculty Interest Questionnaires Received for**  
**Academic Senate Committee Vacancies for 2002-2004**

	<u>Department</u>	<u>Order of Preference</u>
<b><u>Budget and Long Range Planning Committee</u></b>		
No Vacancy		
<b><u>Curriculum Committee</u></b>		
No Vacancy		
<b><u>Cultural Pluralism Requirement Subcommittee</u></b>		
Sydnor, William	Acad Skills	1 of 1
<b><u>Faculty Affairs Committee</u></b>		
Jelinek, Cindy	COSAM Adv Ctr	1 of 1
<b><u>Faculty Awards Committee</u></b>		
No Vacancy		
<b><u>Faculty Dispute Review Committee</u></b>		
Brown, Johanna	Library	1 of 1
<b><u>Fairness Board</u></b>		
Aleshire, Shelley (Incumbent)	DRC	1 of 1
<b><u>Grants Review Committee</u></b>		
No Vacancy		
<b><u>Instruction Committee</u></b>		
No Vacancy		
<b><u>Library Committee</u></b>		
Fryer, Ann (Incumbent)	DRC	1 of 1
<b><u>Research and Professional Development Committee</u></b>		
Harlan, Sallie (Incumbent)	Library	1 of 1
<b><u>Student Grievance Board</u></b>		
No Vacancy		

\* Willing to chair if release time were available

<b>Committee</b>	<b>2001-2002 Chair</b>	<b>Serving Term</b>	<b>Chair Since</b>	<b>Willing to chair 2002-2003 if release time were available</b>
Budget and Long Range Planning Committee	Steve Kaminaka	2003	1999	Steve Kaminaka, Bioresource & Ag Eng David Peach, Mgmnt
Curriculum Committee	Dave Hannings	2002	2002	Dave Hannings, EHS
Faculty Affairs Committee	Walter Bethel	2002	2000	Manzar Foroohar, History
Faculty Awards Committee	Susan McBride	2003	2002	Mike Geringer, GlSt&Law
Faculty Dispute Review Committee	Lezlie Labhard	2002	2001	Lezlie Labhard, IT Saeed Niku, MechEngr
Fairness Board	Del Dingus	2002	2002	Del Dingus, Soil Science
Grants Review Committee	David Braun	2003	2002	David Braun, Electrical Engineering Terri Lituchy, GlSt&Law
Instruction Committee	Stacey Breitenbach	2003	2001	Stacey Breitenbach, CENG John Harris, NRM
Library Committee	Debora Schwartz	2002	2002	Debora Schwartz, English
Research and Professional Development Committee	Ed Sullivan	2003	2002	Harvey Levenson, GraphComm Ed Sullivan, C&Engr (Backup only)
Student Grievance Board	George Beardsley	2002	2000	
US Cultural Pluralism Subcommittee	Michael Lucas	2002	2001	Michael Lucas, Arch



04.03.02

**CALIFORNIA POLYTECHNIC STATE UNIVERSITY**  
**San Luis Obispo, California**

**ACADEMIC SENATE COMMITTEES**  
**2002-2003**

**FACULTY AFFAIRS COMMITTEE**

<u>Name</u>	<u>Department</u>	<u>College/Unit</u>	<u>Ofc/Dept</u>	<u>email(@calpoly.edu)</u>	<u>Exp Term</u>
<i>*Arceneaux, Craig</i>	<i>PoliSci</i>	<i>CLA</i>			<i>2004</i>
<i>*Foroohar, Manzar</i>	<i>History</i>	<i>CLA</i>			<i>2004</i>
<i>Biggs, JR</i>	<i>Mgmt</i>	<i>COB</i>	<i>62955/60212</i>	<i>jbiggs</i>	<i>2004</i>
Carlton, Matthew	Stats	COSAM	67076/62026	mcarlton	2003
Jenlinek, Cindy	Adv Ctr	PCS			2004
Suess, Michael	AcadPers'l	Admin	62844/62844	msuess	ExOff
Wolf, Marianne	Agribus	CAGR	65027/65000	mwolf	2003
Yu, Helen	ElecEngr	CENG	62441/62781	xhyu	2003
VACANT		ASI			ExOff
VACANT		CAED			2003

