I. Minutes: Approval of Academic Senate meeting minutes for April 10 and May 1 2012 (pp. 2-6).

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

III. Consent Agenda:

<table>
<thead>
<tr>
<th>Program Name or Course Number, Title</th>
<th>ASCC recommendation/ Other</th>
<th>Academic Senate (AS)</th>
<th>Term Effective</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 311 Intermediate Agribusiness Finance (4), 4 lectures</td>
<td>Reviewed 3/29/12, additional information requested from the department; recommended for approval 5/3/12</td>
<td>Placed on 5/22/12 consent agenda</td>
<td>Winter 2013</td>
</tr>
<tr>
<td>AG 426 Advanced Rural Appraisal (4), 3 lectures/1 activity</td>
<td>Reviewed 3/29/12, additional information requested from the department; recommended for approval 5/3/12</td>
<td>Placed on 5/22/12 consent agenda</td>
<td>Spring 2013</td>
</tr>
<tr>
<td>CHEM 219 Organic Chemistry Lab III for Life Sciences (1), 1 lab</td>
<td>Reviewed 4/19/12 and 4/26/12; recommended for approval</td>
<td>Placed on 5/22/12 consent agenda</td>
<td>Spring 2013</td>
</tr>
</tbody>
</table>

IV. Business Item(s):
A. Resolution on eLearning Policy: Ken Griggs, chair of the Task Force on Online Education, first reading (pp. 7-15).
B. Resolution on Retention, Promotion, and Tenure: Scott Steinmaus, chair of the RPT Task Force, first reading (pp. 16-17).
C. Resolution on Proposed New Degree Program: Bachelor of Arts in Liberal Arts and Engineering Studies (Appendix support documents at http://academicsenate.wcms.calpoly.edu/sites/academicsenate.wcms.calpoly.edu/files/documents/LAES_appendix_1-support_docs-8.pdf) : Debra Valencia-Laver, Associate Dean for CLA and Andrew Schaffner, ASCC Chair, first reading (pp. 18-29).
D. Resolution on the Mustang Way: Kiyana Tabrizi, ASI President, first reading (pp. 30-31).

V. Discussion Item(s):

<table>
<thead>
<tr>
<th>PHYS 121 College Physics I (4)</th>
<th>Reviewed 4/19/12, not recommended for approval</th>
<th>Pulled from 5/22/12 consent agenda</th>
<th>Fall 2012</th>
</tr>
</thead>
</table>

VI. Adjournment:
Minutes of the Academic Senate
Tuesday, April 10 2012
UU 220, 3:10 to 5:00pm

I. Minutes: The minutes of the February 18 and March 6 2012 Academic Senate meetings were approved as presented.

II. Communication(s) and Announcement(s): none.

III. Reports:
A. Academic Senate Chair: (Fernflores) The Chair introduced Kevin Bontenbal, President of Cuesta College Academic Senate. Chair Bontenbal will be discussing the accreditation process currently underway at Cuesta College later in the meeting. The report on prevention of sexual assault was submitted to President Armstrong on February 15. Vice President Allen has been working on its recommendations and some changes have already been instituted. The report is available at http://studentaffairs.calpoly.edu/content/sexual-assault-recommendations.

B. President’s Office: (Kinsley) On Friday, April 27, 9:00am to 12:00pm, the President’s Cabinet is meeting in open session with campus and community members to discuss learning technologies for enhancing student learning. The purpose of the open forum is to have mutual dialogue and present what we are doing at Cal Poly and how it relates to the greater world. More information on the President’s Cabinet meeting can be found at http://www.president.calpoly.edu/presidentscabinet. The proceedings will videoed and available to all.

C. Provost: (Enz Finken) Provost Enz Finken provided information on current budget conditions. There is a lot of work to do in order to recognize what the best process will be for dealing with the budget shortfall and how best to support the colleges and other areas of campus. If “trigger” cuts are received midyear, plans have already been determined so that no further cuts to campus units will be necessary. The Provost thanked everyone involved in the WASC study, review, and visit. It went extremely well.

D. Vice President for Student Affairs: (Allen) We are expecting a great Open House this year. The Open House Committee is preparing a contingency plan if it rains.

