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

MEETING OF THE ACADEMIC SENATE EXECUTIVE COMMITTEE

Tuesday, October 12, 2004
UU220, 3:10 to 5:00pm

I. Minutes: Approval of the Academic Senate Executive Committee meeting minutes of September 21,2004 (pp. 2-4).

II. Communication(s) and Announcement(s):

m. 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:

N. Consent Agenda:

V. Business Item(s):
- A. Academic Senate/universitywide committee vacancies 2004-2006: (pp. 5-6).
- B. Approval of names: faculty representatives to the Lower Division Transfer Project (materials will be distributed at meeting).
- C. Resolution on Revision to the *Bylaws of the Academic Senate* to Update the Procedures for the Faculty Dispute Review Committee: Paul Rinzler for the Faculty Dispute Committee (pp. 7-9).
- D. Resolution in Support of Affordable Textbooks: Executive Committee (pp. 10-13).
- E. Resolution on Equitable Scholarly Publishing Practices: Executive Committee (pp. 14-15).
- F. ReSOlution on Establishment of a Center for Sustainability in Engineering: Vanasupa, Chair of Materials Engineering Department (pp. 16-24).
- G. [CLOSED SESSION: TIME CERTAIN 4:50pm] The Executive Committee will meet in closed session at 4:50pm (materials sent electronically).

VI. Discussion Item(s):
- A. Disbanding the Ad Hoc Foundation Oversight Committee.
- B. Forming an Ad Hoc Committee to review Constitution and Bylaws Article m.l "Membership": revision of formula for college representation including COE representation on Academic Senate and its committees: (p. 25).
- C. Faculty expectations for research and grant development.

VII. Adjournment:

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

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MINUTES OF
The Academic Senate Executive Committee
Tuesday, September 21,2004
00220, 3:00-5:00 p.m.

Preparatory: The meeting was opened at 3:13 p.rn.

I. Minutes: None.

II. Communication(s) and Announcement(s): All members of the Executive Committee and Academic Senate Office staff was introduced. Click on http://www.calJ?oly.edul-acadsenlexec.htmlfor list.

m. Reports:

A. Academic Senate Chair: (Hannings) The first social hour of the 2004-2005, co hosted by the President's Office and the new College of Education, be held Thursday, September 30 from 4-6 pm at Vista Grande Restaurant. The Academic Senate office will initiate election of faculty to the search committee for the Provost position. ASI representatives on Academic Senate Committees have been granted early registration status in exchange for their full participation. Academic Senate Committee chairs 'are asked to keep track of student attendance. State legislation mandated a transfer curriculum at the Junior College level that is accepted across the CSu. Deans and Department heads have been asked to recruiting faculty to participate in this lower division transfer project. Last Spring an error was made in the procedures of the Academic Senate where Robert's Rules were not properly applied when counting the votes for the CMS resolution. For future reference, abstentions will count as negative votes and this procedure clarification will be announced to the entire Academic Senate at the first meeting schedule for October 5. A search for Athletics' Director is currently underway. At this time, Cal Poly has sufficient funds to hold IRA fees at current rates. President Baker's response to all resolutions can be found by clicking on http://www.calpoly.edul-acaclsenlresolutions.html

B. President's Office: (Howard-Greene) President Baker's remarks from Fall Conference will soon be available. Sandra Gardebring, interim vice president of university advancement will assumes her duties on October 18. Gardebring succeeds Bill Boldt, who recently.accepted a position at UC Riverside.

C. Provost Office: (Detweiler) the current budget has cleared all deficits and has a small operating reserve. Assuming that the Governor's compact holds, Cal Poly is looking a 2% enrollment increase and 3% compensation increase for next year. A 13% increase in construction cost has created signifIcant problems on the three facilities currently under construction. The Student Administration, PeopleSoft implementation is under way with a new revised cost of $11.9 million not the originally estimate of $15 million. .

D. Statewide Senators: (Hood) Statewide Senators met in Long Beach were the main topic of discussion continues to be the budget. This year's budget received a $225 million increase and the increase is expected to go up to $310 million next year. Chancellor Reed announced an. attempt to bring faculty salaries up to those of comparable institutions. Currently CSU Presidents have a salary that is 37% lower than their counterparts.

E. CPA Campus President: None.

F. ASI Representative: (Mednick) ASI will hold an orientation next week where goals for the year will be decided.

G. Other: (Sue Elrod, Chair of the Curriculum Committee) The Curriculuril Committee will meet on Thursday. All curriculum items, such as program reviews, will be on the consent agenda and summaries of approved programs will be posted on the web.

IV. Consent Agenda:

A. Jim Harris (Electrical Engineering) was appointed to the Graphic Communication Program Review Committee.

B. Andrew Brown (Kinesiology) was appointed to the Nutrition Program Review Committee.

V. Business Items:

A. Academic Senateluniversitywide committee vacancies 2004-2006: The following appointments were made:

College of Business

John C. Rogers	Budget and Long Range Planning Committee
Lee Burgunder	Instruction Committee
Alan Weatherford	Student Grievance Board

College of Engineering

Dan Waldorf	Instruction Committee

College of Science and Math

Jimmy Doi	Faculty Affairs Committee
Mike Sutliff	Faculty Dispute Review Committee

Academic Advising Council Kathryn Rummell
Matt Carlton

Budget and Long Range Budget Committee Chair Steve Kaminaka .
Faculty Dispute Review Committee Chair Paul Rinzler

B. Appointment of Faculty Athletic Representative to the Faculty Governing Board: ADDroved. The name of the faculty atWetic representative appointed to the Faculty Governing Board is withheld from the minutes until a public announcement is made.