**STUDENT GRIEVANCE BOARD**

<u>Name</u>	<u>Department</u>	<u>College/Unit</u>	<u>Ofc/Dept</u>	<u>email(@calpoly.edu)</u>	<u>Exp Term</u>
Lewis, George	Math	COSAM	62333/62206	glewis	2003
Seifoddini, Ahmad	IndEngr	CENG	62630/62341	aseifodd	2003
Johnson, Matt D.	Student	ASI	61291/61291	mjslo54@aol.com	ExOff
VACANT		ASI			ExOff
VACANT		CAGR			2003
Nominations not requested due to possible merge with Fairness Board.		CLA			2004
		COB			2004
		PCS			2004
		CAED			2004

**U.S. CULTURAL PLURALISM SUBCOMMITTEE**

<u>Name</u>	<u>Department</u>	<u>College/Unit</u>	<u>Ofc/Dept</u>	<u>email(@calpoly.edu)</u>	<u>Exp Term</u>
Armstrong, Mary		WomenStudies	62529/61525	maarmstr	ExOff
<i>Jacques, Jodi</i>	<i>UCTE</i>	<i>COSAM/UCTE</i>			<i>2004</i>
<i>Sydnor, William</i>	<i>AcadSkills</i>	<i>PCS</i>			<i>2004</i>
Griffin, Lanny	MatEngr	CENG	62575/62568	lgriffin	2003
Howard, Wayne	Agribus	CAGR	65022/65000	whhoward	2003
Langston, Donna	EthnSts	EthnicStudies	67388/61707	dlangsto	ExOff
<i>Lucas, Michael</i>	<i>Arch</i>	<i>CAED</i>			<i>2004</i>
O'Neill, Colleen	Ethnic St	CLA	66442/61707	coneill	2003
Weatherford, Alan	Finance	COB	62944/61472	aweather	2003
Whiteford, Mary	AcadProgs	Curr Com rep	65475/62246	mwhitefo	ExOff
Villegas, Dan	Econ	GEB(EO)	61767/61384	dvillega	ExOff
VACANT		ASI			ExOff

*Italic names need approval.*

*\* Choose only one.*

**Faculty Interest Questionnaires Received for  
UNIVERSITY-WIDE COMMITTEES  
Vacancies for 2002-2003**

	<u>Department</u>	<u>Order of Preference</u>
<u>Accommodation Review Board</u>		
(2 Representatives/1 Vacancy)		
Baldwin, Marylud	UCTE	1 of 2
Chance, Beth	Stats	1 of 3
Harris, John	NRM	1 of 2
Osmond, Penny	GrphComm	1 of 2
Ruef, Mike	UCTE	2 of 3
<b>Taylor, Kevin (Incumbent)</b>	<b>Kinesiology</b>	<b>1 of 2</b>
 <u>ASI Facilities and Operations Committee</u>		
(1 Representative/1 Vacancy)		
 <u>ASI Pace Committee</u>		
(1 Representative/1 Vacancy)		
Dingus, Del	Eth&SoilSci	1 of 2
 <u>ASI Student Senate</u>		
(1 Representative/1 Vacancy)		
Chance, Beth	Stats	2 of 3
<b>Dingus, Del (Incumbent)</b>	<b>Eth&amp;SoilSci</b>	<b>2 of 2</b>
 <u>Athletics Governing Board</u>		
(3 Representatives/1 Vacancy)		
Chance, Beth	Stats	3 of 3
Clark, Kevin	English	1 of 1
Colvin, Kurt	I&Meng	1 of 1
Jacques, Jodi	UCTE	1 of 4
 <u>Cal Poly Plan Steering Committee</u>		
(3 Representatives/3 Vacancies)		
Kelly, Meredith	Finan Aid	2 of 2
 <u>Campus Safety and Risk Management Committee</u>		
(2 Representatives/1 Vacancy)		
<b>Goldenberg, Stu (Incumbent)</b>	<b>Math</b>	<b>1 of 1</b>
Harris, John	NRM	2 of 2
Kellogg, Bill	Ag Ed	1 of 1