E. Statewide Senate: (Foroohar) Two statewide resolutions on academic freedom were discussed. The earlier constitutional resolution—that all 23 campuses voted on—was not agendized by the Chancellor due to legal implications. A revised version was drafted by the statewide Senate and accepted. The modification will return to campuses in May and then forwarded to the Trustees for approval.
F. CFA Campus President: (Thorncroft) Next week the strike vote begins. CFA is drafting its response to Chancellor Reed’s email concerning negotiations. The last three rounds of fact-finding were in favor of CFA’s position; however, the Chancellor chose to do something different each time.

G. ASI Representative: none.

IV. Consent Agenda: The following course was approved by consent: HIST 350, The Scientific Revolution, c 1500-1800 (4), 4 lectures, GE 05.

V. Business Item(s):
   A. Election of Senate officers for 2012-2013: Steve Rein was elected Chair by acclamation. Dustin Stegner was elected Vice Chair by acclamation.
   
   B. Resolution on Shared Governance: first reading. This resolution has undergone a good deal of discussion. During the WASC self-study, shared governance was an issue identified as needing clarification. The resolution requires a two-thirds vote to pass and a faculty referendum to add the word “shared” to the preamble of the Constitution of the Faculty (“...and the collegial form of shared governance are based...”). Some added wording was suggested. The resolution will return for second reading with the added wording.
   
   C. Resolution on For Profit Course Material Sites: first reading. Adrienne Miller, Director of Student Rights & Responsibilities, gave background information for this resolution. Several for-profit sites have been appearing on the internet which contain faculty members notes and exams used in their classes. Dr. Miller spends numerous hours tracking students who provide the materials to these sites and assisting faculty members to remove their materials. The resolution contains guidelines entitled “Suggestions to Protect Course Materials Which Faculty Maintain are Copyright Protected,” prepared by Al Liddicoat, Associate Vice Provost for Academic Personnel. Copyright information is available at http://lib.calpoly.edu/copyright.

VI. Special Reports:
   A. Kathleen Enz Finken, Provost; Kimi Ikeda, AVP for Systems and Resource Mgt; and Jim Maraviglia, AVP for Marketing and Enrollment Development: CSU Enrollment Planning and Management: Provost Enz Finken provided information on recent changes affecting student enrollment and management. The CSU will be imposing unit limits on students; however, exceptions are available. A large majority of Cal Poly students will qualify under these exceptions. Of 18,000 students, about 200-300 students do not meet the exceptions. At present, about 13% of our students carry over 16 units. The issue of enrollment management is a complex one. Financially, it may require more modeling options be available in order to determine what model is best for each individual campus.
   
   B. Kevin Bontenbal, Academic Senate President of Cuesta College: Cuesta College accreditation process: Kevin Bontenbal, President of the Cuesta College Academic Senate, provided information on the accreditation review currently underway at Cuesta College. Cuesta is accredited by ACCJC, a branch of WASC. The college had its last comprehensive self-evaluation in 2008. In January 2009, the commission reviewed
Cuesta's self-study and the visiting team report provided nine recommendations in areas it felt standards were not being met. Cuesta was put on warning status, which is the first level of sanction. Much work has been done to address those recommendations with three still to be fully addressed: planning and resource allocation, technology infrastructure and funding, and long-term debt issues (Cuesta has a $1.6 million interest liability per year). In January 2011, Cuesta was placed on “show cause,” the furthest point before losing accreditation. The college’s report will be submitted this October and a decision will be returned in January 2013. The likelihood of receiving full accreditation is low since there is not enough time to make all corrections before October. The problem is an insufficient institutional infrastructure. If accreditation is withheld, the state would not leave San Luis Obispo County without a community college. It’s possible that its administration could be placed under Hancock College.

VIII. Adjournment: 5:00pm

Submitted by,

Margaret Camuso
Academic Senate
MINUTES OF THE
ACADEMIC SENATE MEETING
Tuesday, May 1, 2012
UU220, 3:10 to 5:00pm

I. Minutes: none.

II. Communication(s) and Announcement(s): none.

III. Consent Agenda: GRC 204 – Introduction to Contemporary Print Management and Manufacturing and SPAN 307 – Spanish and Latin American Film were approved.

IV. Business Item(s):
   A. Resolution on Shared Governance (Faculty Affairs Committee): Brown presented this resolution requesting that the preamble to the Constitution of the Faculty include shared governance in the definition of the functions of the Academic Senate. M/S/P to approve the resolution.

   B. Resolution on For Profit Course Material Sites (Executive Committee): Fernflores presented this resolution requesting that the Academic Senate acknowledge and publish the general guidelines provided by Al Liddicoat, Associate Vice Provost, Academic Personnel, regarding protecting copyright course material and that the administration review and revise the students’ code of conduct to clearly prohibit violations of faculty members’ intellectual property rights. M/S/P to approve the resolution.