C. Resolution on Proposed Change to Registration and AddlDrop Procedures: Greenwald, Academic Senator. This resolution request to delay implementation of proposed changes to the add/drop policy until the Academic Senate Instruction Committee has an opportunity to review the changes and receives the endorsement of the Academic Senate. There was much discussion about the fundamental issue of the Academic Senate giving up the right over an issue and the implementation steps already taken by the administration. *MlSIF* to agendized. Resolution sent to the Instruction Committee for review.

D. Resolution on the Creation of a Standing Sustainability Committee: Greenwald, Academic Senator. This resolution attempts to comply with the 10th provision of the Talloires Declaration endorsed by the President on August 21, 2003. The 10th provision calls for "establish a Secretariat and a steering committee to continue this momentum, and to inform and support each other's efforts in carrying out this declaration." *MlSIP* to agendize the resolution with minor changes.

E. Resolution in Support of Affordable Textbooks: Due to lack of time this resolution will be addressed at the next Academic Senate Executive Committee meeting.

F. Resolution on Equitable Scholarly Publishing Practices: Due to lack of time this resolution will be addressed at the next Academic Senate Executive Committee meeting.

G. Resolution on Revision to the *Bylaws of the Academic Senate* to Update the Responsibilities for the Research and Professional Development Committee: Ed Sullivan, former chair of the Research and Professional Development Committee. This resolution updates the responsibilities and charge of the committee by clarifying the language and deleting items that are obsolete. *MlSIP* to agendize resolution.

H. Resolution on Revision to the *Bylaws of the Academic Senate* to Update the Procedures for the Faculty Dispute Review Committee: Due to lack of time this resolution will be addressed at the next Academic Senate Executive Committee meeting.

VI. Discussion Item (s):

A. Disbanding the Ad Hoc Foundation Oversight Committee: Due to lack of time this discussion item will be addressed at the next Academic Senate Executive Committee meeting.

B. Forming and Ad Hoc Committee to review Constitution and Bylaws Article 111.1 *Membership* (formula for college representative): Due to lack of time this discussion item will be addressed at the next Academic Senate Executive Committee meeting.

C. Faculty Expectations, Research and Grants: Due to lack of time this discussion item will be addressed at the next Academic Senate Executive Committee meeting.

VII. Adjournment: meeting was adjourned at 5:00 p.m.

Submitted by,

Gladys Gregory
Academic Senate

ACADEMIC SENATE COMMITTEE VACANCIES FOR 2004·2006

COLLEGE OF AGRICULTURE

	Department
Fairness Board	
. Steve Daugherty	AniSci
Grants Review Committee	
Elizabeth Koutsos	AniSci
Student Grievance Board	
Bill Kellogg	AgEd&Comm

COLLEGE OF BUSINESS

	Department
Curriculum Committee	
Faculty Dispute Review Committee	
Norm Borin	Marketing

COLLEGE OF EDUCATION

	Department
Curriculum Committee	
Roberta Herter	Grad Studies

COLLEGE OF LIBERAL ARTS

	Department
Student Grievance·Board	

Academic Senate Committee Chairs

Fairness Board

Current Membership:

Name	Department	CollegelUnit
Aleshire, Shelley	DRC	PCS
Baltimore, Craig	Arch	CABD
Brown,Ron	Physics	CSMlUCTE
Millan, Jose	StudServ	StudAffs
Robison, Jack	Acctg	OCOB
Taufik, Dr.	ElecEngr	CENG
Trice, Thomas	History	CLA
Augusto. Melisa	Student	ASI
Samarin, Jared	Student	ASI
VACANCY	CAGR	

ACADEMIC SENATE
Vacancy for 2004-2006

College of Science and Mathematics — one vacancy (2004-06)

Orfalea College of Business — one vacancy (2004-05)

· UNIVERSITY-WIDE COMMITTEES.
Vacancies for 2004-2006

Advisory Committee on Workplace Violence
(1 Representative/l Vacancy - must be nominated by the Academic Senate Chair)

Deans Admissions Advisory Committee
(2 Representatives/l Vacancy - must be from Budget and Long Range Planning Committee)

Current BLRP Membership:

Name	Department	College/Unit
Cavaletto, Richard	BRAE	CAGR
Conn, David	AcadProg	Admin
Dalton, Linda	AcadMfrs	Admin
Dimmitt, Laura	Finan Aid	PCS
Duerk, Donna	Arch	CAED
Dugan, Timothy	Theatre&dnc	CLA
Ikeda, Kimi	AcadAffrs	Admin
Kaminaka, Steve (CH)	BioR&AE	CAGR
Niebuhr, David	MatEngr	CENG
Ramirez, Rick	Budget Off. &	Admin
Walker, John	Stats	CSMlCOE
Vaccaro, Joe	Student	ASI
VACANCY	OCOB	