Coordinating Committee on Aids and HIV Infection

(1 Representative/1 Vacancy)

Jacques, Jodi

UCTE

2 of 4

Deans Admissions Advisory Committee

(2 Representatives/2 Vacancies)

Disabled Students Advisory Committee

(4 Representatives/2 Vacancies)

Baldwin, Marylud

UCTE

2 of 2

Duerk, Donna

Arch

1 of 1

Jones, Carolyn

Career Serv

1 of 1

Osmond, Penny

GrphComm

2 of 2

**Ruef, Mike (Incumbent)****UCTE****1 of 3****Taylor, Kevin (Incumbent)****Kinesiology****2 of 2**El Corral Bookstore Advisory Committee

(2 Representatives/1 Vacancy)

Arceneaux, Craig

PoliSci

2 of 2

Miller, Sandy

Arch

1 of 1

Vernon, Scott

AgEd&amp;Comm

1 of 1

Faculty Development Grants Review Committee

(1 Representative/1 Vacancy)

Shaban, Ali

ElecEngr

1 of 2

International Education and Programs Council

(1 Representative/1 Vacancy)

Arceneaux, Craig

PoliSci

1 of 2

Geringer, Michael

GlSt&amp;Law

1 of 1

Hilltpold, Paul

History

1 of 1

Lituchi, Terri

GlSt&amp;Law

1 of 1

Martinez, William

ModLgs&amp;Lit

1 of 1

Richison, Jeannine

English

1 of 2

Ruef, Mike

UCTE

3 of 3

Instructional Advisory Committee on Computing (IACC)

(1 Representative/1 Vacancy)

Resource Use Committee

(3 Representatives/2 Vacancies)

Ahern, Jim

Agribus

1 of 1

Lancaster, Kathryn

Accntg

1 of 1

Student Health Advisory Committee

(1 Representative/1 Vacancy)

Jacques, Jodi	UCTE	3 of 4
Kelly, Meredith	Finan Aid	1 of 2
Nicholson, Lisa	FdSci&Nut	1 of 2
Richison, Jeannine	English	2 of 2

University Committee on Committees

(1 Representative/No Vacancy)

**Academic Senate Chair**University Diversity Enhancement Council

(2 Representatives/1 Vacancy)

Bomstad, Linda	Philo	1 of 1
Jacques, Jodi	UCTE	4 of 4
Nicholson, Lisa	FdSci&Nut	2 of 2
Schwartz, Debora	English	1 of 1
Shaban, Ali	ElecEngr	2 of 2

University Planning and Budget Advisory Committee

(2 Representatives/No Vacancies)

**Academic Senate Chair****Chair of the Budget and Long Range Planning Committee**University Union Advisory Board

(1 Representative/1 Vacancy)