V. Reports:
   A. Academic Senate Chair: none.

   B. President’s Office: Kinsley announced that strategic planning feedback is appreciated and will be taken under advisement. Most issues raised during the focus groups will be addressed at fall conference.

   C. Provost: none.

   D. Vice Provost for Student Affairs: Allen announced that University Housing has new live and learning programs in place as well as 14 new themed communities for 2012-2013.

   E. Statewide Senate: Foroohar reported that statewide will be discussing resolutions on academic freedom, amendment to the constitution, and the endorsement of the joint statement on shared governance.
F. CFA Campus President: Thorncroft reported that the results from the strike vote will be available tomorrow. If the strike vote passes, strikes will most likely take place during fall quarter and will consist of a series of two-day rolling strikes. The campus presidents will meet in June to work out details.

G. ASI Representative: Tabrizi introduced Katie Morrow, 2012-2013 ASI President. ASI experienced a 29% voter turnout at its last elections. 24 new board members were elected. The Student Success Fee Allocation Advisory Committee will be polling students asking them vote on their priorities on how to spend the funds. The results will then be passed on to the Vice President for specific recommendations.


VI. Special Reports: Franz Kurfess, chair of the Research & Professional Development Committee reported on the issue of human subject policy. A survey was distributed to 140 people who regularly submit proposals to the Human Subject Committee. 45 people responded, mostly Cal Poly faculty members. Four areas of concern were identified:
1. The Human Subjects Committee proposal submission, review, and renewal processes are unclear to some proposal submitters.
2. The mission and scope of the Human Subject Committee is not well articulated.
3. The emphases of the reviews should be on the protection of human subjects, and address aspects like scientific merit and research methodology only when relevant for human subject issues.
4. Members of the Human Subject committee should serve terms of limited and defined duration, and new members should go through an orientation or training process.

Submitted by,

Gladyx Gregory
Academic Senate
WHEREAS, The Academic Senate's Resolution on Distance Education Policy (AS-581-02/CC) is ten years old; and

WHEREAS, Some courses and programs at Cal Poly now employ a broader range of educational technologies described in industry and by specialists in the role of technology in higher education as eLearning; and

WHEREAS, Cal Poly Continuing Education has recently encouraged faculty to develop online courses or convert existing courses for online delivery; and

WHEREAS, The Academic Senate Task Force on Online Education and the Academic Senate Curriculum Committee have endorsed the attached policy entitled “eLearning Policy at Cal Poly, San Luis Obispo;” therefore, be it

RESOLVED: That the Academic Senate adopt the following eLearning Policy at Cal Poly, San Luis Obispo document.

Proposed by: Academic Senate Task Force on Online Education
Date: May 3 2012
1. Preamble

This policy is an update of the former “Policy on Distance Education at Cal Poly” (AS-581-02/CC) and is designed to be a guide for faculty who plan to use technology to enhance student learning, improve student success, or deliver course content. The terms “Distance Education” and “Technology Mediated Instruction” in Academic Senate resolution AS-2321-96 and the Chancellor’s Office Academic Planning Database, which are also used in the Academic Senate’s Resolution on Distance Education (AS-581-02/CC), are inadequate to describe innovative technologies and practices now being used to enhance and transform teaching and learning. Thus, this policy uses the more general term “eLearning” (defined below), which is gaining currency both in industry and in discussions of technology in higher education among specialists at venues such as EDUCAUSE.¹

Cal Poly will continue to encourage responsible innovation in teaching, embracing experimentation whose goal is both to improve the quality of education and to promote student success. While Cal Poly should remain receptive to innovative forms of using technology for these purposes, the University must also ensure that there is proper faculty review and oversight to uphold existing quality standards.