Student Health Advisory Committee
(I Representative/l Vacancy. Also serves on Health Services Oversight Committee)

Sustainability Advisory Committee (formerly know as Resource Use Committee)

Choose one to serve as CABD representative — Robert Pena member since 2004; Paul Wack member since 2001

Choose one to continue as Academic Senate representative — Kathryn Lancaster member since 2002; Robert Pena member since 2004; Paul Wack member since 2001

University Union Advisory Board
(1 Representative/l Vacancy - appointed by the Academic Senate Chair)

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

AS-XXX-04

.RESOLUTION ON
. REVISION TO THE *BYLAWS OF THE ACADEMIC SENATE*
TO UPDATE THE PROCEDURES FOR THE FACULTY DISPUTE REVIEW COMMITTEE

WHEREAS, The Faculty Dispute Review Committee was charged with creating procedures to implement a faculty dispute process consistent with the attached document; therefore, be it

RESOLVED: That the *Bylaws of the Academic Senate* be revised as follows:

I. COMMITTEE DESCRIPTIONS

5. faculty Dispute Review Committee

b. Responsibilities

The ~~committee~~ ~~shall~~ ~~develop~~ procedures appropriate to its . funotions and ~~shall~~ make periodio reports of its ~~activities~~ to ~~the~~ Aoademio Senate and to ~~the~~ ProyostiVice President for Academic Mfairs. For all disputes that fall within its jurisdiction, the Faculty Dispute Review Committee shall have the authority to conduct an investigation of the dispute· and to make recommendations to the ProvosWice President for Academic Affairs. The procedures to be followed shall be approved by the Academic Senate and . published as a document entitled *Faculty Dispute Review Committee Procedures.* Changes in the document shall be made by the Senate upon recommendation of the Faculty Dispute Review Committee.

RESOLVED: That the *Faculty Dispute Review Committee Procedures* be approved as follows:

Preamble/Charge

The Committee represents a resource where faculty can have disputes reviewed by peers for a resolution recommendation. Faculty includes full-tinie and part-time "teaching" faculty and department heads. The Committee was fonned to acldress disputes between faculty members which can not be resolved by other means, deals with disputes between/among faculty members only, and attempts to reach equitable resolution. Faculty should make every attempt at infonnal resolution prior to appealing to this Committee. Appearance before the Committee is voluntary, and proceedings are kept confidential by Committee members. The Committee recognizes the obligation to report any illegal activity. The authority of this Academic Senate Committee is limited as a recommending body to the Provost. The Committee does not deal with decisions or questions of professional review such as RPT and FMI. (See sections which follow that detail jurisdiction and procedures.)

Membership/Terms/Chair/Quorum

The Faculty Dispute Review Committee shall consist of six (6) tenured facmty members representing each of the Colleges and one representative from Professional Consultative Services, appointed by the Executive Committee of the Academic Senate for staggered two-year tenns. The ~~University~~ ~~Ombudsman~~ ~~will~~ be a ROR ~~voting~~ ~~ex~~ offioio member ~~of the~~ Committee. The Faculty Dispute Review Committee chair shall be a member of the General Faculty and shall be appointed in accordance with Article VIII.C of the Bylaws of the Academic Senate. A quorum shall consist of 5 voting Committee members. The Committee may invite various consmtants to attend to provide advice on university policies and procedures.

Propos.ed by: Faculty Dispute Review Committee
Date: June 21, 2004
Revised: September 20, 2004

Faculty Dispute Committee

Summary

June 2, 1998 - Resolution AS-501-98/ETF "Resolution on Faculty Dispute Process" was adopted. This resolution states the following:

- That a faculty dispute process be established consistent with the attached docwnent (Faculty Dispute Process) utilizing informal solutions first and then formal solutions
- That the Faculty Ethics Committee be established consistent with the. attached docwnent
- That the Faculty Ethics Committee be charged with creating procedures to implenient a faculty dispute process consistent with the attached document

March 9, 1999 - Resolution AS-516-99 "Resolution on Revision to the Bylaws of the Academic Senate to add Academic Senate Faculty Ethics Committee" was adopted. This resolution states the following:

- That the Facu1ty Ethics Committee be added to the *Bylaws of the Academic Senate.*

March 26, 2001 - .Memorandwn to Myron Hood from LezlieLabhard, Chair. This memorandwn presents the procedures developed by the committee members, Sean Bank, and Harvey Greenwald. A new name "Faculty Dispute Review Committee" was also suggested as it reflects other issues that the commi1:tee addresses in addition to ethics.

Adopted:

ACADEMIC SENATE
of
CALIFORNIA POLYTECHNIC STATE UNIVERSITY
San ·LuisObispo, CA

AS-_-04

RESOLUTION IN
SUPPORT OF AFFORDABLE TEXTBOOKS .