## Summary of NRM's Proposal for a B.S. in Environmental Management and Protection

### Purpose

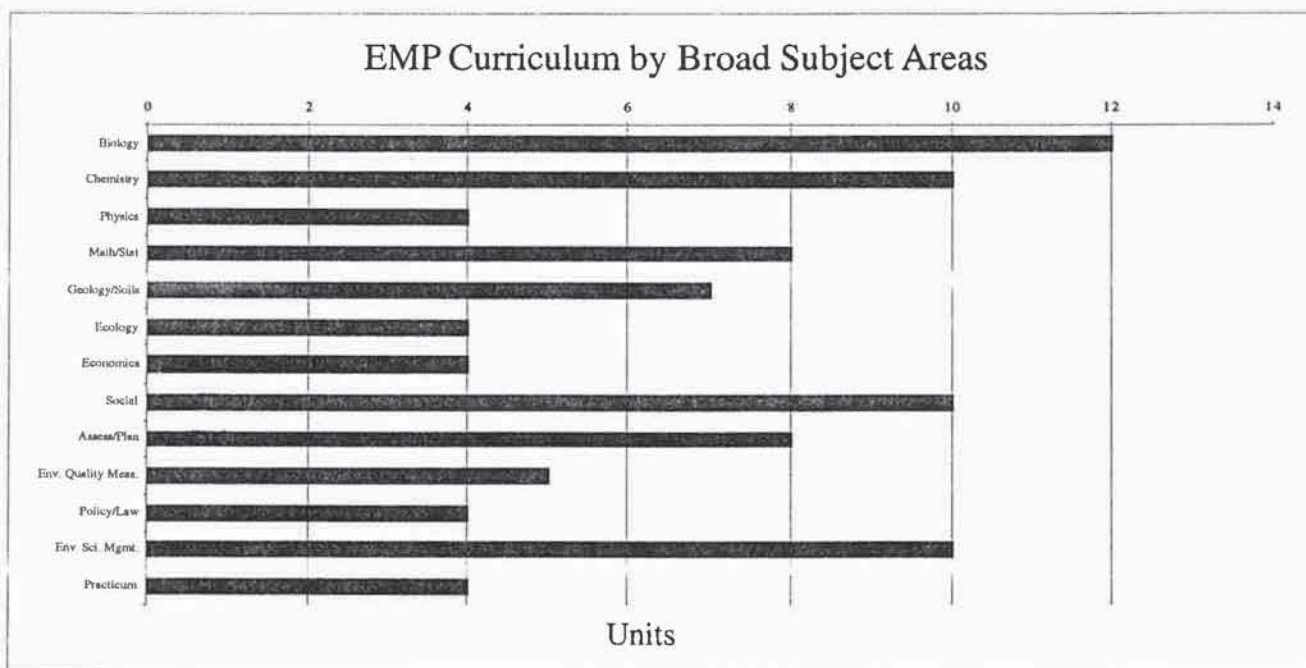
The purpose of environmental management and protection is the sustainable management of environmental resources directed toward balancing the value of those resources for consumptive and non-consumptive uses for both current and future generations. The Environmental Management and Protection (EMP) degree will provide an undergraduate interdisciplinary course of study that integrates the bio-physical and social/economical/political sciences, emphasizing management and protection of ecosystem structures and processes that sustain uses of environmental resources. The EMP major will provide students with the science and management background in natural resources that, when properly integrated, can guide consumptive uses of resources in a sustainable manner.

### Goals

1. Provide an interdisciplinary curriculum that integrates horizontally across ecosystem hierarchies (i.e., physical, hydrologic, biologic and socioeconomic); and vertically across disciplines (basic science, applied science, socio-economic and managerial).
2. Build a broad-based science foundation.
3. Integrate the ecosystem management interdisciplinary philosophy and decision-making framework into a common curriculum theme that promotes communication abilities.
4. Provide specialization in growing environmental careers such as wildlife biology, watershed hydrology, environmental policy and management, and bioresource waste management.

### Major Curriculum

Administered by the Natural Resources Management Department, the major core including support courses consists of 92-95 units, 38 units of specialization (e.g., concentrations, minors, individualized courses of study), and 7-10 units of free electives. Combined with GE, the proposed major totals 186 units (*see p.5*). The following graphic illustrates the basic design of the major core, grouping courses by broad subject areas:



### Specialization and Two New Concentrations

Due to the breadth of subjects, theories, practices and issues associated with environmental management and protection, specialization is important. Two new concentrations are proposed:

***Bioresource Waste Management*** – coursework in the biology, chemistry, design principles, and laws relating to the sustainable management of waste from point and non-point sources of pollution (*see p. 7*).

***Environmental Policy & Management*** – coursework directed at understanding the social, political, legal and regulatory issues of environmental management (*see p. 8*).