The basic principle underlying this policy is that best practices in teaching and learning will drive the use of technology in the curriculum. Thus, we should continually discuss the following questions about the technologies we use for teaching and learning:

- How do these technologies contribute to Cal Poly’s mission and identity as a comprehensive polytechnic university founded upon a “learn by doing” philosophy?
- How do these technologies help Cal Poly adapt to broader national and international changes in higher education?
- How do these technologies contribute to achieving Cal Poly’s key strategic imperatives,² which include:
  - Developing and inspiring whole-system thinkers

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¹ See, for example, the list of eLearning resources at http://www.educause.edu/Resources/Browse/Elearning/17176
² These strategic imperatives appear on President Armstrong’s “Key Principles” document, which he revealed during Fall Conference 2011 (http://www.president.calpoly.edu/fallconference/).
• Embracing the teacher-scholar model while remaining committed to undergraduate education in a residential campus setting
• Fostering diversity and cultural competence in a global context
• Achieving sustainable growth and supporting world-class facilities and equipment

2. Definitions
Currently, the definition of the term “eLearning” is rather fluid and depends largely on whether the focus is on learning that occurs in the workplace or in higher education. Consequently, we adopt the following definition:

Definition: “eLearning comprises all forms of electronically supported learning and teaching.”

It is the use of a computer-enabled environment in which students acquire skills and knowledge employing any form of electronic media content delivered on any type of platform.

Courses developed using eLearning technologies may be delivered using a wide range and combination of methods including:

• Synchronous Instruction: “Instructional activities where both instructor and students are engaging in activities at the same time”
• Asynchronous Instruction: “Instructional activities where the instructor and/or some or all students engage in activities that are not necessarily occurring simultaneously”

Although the variety of course structure possibilities precludes a strict definition of course types, the primary factors that determine the teaching and learning experience are:

• The degree of computer-mediated faculty/student interaction
  Faculty and students can interact face-to-face or in a computer-based virtual space in a scheduled or unscheduled manner. Computer mediated interaction could be mixed (e.g., “hybrid” courses with some traditional classroom lectures supplemented by video conferencing) or it could be complete (e.g., a course in which all faculty/student interaction occurs using a web-based video conference tool).

• The degree of technology replacement of faculty/student interaction
  Technology can have a relatively limited role in course support (e.g., a course

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4 “Online Education White Paper,” January 2012, p. 22
5 “Online Education White Paper,” January 2012, p. 22
uses a small number of pre-recorded video lectures that are posted online) or technology could be used to completely replace faculty/student interaction (e.g., a web-based, self-paced instructorless course).

In light of the range of degree of computer mediation and use of technology to replace faculty/student interaction, no set of standardized course descriptors can be created.

However, given the ubiquity of the terms “online course,” “online program,” “online degree” and related terms, and given the current interest to develop such courses, programs, and degrees both here at Cal Poly and more broadly in the CSU, it is useful to have definitions of both traditional and online instruction. We shall adopt the following:

**Definition:** Traditional instruction courses are “offered in the traditional mode with an instructor holding class sessions where students are expected to be physically present. Traditional instruction is also synchronous, with both instructor and students engaging in activities simultaneously.”

**Definition:** Online instruction is “instruction delivered via an electronic network such as the Internet.”

**3. Applicability of this Policy**

This policy shall apply to all new and existing credit-bearing courses and programs using eLearning technologies including online courses and programs offered by Cal Poly.

**4. Faculty Responsibility for Curricular and Quality Control**

Cal Poly faculty have the collective and exclusive responsibility for determining the pedagogies, instructional methods, and best practices most appropriate for the instructional modules, courses, and academic programs.

Whenever a department or faculty group proposes to initiate a degree program in which more than 50% of content is offered online or off-campus, approval in advance from the Western Association of Schools and Colleges (WASC) is required under the latter’s Substantive Change Policy.

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6 “Online Education White Paper,” January 2012, p. 22
7 “Online Education Whitepaper,” January 2012, p. 22
An eLearning Addendum to either the New Course Proposal or Course Modification form must be submitted for curricular review for any new or existing courses in which a total of more than 50% of traditional face-to-face instruction time is being replaced with eLearning technologies. Additionally, in these cases, either the New Course Proposal or Course Modification form must include the following two statements:

- A statement of the degree (in percentage terms) of computer-mediated faculty/student interaction contained in the course (e.g., “30% to 50% of faculty/student interaction for this course is via an interactive web-based video connection”).

- A statement of the degree (in percentage terms) of technology replacement of faculty/student interaction (e.g., “25% of this course is comprised of instructorless self-paced learning modules consisting of web-based video lectures, demonstrations, and automatically-graded quizzes”).

Approval of eLearning courses, sections, and programs shall be held to the same standards as traditional classroom instruction when reviewed by the department, college, and Academic Senate.