WHEREAS, According to a survey by the California Strident Public Interest Research Group (CALPIRG), students spent an average of$898 per year on textbooks in the 2003-2004 school year, or almost 20% of the cost of in-state fees; and

WHEREAS, In contrast, a 1997 University of California survey found that students spent an average of $642 on textbooks in 1996-97; and

WHEREAS, Textbook publishers use gimmicks to increase the price of textbooks; arid

WHEREAS, Textbook publishers add bells and whistles to textbooks-such as CD ROMs and .workbooks that over 65% of faculty surveyed say they "rarely" or "never" use; and

WHEREAS, Textbook publishers put new editions on the market frequently-often with few content changes-making the less expensive used editions obsolete and unavailable; and

WHEREAS,· Over 59% of students surveyed who searched for a used book for the fall 2003 quarter/semester were unable to find even one used book for their classes; and

WHEREAS, Textbook publishers are unfairly charging students at a time when tuition and other college costs are rising; therefore be it

RESOLYED: That Cal Poly support the CSU Academic Senate to call upon college textbook publishers to adopt the following practices:

- To keep the cost of producing textbooks as low as possible without sacrificing educational content;
- To give faculty and students the option of buying texthooksseparately, without additional bells and whistles;
- To keep textbook editions on the market as long as possible without sacrificing the educational content;

- To give preference to paper or online supplements to current editions over producing entirely new editions;
- To pass on cost savings to students mi.ce online textbooks are on the market;
- To disclose to faculty members all of the different products they sell including both bundled and unbundled options, list how much each of those products cost, the length of time they intend to produce the current edition, and how the newest edition is different from the previous edition; and be it further

RESOLVED: That Cal Poly support the CSU Academic Senate to call upon faculty to both give preference to the least cost textbook option when the educational content is equal and to press publishers to adopt the above practices; and be it further

RESOLVED: The Cal Poly support the CSU Academic Senate to call upon the University to encourage as many forums for students to purchase as many used books as pos·sible, including rental programs and book swaps; and be it further

RESOLVED: That a copy of this resolution be forwarded to The Association of American Publishers, Chancellor Reed, and the California Student Public Interest Research Group (CALPIRG).

Proposed by: Academic Senate Executive Committee
Date: September 21, 2004

CALPIRG

California Student Public Interest Research Group

May 4, 2004 ,

Dear Robert Cherny,

Please consider adopting the attached resoJution in support of affordable textbooks.

As you probably know; a recent survey of students across the University of California system fQund that students are now paying an average of $900 a year for textbooks. In contrast, a 1997 DC study found that students paid on average $642 a year during the 1996-1997 academic year. With other college costs rising as well, we are concerned about students' ability to either pay for college or to fully take advantage of all of the educational opportunities. available to them while at college.

We recently interviewed faculty members who teach the top five most purchased textbooks at 13 colleges and universities in California and Oregon. Our survey found that many textbook publishers engage in practices that unfairly drive up the cost of textbooks for students, such as adding bells and whistles that have questionable usefulness and producing new textbook editions with relatively few significant changes, forcing students to forgo the older, less' expensive edition. The full report can be downloaded at www.CALPIRGStudents.org.

Over 500 mathematics professors from over 100 universities from around the country- including California State University campuses'- have already signed'a letter to Thomson Learning which makes four simple requests; we are hoping that the Senate's 'involvement will help make the case to all publishers to cease many of their unfair practices.

Feel free to contact us at (213) 251-3680 x303 if you have questions or are interested in getting more involved in our effort. You may also review the report and download this resolution at www.CALPIRGStudents.org. Thank you for your time.

Sincerely,

Merriah Fairchild
CALPIRG Higher Education Advocate

Three-Way Price Agreement for
University of California, Los Angeles
Math 31a, 31b, 31e, 32a, 32b,

This memo serves as full price disclosure for tho text listed below IS adopted by tho Mathematics department fot academic year 2004/2005. The following prices are good for the lifo of the edition.

ISBN:	0-534-39339-X	0-534-39366-7	0-534-39357-8
Author:	Stewart	Stewart	Steart
Title & Edition..:	Calculus 5/e	Single Var Calc 5/e	Multivar Calc 5/e

Thomson Learning's Pledge to the Bookstore
Net Price (.. invoiced to the Bookstore) .. of May 15, 2004:

	S 80.80	$64.80	$59.40
(dowll from	S101,00511.00		$73.00)

Not subject to annual company price increase.

The Bookstore Pledge to the Department
Retail Price as of June 1, 2004 at or below:

	$109.50	S 87.75	$79.00
(down from	$136.50	$109.50	$95)

As part of the Bruin Advantage program.

The Instructors' Pledge to the Bookstore and students
The professors for tbe courses listed above will mention that the book is required for the students by the professor and department and will encourage the students to buy the books from the bookstore by informing the students of the special negotiated price available at the bookstore.

Our Siped Pledge

Thomson Learning Sale. Representative Sylvia Sotomayor	Department Contact Dr. Miech	Textbook Manager Anne Collins
4-19-04	4-19-04	
Date	Oat.	

[redacted]

Adopted:

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

AS-_-04

RESOLUTION ON
EQUITABLE SCHOLARLY PUBLISHING PRACTICES

Background: In an enviroriment of escalating subscription costs and serious budget constraints, the University Library strives to provide access to scholarly journals:-either online or in print-required for student and faculty research. The Systemwide Electronic, Information Resources group at the Chancellor's Office has been on the cutting edge of subscription negotiations with large publishers such as Elsevier, Wiley, etc. This process has increasingly resulted in the purchase of large, bundled packages of journal titles from a single publisher. Because these bundled subscriptions include both necessary and unnecessary titles, academic libraries often pay for journal titles that are not needed. A number of academic institutions, including some in the CSU and UC systems, are engaged in a struggle to obtain reasonably priced packages of desired online journals. Some campuses have passed resolutions asking for intensified negotiations with journal publishers. These events have also, inspired some faculty and administrators to rethink extant definitions and ranking of tenure quality journals.