In addition, Cal Poly, SLO has recently expanded the number of concentrations and minors that are oriented toward specializations of relevance to the EMP Degree proposal, such as concentrations in watershed hydrology, wildlife biology and a minor in GIS. To take advantage of these opportunities, the EMP major includes an option of an Individualized Course of Study (*see p. 8 for a listing of related, current and proposed minors and concentrations*).

Work will begin in Fall 2002 on a concentration in “Conservation of Biological Resources” in collaboration with the Biological Sciences Department.

### History of NRM Department’s Leadership in Environmental Management

Beginning as far back as 1984 and endorsed by President Baker, the NRM Department has developed courses, academic programs and interdisciplinary faculty projects in environmental management. Led by Dr. James Vilkitis, the Coastal Resources Institute was formed in 1991 as a university-wide institute to conduct interdisciplinary research on environmental problems (*see Appendix E*).

The NRM Dept.’s concentration in Environmental Management has been adopted by several degree programs. Efforts to expand the Environmental Management Concentration into a baccalaureate degree began in 1996. Working with numerous Cal Poly faculty representing all colleges, except Business, and the Association of Environmental Professionals (a statewide organization of over 1200 environmental professionals), the EMP curriculum reflects a careful balance between the “hard” and “soft” sciences, theory and practice, science and management.

### Need and Demand/Support

Although undergraduate degrees in “Environmental Science” or “Environmental Studies” are common in academia, there is a serious and growing need to prepare graduates with more than a scientific understanding of environmental problems but with the ability to implement and manage. With its polytechnic tradition and strength, Cal Poly possesses the right blend of faculty and curricula needed for this approach to environmental management.

Surveys of current students reveal a strong demand for the proposed EMP degree from among a broad range of majors, including NRM.

Specific conditions that reflect the need for the EMP Degree:

1. Environmental impacts from growing population in California, nation and world
2. Rapid increase of ecosystem fragmentation and invasive species



3. Legal and regulatory requirements increasingly complex and even conflicting
4. Lack of understanding by general public of environmental issues complexity
5. Shrinking land base to provide food and fiber needs and non-consumptive values
6. Growing demand for graduates with environmental knowledge and communication skills

Specific conditions that reflect the demand by students and employers for EMP Degree:

1. Student survey shows that about 37% of current FNR students would transfer to EMP
2. About 15% of non-FNR majors would likely matriculate to EMP major
3. Public, private, and NPO/NGO employers express high demand for EMP graduates

In support of the last point, the following excerpts from the Letters of Support are offered:

"The range of courses offered coupled with the mission of the program coincides with my view of the current and future needs for scholarship and vocational training the environmental field."  
*C.W. Clark, President, Bay Foundation*

"The curriculum is flexible enough to allow students with varying interest to pursue many different discipline [areas] in the life sciences [and] land sciences." *Dwight Steinert, President, AEP.*

"The proposed [EMP] Major contains the diverse course [of] study that will be needed in the coming decades." *Brian Stark, Deputy Directory, The Land Conservancy*

"The proposed new major includes a course of study which will uniquely prepare graduates for employment with resource protection agencies such as the Regional Water Quality Control Board as well as a variety of industrial, municipal and consulting firms in the environmental management arena." *Sorrel Marks, Nonpoint Source Program Manager, CC Cal. Regional Water Quality Control Board.*

#### Resources

No new courses or teaching resources are required for the EMP degree. A few prerequisite changes and allowances have been made (see "FNR Changes for 2003-05 Catalog" and letters of notification and other communications in Appendices I and J).