Faculty preparing an eLearning Addendum and faculty reviewing such addenda are encouraged to ask the following questions to determine the suitability of eLearning-based courses:

1. Is the proposed use of eLearning technologies consistent with the University’s mission and identity?
2. Is the proposed use of eLearning technologies likely to enhance student learning and improve student success?
3. Is the proposed use of eLearning technologies appropriate to achieving the desired learning outcomes for the course or program?
4. Is the proposed use of eLearning technologies likely to increase student access to education?
5. If the course being proposed or modified uses a significant amount of eLearning technologies, e.g., because it is being converted to an online course, is the course of equivalent quality and rigor to a course taught using traditional instruction?
6. Are the necessary instructional and student support resources available to facilitate the use of the proposed eLearning technologies, e.g., online access to advising and information sources, information technology infrastructure, etc.?
7. Does the course syllabus adhere to the same standards as traditional courses and include information related to specific eLearning issues?
8. Are safeguards in place that follow the WCET best practice guidelines to insure high standards of academic integrity and to prevent cheating?

9. Is faculty availability and student contact time including virtual and physical office hours consistent with established standards and collective bargaining agreements and how will such information be clearly communicated to students?

10. Is the faculty/student ratio reasonable and consistent with both established curricular standards and collective bargaining agreements?

Additionally, faculty developing courses that use significant amounts of eLearning technology and faculty participating in curricular review are encouraged to consult the CSU Online Education Whitepaper for a list of assumptions and best-practices relevant to the successful development, evaluation, and deployment of online course offerings.

Criteria for assessing the quality and efficacy of eLearning-based courses shall be developed by the academic units from which the instruction originates.

5. University Resource Responsibilities

Information Technology Services (ITS), the Robert E. Kennedy Library, the Cal Poly Academic Technology unit, Cal Poly Continuing Education, the Center for Teaching and Learning, and other university agencies may be called upon to provide necessary resources and services for the successful implementation of eLearning courses and programs. These resources and services include:

1. **Student Training.** Where applicable, the University will provide training in eLearning technology and use to students, perhaps through automated means (e.g., web video).

2. **Faculty Training.** Where applicable, the University will provide training in the use of eLearning technologies and instructional design to faculty.

3. **Technical Support.** Where applicable, the University will provide help desk services, account maintenance, software and hardware assistance, etc., as needed to support eLearning-based courses.

4. **Information and Facility Services.** The University will provide adequate access to library resources, laboratories, facilities, and equipment appropriate to eLearning courses and programs.

5. **Student Services.** The University will provide adequate access to the range of student services appropriate to support eLearning courses and programs, including admissions, financial aid, academic advising, and placement and counseling.

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9 *Best Practice Strategies to Promote Academic Integrity in Online Education Version 2.0, June 2009, WICHE Cooperative for Educational Technologies (WCET)*

10 “Online Education Whitepaper,” January 2012, p. 28
6. **Student Evaluations.** The University should collaborate with faculty to develop and deploy student evaluation tools for eLearning-based courses, especially for courses in which no face-to-face meetings take place. Such tools should be consistent with the Unit 3 Collective Bargaining Agreement.

6. **Assessment of eLearning Courses and Programs**

Criteria for assessing the quality and efficacy of eLearning-based instruction shall be developed by the academic units from which the instruction originates. eLearning courses, sections, and programs shall be held to the same standards as traditional classroom instruction when reviewed by department, college, and university program review committees.

Program Review committees shall evaluate the educational effectiveness of eLearning programs (including assessments of student-based learning outcomes, student retention, and student satisfaction), and when appropriate, determine comparability to campus-based programs. This process shall also be used to assure the conformity of eLearning courses and programs to prevailing eLearning quality standards. eLearning courses and programs shall be consistent with the educational missions and strategic plans of the Department, College, and University.

7. **Contracting and the use of Outside Resources**

The University shall not agree in a contract with any private or public entity to deliver or receive eLearning courses or programs for academic credit without the prior approval of the relevant department and college. In addition, all such contracts must be in compliance with the relevant University policies and guidelines. The impetus for such a contract shall originate with the Cal Poly faculty, who would decide whether there is an instructional need and how best to fill it. As part of its review of eLearning-based courses within the scope of this policy document, the Academic Senate Curriculum Committee in conjunction with ITS shall determine the suitability of hosting course materials on non-university facilities.

8. **Intellectual Property Rights**

Ownership of materials, faculty compensation, copyright issues, and the use of revenue derived from the creation and production of software, courseware, or other media products shall be agreed upon by the faculty and the University prior to the initial offering of an eLearning course or program, in accordance with established CSU and Cal Poly policies and the collective bargaining agreement.