The CSU system faces a challenge to scholarly communication in relation to the costs of online journal subscriptions; for example, access to many of the 1800 journal titles represented in Elsevier's Science Direct Online (SDOL) database. Difficult negotiations with Elsevier and other large publishers concerning pricing issues are symptomatic of an underlying issue in scholarly communications: many faculty feel the need to publish their papers in high profile, highly respected journals whose publishers are selling access to these papers at prices that are increasing at a much higher rate than current inflation.

Alternative forms of scholarly communication need to be considered. Consider the California Digital Library (CDL) which has been pioneering new forms of publication including the eScholarship Repository. Through the CDL the UC also provides, tangible support for new scholarly publishing initiatives that promise high quality peer reviewed content at affordable prices, including the Public Library of Science and BioMed Central.

Faculty action to retain intellectual property rights would also contribute to meeting the challenge. Authors can negotiate to retain rights, including the right to post their work in an institutional repository or distribute copies to their classes.

WHEREAS" Online access 'to scholarly papers is increasingly important to scholarly research. Such access would be jeopardized by a breakdown in negotiations between the CSU and any large scale publisher's collective product (such as Elsevier's Science Direct Online, negotiations for which will occur next fiscal year).' Successful resolution of negotiations is threatened by these publishers' insistence on increasing subscription charges at a rate far exceeding inflation and to a level not justified by their relative utility compared with other online journal services; therefore be it'

RESOLVED: That the Cal Poly Academic Senate resolves to call upon its faculty members to give serious and careful consideration to:

- Cutting its, ties with Elsevier and other large scale publishers identified as problematic;
- No longer submitting papers to Elsevier journals or to the journals of other large scale publishers identified as problematic;'
- Declining to referee the work of colleagues submitted to these publishers' journals;
- Relinquishing editorial posts, should the CSUlElsevier negotiations--or negotiations with other publishers-prove unsuccessful; and, be it further

RESOLVED: That the Senate also calls upon all faculty and administrators involved in the promotion,'tenure & retention procedures to recognize that some factilty may choose not to submit papers to these types of journals even when the journals are highly ranked. Faculty choosing to follow the advice of this resolution should not be penalized.

Proposed by: Academic Senate Executive Committee
Date: September 21,2004

Adopted:

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

AS- -04

RESOLUTION ON ESTABLISHMENT OF A
CENTER FOR SUSTAINABILITY IN ENGINEERING (CSinE)

WHEREAS, Cal Poly, along with over 300 universities worldwide, is committed to environmental citizenship through President Baker's recent endorsement of the Talloires Declaration; and

WHEREAS, The Talloires Declaration calls for urgent action, including the development and implementation of environmentally sound industrial technologies; and

WHEREAS, It is incumbent on engineers, whose business is the innovation of and management of technology to provide new and creative solutions in the global community's quest for sustainable solutions; and

WHEREAS, There is a critical mass of individuals within the College of Engineering who are engaged in the application and research of technologies for sustainable solutions; and

WHEREAS, A Center for Sustainability in Engineering will leverage the efforts of individuals within the College of Engineering; and

WHEREAS, Endorsements for the creation of the center have been obtained from the College of Engineering, College of Engineering Dean's Advisory Council, the Deans Council, and the Office of Research and Graduate Programs; therefore be it

RESOLVED: That the Academic Senate of Cal Poly endorse the proposal to establish the *Center for Slistainability in Engineering (CsinE).*

Proposed by: Chaztiioanou, Richards, Vanasupa, CENG
Date: September 27, 2004

CAL POLY

State of California
Memo·randum.

To: David Hannings, Chair
Academic Senate

Date: September 27, 2004

From: Robert C. Detwel1er
Interim Provost and Vice.President
for Academic Affairs.

Copies: Peter Y. Lee
Susan Opava
Alypios Chatziioanou
Linda Vanasupa

Subject: Request for Academic Senate Review of the Proposal for the .Establishment of a Center for Sustainability in Engineering (CslnE).

Attached is a copy of a preliminary proposal to establish a Center for SustainabilitY in Engineering at Cal Poly. In accordance with campus Administrative Bulletin 87-3. - (Guidelines for the establishment of Centers and Institutes), this proposal received conceptual approval by the Academic Deans' Council at its meeting on May 10,2004. I would now appreciate the Academic Senate review this proposal prior to the close of Fall Quarter 2004. Please feel free to contact Dr. Alypios Chatziioanou, Chair of the Civil and Environmental Engineering Department, or Dr. Linda Vanasupa, Chair of the Materials Engineering Department, authors of the proposal, should you have any questions or would like them to make a presentation to the Academic Senate. No State funding is guaranteed or foreseen for startup funds for this proposed center due to the current State budget situation.

Thank you, and if you have any questions, please do not hesitate to contact my office.