## B.S. IN ENVIRONMENTAL MANAGEMENT AND PROTECTION

Major Courses	Description	Units
FNR 140	Careers, Planning & Seminar in NRM	1
MATH 118	Precalculus Algebra	4
<u>Math (select one):</u>		4
MATH 141	Calculus I (B1)	
MATH 161	Calculus for the Life Sciences I (B1)	
MATH 221	Business Calculus (B1)	
<u>Biology (select one):</u>		4 / 5
BIO 151	Introduction to Biology (B2)	
BOT 121	General Botany (B2)	
CHEM 111	Survey of Chemistry (B3)	5
CHEM 212	Introduction to Organic Chemistry	5
PHYS 121	Physics (B3 & B4)	4
SS 121	Introductory Soil Science (B2)	4
PSY 201/202	Introduction to Psychology (D4)	4
GEOL 201	Physical Geology	3
STAT 217/218	Applied Statistics (B.1)	4
BRAE 237/247	Field Surveying	2
<u>Plant (select one):</u>		4 / 5
BIO 152	Biology of Plants and Fungi	
BOT 238	Native Plant Materials	
EHS 231	Plant Materials	
FNR 208	Dendrology	
FNR/GEOL/LA 318	GIS	3
<u>Animals (select one):</u>		4 / 5
ASCI 329	Principles of Range Management	
BIO 153	Biology of Animals	
BIO 227	Wildlife Conservation Biology (B2)	
<u>Ecology (select one):</u>		4
BIO 325	General Ecology	
FNR 306	Ecology of Resource Areas	
FNR 326	Natural Resources Economics & Valuation	4
ENVE 330	Environmental Quality Control	3
FNR 335	Conflict Management	4
CRP/FNR 404	Environmental Law	4
<u>Area F (select one):</u>		4
BRAE 348	Energy for a Sustainable Society (F)	
ENVE 324	Introduction to Air Pollution (F)	
FNR 412/FNR 461	Ecosystem Assessment Project/Sr. Project	4
FNR 416	Environmental Impact Analysis & Mgmt.	4
FNR 465	Ecosystem Management	4
<b>Concentrations</b>		<b>38</b>
<b>Total Major</b>		<b>130-133</b>

Area	GE	Units
A.1	Expository Writing	4
A.2	Oral Communication	4
A.3	Reasoning, Argu., & Writing	4
B.1	Math/Stat	0
B.2	Life Sciences	0
B.3	Physical Science	0
B.4	Life or Physical Science Lab	0
C.1	Literature	4
C.2	Philosophy	4
C.3	Fine & Performing Arts	4
C.4	Upper-division Elective	4
C.5	Upper-division Elective (Area G)	4
D.1	American Experience	4
D.2	Political Economy	4
D.3	Comparative Social Inst.	4
D.4	Self Development (Area E)	0
D.5	Upper-division Elective	4
F	Technology Elective	0
<b>GE =</b>		<b>48</b>
<b>Free Electives =</b>		<b>7-10</b>
<b>TOTAL UNITS =</b>		<b>186</b>



## ENVIRONMENTAL POLICY & MANAGEMENT

### A. Environmental Management Concentration

	Units
CRP 212	Intro. Urban Planning
CRP 336	Regional & Environ. Planning Foundations
ECON 431	Environmental Economics
ENVE 465	Environmental Mgmt. & Urban Systems
FNR 425	Applied Resource Analysis
FNR 435	Natural Resources Policy Analysis

Concentration Core = 22

Select one of the following:

	Units
AGB 409	California Agricultural Law
FNR/CRP 408	Water Law

Select one of the following:

FNR 419	Watershed Mgmt. & Restoration
FNR/REC 417	Res Recreation Plng
SS 433	Land Use Planning

Select one of the following:

POLS 318	Political Behavior
POLS 316	Political Parties and Interest Groups

Select one of the following:

LA 451	Regional Landscape Assessment
EDES 408	Implementing Sustainable Principles
FNR 460	Advanced Applications in GIS

Restricted Electives ..... 0-8

GRAND TOTAL = 38

Individualized Course of Study ..... 38

## BIORESOURCE WASTE MANAGEMENT

### A. Professional Electives - Core

	Units
BIO 418	Limnology
BRAE 448	Bioconversion
CHEM 313	Survey of Biochemistry & Biotechnology
EDES 408	Implementing Sustainable Principles
ENVE 434	Water Quality Measurements
FNR/CRP 408	Water Law
MCRO 221	Microbiology
MCRO 342 or	Sanitary Microbiology
SS 423	Soil Vadose Zone Remediation