Enclosure

Center forSustainability in Engineering (C.SinE)

Proposal to the California Polytechnic State University

April 30, 2004

A. Chaztiioanou,:O. Richards, L. Vanasupa
College of Engineering

Contents

$ustainability in Engineering
The Critical Need, The Urgency, The Rationale

Strategic Plan
Our vision and mission
Objectives, Strategies

Organization and Governance
Roles and Responsibilities
About the Director, Deanna Richards
About the Center Faculty

Budget Estimates

Bylaws

Appendix A: Memo of Support from CENG Chairs and Directors

Appendix B: Curricular Roadmap

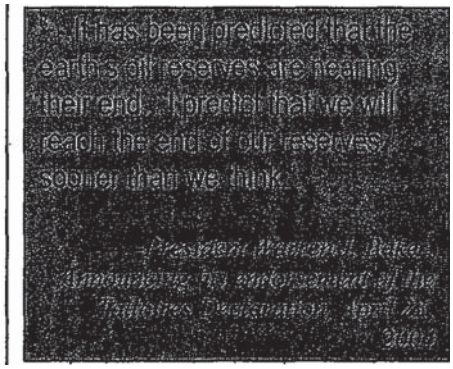
Appendix C: Curriculum Vita for D. Richards

Appendix D: Summary of Grants Activity for Faculty Involved in Center

Sustainability in. Engineering

The Critical Need

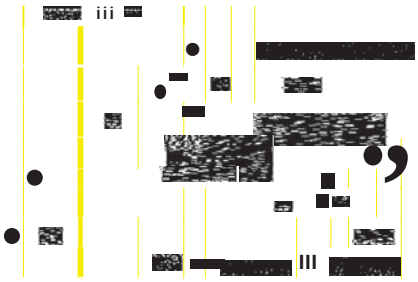
The global scientific and engineering communities recognize the urgent need for society to minimize harm to the environment. Indeed, over 300 university presidents, including Cal Poly's, has underscored the urgency by signing the Talloires Declaration. In it, university leaders call attention to the precarious . state·of the environment and global society and call for immediate action, including developing and deploying environmentally preferable technologies, to ensure a more sustainable future for all humanity.



It is incumbent on engineers, whose business is the innovation of and management of technology to provide new and creative solutions in the global community's quest for sustainable solutions.

The Urgency

Historically, as in other academic fields, environmental initiatives within engineering have mainly been isolated within the discipline .of environmental engineering. However, both·the approaches to meeting economic and social demands amid tighter environmental constraints have been'evolving over the last 30 years. Indeed as the international community has been examining the scope of the problem--depleting natural resources, diminishing biodiversity, social inequity-- it is clear that sustainable solutions will require knowledge from all disciplines. There are no magic bullets. There are no simple solutions. What is required is new thinking, new ideas, new ways of balancing economics, the environment, and social imperatives (the triple bottom line). Because we have already damaged key components of the biosphere such as forests, waterways, fisheries and the ozone layer, we cannot delay making this paradigm shift.



The Rationale

Fortunately, a number of efforts are already underway at Cal Poly to promote sustainable solutions. In addition to projects, courses and course content within the College of Engineering (CENG), faculty outside CENG have established programs to address some of the critical needs; the *Renewable Energy Institute* and *Environmental Biotechnology Institute* are two examples. Our intent is to bolster these efforts and to strengthen the overall efforts at Cal Poly. The proposed Center for Sustainability in Engineering (CSinE) will primarily, initially, leverage the work of individual.

investigators within CENG to effect the paradigm shift needed throughout CENG programs and influence engineering programs ,statewide and nationwide. However, given the complex multi-disciplinary nature of the science and solutions to sustainability, CSinE efforts will benefit from and contribute to the larger CalPoly' community as well.

Strategic Plan

In the first two years, CSinE efforts will be concentrated on three primary activities:

- facilitating the'integration of environmental and sustainability concepts throughout engineering curricula
- Organizing a conference for Fal12005;
- Establishing outside funding for the Center's.on-going activities;

Our vision and mission

Vision: To provide engineers with the interdisciplinary perspective needed to inspire, develop, implement, innovate, practible methods for sustainability

While the initial aim of CSinE is to assist CENG faculty with curricular change our goal is to function as a resource for faculty at other engineering institutions as well (similar to Carnegie Mellon's *Eberly Center for Excellence in Teaching)* We plan to host workshops locally and at strategic conferences such as *Frontiers in Education,* or the annual *American Society for Engineering Education.* Potential funding sources for curricular activities include government agencies, private foundations and industry.. draft plan for the curricular .integration is included in Appendix B of this docunient. It includes goals, actions and objectives for each year of study with the intent of shifting the paradigm toward multi-disciplinary environmentally preferable, socially sensitive, systems-based thinking and design.

Mission: CSinE is committed to leading the development of engineers who are systems thinkers, technological innovators and catalysts of change for sustainable futures.

Objectives

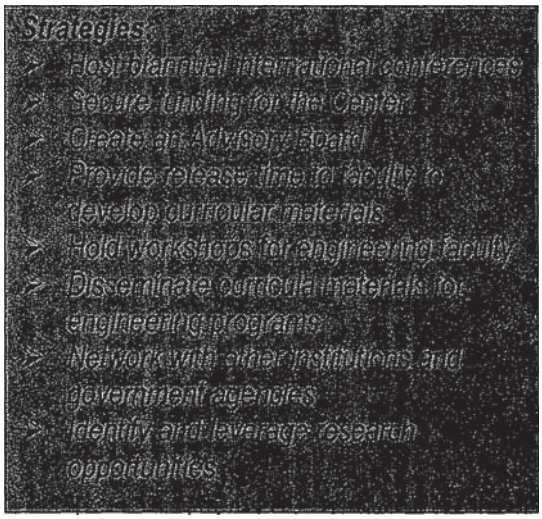
Objectives:

- *Shift the engineering educational paradigm so that it involves systems thinking, and incorporates environmental and social considerations in engineering design and management;*
- *Ensure that engineering design incorporates continuous improvements in integrating environmental and social considerations;*
- *Serve as a resource for faculty to integrate sustainability practices into the curriculum;*
- *Coordinate and fund multidisciplinary projects with sustainable components;*
- *Become self-supporting by Year 3;*
- *Increase community awareness of the need for sustainable solutions.*

• The CENG Department Chairs and Directors have endorsed the proposal to integrate sustainability and create a Center. Please see item 4 in Appendix A.

Strategies

The second goal of CSinE in the firsttwo years is to host a major international conference on the challenges to integrating sustainability .mto the undergraduate engineering curricula engaging industry, academia, and government. It is . .tentatively planned for the Fall of 2005 and potential speakers have been .identified. The National Academy of Engineering has been approached to playa. partnership role. In addition, professional engineering associations will be asked to join the effort as well. Funding will be sought from the Environmental Protection Agency, National Science Foundation, the Engineering Foundation, the Sloan Foundation, corporate entities, as well as private foundations. Funds will be used to cover commissioned papers, costs of travel of speakers; publication costs, as well as salary and other conference costs. Some costs will also be covered by registration. fees. It is anticipated that the conference will be the first of several to be hosted biannually on the same or related topics.

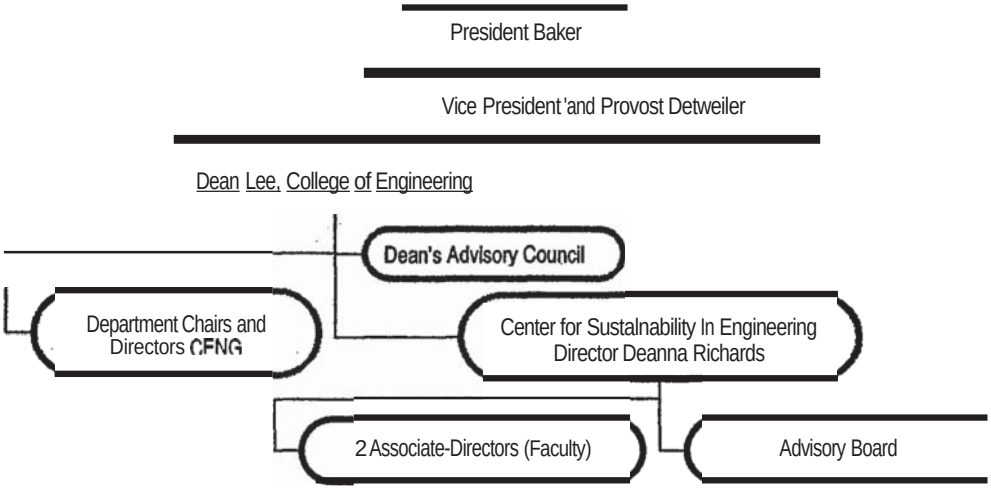


Over the longer term, it is anticipated that CSinE will fully engage in efforts to promote research and development related to finding sustainable solutions. While there are many aspects of sustainable development that can be . characterized as needing basic research, much of it is applied. As such Cal .Poly is uniquely positioned to provide leadership in this area. Additionally, such applied .research also provides valuable real-world learn-by-doing'.' experience from which Cal Poly students can abundantly benefit. As such, CSinE would be poised to take advantage of a situation in which Cal Poly's competitive advantage can 'be, and should be, harnessed to address a pressing global need. Furthermore, given the nature of the issues of sustainability, it is very likely that many of the engineering design issues that arise will require the input of other fields such as ecology (obvious as engineers learn to design within environmental constrains) as well as anthropology and sociology (as engineers learn to design within social constraints). As' such, if CSinE is to live up to its vision of providing engineers with the' *interdisciplinary* perspective needed we anticipate both drawing on, and contributing to the larger Cal Poly community. . .

Funding for this effort will take two forms. The first to support faculty and· students 'on specific projects with funding from state and federal government agencies, private foundations and corporate sponsors. The second is to seek sustaining funds for CSinE from private individuals, corporations and private foundations. An example of an specific project involving industry and government sponsors is on recycling automobile tires currently being negotiated by one of the proposers of CSinE (LV).. Applied, multi-disciplinary projects such as this would fall tinder the mission of CSinE and , sought by the Director and. Associate Directors. The Director and Associate Directors will work together to form the investigator teams and cultivate funding opportunities for these types of projects.