Concentration Core = 29

These are recommended courses (will not appear in catalog):

B. Non-Point Source Pollution. Recommended Courses:	Units
ASCI 329	Principles of Range Management
CRP 438	Pollution Prevention & Control
FNR 419	Watershed Mgmt. & Restoration
FNR 420	Advanced Watershed Hydrology
PPSC 221	Weed Science
PPSC 311	Insect Pest Management
PPSC 441	Biological Control of Insects
FNR 339	Internship

Total not to exceed = 9

C. Point Source Pollution. Recommended Courses:	Units
CRP 438	Pollution Prevention & Control
DSCI 121/230	Intro to Dairying/Husbandry
DSCI 333	Dairy Cattle Mgmt., Safety & Well-being
ENVE 439	Solid Waste Management
ENVE 465	Environmental Mgmt. & Urban Systems
FNR 339	Internship

Total not to exceed = 9

GRAND TOTAL = 38

Adopted:

**ACADEMIC SENATE  
of  
CALIFORNIA POLYTECHNIC STATE UNIVERSITY  
San Luis Obispo, CA**

**AS-\_\_-02/**

**RESOLUTION TO CHANGE ADMINISTRATIVE  
STATUS FOR LIBERAL STUDIES PROGRAM**

- 1 WHEREAS, The Liberal Studies program is presently an academic unit located in the College  
2 of Liberal Arts, and  
3  
4 WHEREAS, A status change from Liberal Arts program to Liberal Arts Department is being  
5 proposed, and  
6  
7 WHEREAS, The only functional modification in changing to department status is a change in  
8 "rank and pay" for the program from "coordinator" to "department chair" (no  
9 change will occur in staffing, number of students, location of unit, or curriculum;  
10 only a slight change in budget will occur to augment the change from coordinator  
11 to department chair), and  
12  
13 WHEREAS, Said change in status has been approved by the College of Liberal Arts (CLA)  
14 department chairs, CLA College Council, CLA Curriculum Committee, CLA  
15 Dean, and Academic Senate Curriculum Committee, and is being concurrently  
16 reviewed by the Academic Deans' Council; therefore, be it  
17  
18 RESOLVED: That the Academic Senate of Cal Poly endorse that the Liberal Studies program  
19 be changed to an academic department; i.e., **Liberal Studies Department**.

Proposed by: College of Liberal Arts  
Date: April 24, 2002

March 6, 2002

To: Provost Zingg and Academic Senate Chair Unny Menon

Via: David Conn, Vice Provost

Via: Deans' Council

Via: Harry Hellenbrand, Dean CLA

Via: CLA Council

*Susan Currier*

This is a request to change Liberal Studies from--in Contract terms--an "equivalent unit" to a department. It has a major, faculty lines (two to three, with one tenured), a director, an O/E budget (@11K), majors (@400), an advisor, full-time office staff, autonomous academic and personnel review procedures, and an office suite (thanks to CoSaM); it also administers several hundred thousand dollars in grants.

It is a crucial program that "interfaces" between the arts and sciences, on the one hand, and UCTE, on the other. Why the change? If it smells like a department, walks like a department, and behaves like a department, then it should be a department.

Functionally, what will this change effect? The director will become a chair; and the equivalent unit will leave limboland for department status. Budget does not change much since that is linked to HC and FTES, and those are relatively fixed in the college. Liberal Studies oversees and staffs its own course designators now and will continue to do so, while seeking agreements from other departments to staff their courses that LS students enroll in. Conceivably, either as an "equivalent unit" or a department, faculty may be added; but this conversion in status does not affect or regulate that decision.

Sincerely,

*R. Cichowski*

Robert S. Cichowski, Director  
Liberal Studies Program