Finally, there is already a clear synergy with the other CENG initiatives, such as the Project-Based Learning Initiative and the Bonderson Building, which is scheduled to be ready by CSinE's third year. Many of CSinE's space needs can: be satisfied by the new building. Additional funds that become . available through indirect returns and grants will be used towards meeting staffing needs as well as creating 'a paid director position. During the first year, the Director will work *pro bono.*

Organization and Governance



The Director of CSinE would be appointed by the Dean of the College of Engineering in consultation with CENG Chairs and Directors. The appointment would last for one year unless otherise recommended by the CENG Council. Her primary role would be to implement or facilitate the implementation of the strategies: fundraising handling budget and staffing issues; interacting directly with CENG students and faculty; working with the

Dean to determine space needs arid allocations for the projects; forming partnerships with other institutions and agencies. The Director will also consult with an advisory board that is appointed by the CENG Dean after recommendations by the CSinE Director and the CENG Council.,

The Associate Directors are appointed by the Dean of CENG in consultation with CENG Chairs and Directors when the director is not a Cal Poly faculty member. They serve as advisors to the Director and internal advocates for the University.'

, About the Director, Deanna Richards, Ph D.

DEANNA J. RICHARDS is an independent consultant. She provides technological and management strategies, tools and solutions that enable 'corporate, public and non-governmental entities address environmental and sustainable development concenis. ,Dr. Richards launched and directed the Technology and Environment/Sustainable Development program'of the National Academy of Engineering from 1989 to 2000, before striking out on her own. At the Academy she initiated and oversaw efforts to address policy and management issues related to technology, the environment and economic growth, directed several studies on related issues and produced several seminal publications. Today she continues her pioneering efforts in the field of industrial ecology, engineering within ecological constraints, environmentally conscious manufacturing, as well as innovations to meet sustainable development objectives with a range of clients. She is currently serving within Cal Poly's College of Engineering as the Director of the Sustainability in Engineering Initiatives. (please see Appendix C for more information on Dr. Richards).

About the Center FaCUlty'

The faculty establishing the Center has been involved in research and development that support the Center's objectives for several years. Their collective experience includes securing external funding from government agencies, private foundations, and corporations. They have lead both education and research initiatives (see Appendix D for a summary of 'sponsored research). As the core CSinE team, they are well positioned to work with the Director to enable the success of the Center.

In addition to some of the funded research listed in Appendix D, the College of Engineering faculty continues to engage activities related to the proposed Centers mission, including hosting workshops and short courses for industry, courses and activities within the engineering curricula, and presentations at international conferences.

Budget Estimations

We are requesting start-up funds totaling $50K for the first two years. Note that CENO is committing a 25% match for funds in the first year and a 17% match' in the second. The Director will not draw a salary until the second year.

	Year 1	Year 2	Year 3	Year 4**	Year 5
Estimated Income					
Center Start-u Funds	$20,000	$30,000			
CENGFunds	$5.000	$5.000			
Indirect Returns			$5,000	$10000	$20.000
Conference Fees		$120.000			
Grants		$20,000	$30,000	$40,000	$60,000
Total	$25.000	$175.000	$35.000	$50.000	$80.000
Estimated Expenses					
Staff and Student Assistants	$7,000	$40,000	$25,000	$38,000	$66,000
Direct Conference· Exoenses	$10,000	$120.000			
Supplies and services	$8.000	$15,000	$10,000	$12.000	$14,000
Total	$25,000	$175,000	·$35,000	$50,000	$80,000

*Expenses include foundation administrative fees or other overhead as required.
**If Conference is biannual the 4 year budget needs to be adjusted accordingly.

September 2003

CALIFORNIA POLYTECHNICSTATE UNIVERSITY
San Luis Obispo, Callfornia 93407

CONSTITUTION OF THE FACULTY
and the
BYLAWS OF THE ACADEMICSENATE

* * * *

Article ill, The Academic Senate

Section 1. Membership

a. Each college shall elect three senators, plus one senator for each thirty faculty members . or major fraction thereof. Any academic unit not housed within a college, which is otherwise not represented within the Acadeniic Senate, shall have an opportunity to obtam representation ili. the Senate and/or UIiiversity committees through a petition to the Academic Senate Executive Committee. The unit, upon petition, may be allocated one senator for each thirty full-time faculty members or major fraction thereof who are solely affiliated with that unit.

b. Designated personnel in Professional Consultative Services (excepting directors) shall be represented in the Academic Senate by the formula of one senator per each fifteen members, or major fraction thereof:

(1) Full time probationary or permanent Librarians; and

(2) Full time probationary or permanent (a) Counselors; (b) Student Services Professionals [SSPs] 1-, IT·, and ill-academically related; (c) SSPs ill and IV; (d) Cooperative Education lecturers; (e) physicians; and (f) full time coaches holding a current faculty appointment of at least one year.

c. Those part time lecturers of an academic department/teaching area and those part time employees of Professional Consultative Services, other than those who are members of the General Faculty as' defined in Article I, will be represented by one voting member in the Senate.

d. Senators acting in an at-large capacity are the immediate' Past Chair of the Academic Senate and the CSUstatewide academic senators.

e. Ex officio, nonvoting members are (1) the President of-the University or designee, (2) the ProvostlVice President for Academic Affairs or designee, (3) one representative from among the academic deans, (4) the President and Executive Vice President of ASI or designees, and (5) the Vice President for Student Affairs.