9. **Admissions**

Admissions criteria for eLearning-based courses shall be the same as for traditional face-to-face lecture courses. Agencies providing funding for eLearning courses or
programs shall not acquire any privileges regarding the admission standards, academic continuation standards, or degree requirements for students or faculty.

10. Course Descriptions and Advertising Guidelines
Faculty and students have a right to know the methods of delivery and technological requirements of each course, program, and degree offered by the University. This information will be communicated to students in all relevant communications.

Publicized descriptions of eLearning courses, e.g., in PASS, shall always contain clear information regarding (a) the degree (in percentage terms) of computer-mediated faculty/student interaction contained in the course and (b) the degree (in percentage terms) of technology replacement of faculty/student interaction (see Section 4).

11. Impact on Faculty Personnel Decisions
Faculty personnel decisions (hiring, retention, tenure, promotion, and post-tenure review) should value and reward course and curriculum development and professional development activities that result in improved instruction. However, no ranking of instructional methodologies or methods of delivery is to be used as a basis for personnel decisions. The role and value of eLearning should be made explicit in the personnel policies of departments and colleges.

12. eLearning Course and Program Funding
Funding sources for the development of eLearning courses and programs shall be explicitly stated in all eLearning-based course and program proposals. Funding sources may include any combination of grants, self-support, private contributions, and state support. The originating department shall develop the funding source proposal through traditional means and shall make a recommendation to the Academic Senate as to the suitability and viability of the proposed funding source. If applicable, such proposals shall include funding for the services of an instructional designer.

13. Use of eLearning Technologies is Optional
Nothing in this policy shall imply that eLearning is a preferred or required method of instruction. Implementation of this policy must comply with existing campus policies and collective bargaining agreements where applicable, e.g., workload and faculty rights. Furthermore, this policy is only applicable to new courses and course conversions with a substantial online component and is not meant to restrict or rigidly control the general use of eLearning technology in the classroom.
14. Resource Notes
The following are links to resources used in this document:

Online Education White Paper (January, 2012) produced by the Academic Affairs Committee of the CSU: [http://www.calstate.edu/](http://www.calstate.edu/)

WICHE Cooperative for Educational Technologies (WCET) – Cited by WASC [http://wcet.wiche.edu/](http://wcet.wiche.edu/)

Best Practice to Strategies to Promote Academic Integrity in Online Education (WCET) [http://wcet.wiche.edu/wcet/docs/cigs/studentauthentication/BestPractices.pdf](http://wcet.wiche.edu/wcet/docs/cigs/studentauthentication/BestPractices.pdf)

The University of Hawaii’s Distance Education Site [http://manoa.hawaii.edu/ovcaa/distance_ed/](http://manoa.hawaii.edu/ovcaa/distance_ed/)
WHEREAS, The WASC TSM CPR Report\(^i\) and the RPTFG Report\(^ii\) provided evidence that lack of clarity of Retention, Promotion, and Tenure ("RPT") criteria, including Professional Plans, results in different interpretations and uneven implementation of the process across different colleges; and

WHEREAS, Also among the recommendations in the WASC TSM CPR is that the Academic Senate “Consider establishing a university-level RPT committee” (p. 22); and,

WHEREAS, There have been many changes to the demands of all faculty, particularly faculty at the Assistant and Associate level over the past several years, such as increasing class sizes and expectations of research and scholarship during a time of decreasing resources; and

WHEREAS, Integrity of the RPT process depends on the fair review of faculty’s work by their peers in the context of established criteria; and

WHEREAS, Clarity of criteria and faculty’s knowledge of it in the beginning of each cycle of review is essential for timely progress toward meeting the expectations; and

WHEREAS, Evolving criteria coupled with long periods between post-tenure reviews can lead faculty to perceive the criteria as a “moving target”; and

WHEREAS, Some CSU departments develop performance criteria that sets out in detail teaching, scholarly, and service activities that can be considered in evaluating faculty going through the RPT process\(^iii\); therefore be it

RESOLVED: That the chairs/heads, deans and the Provost base their own evaluation of each faculty’s performance on department, college and University RPT criteria; and be it further

RESOLVED: That henceforth, when criteria change, either the changes be phased in gradually and communicated clearly to faculty so that faculty have appropriate time to adapt or, if the change is significant, that faculty be evaluated based on criteria previously communicated to them by their department and college for successful tenure and/or promotion; and be it further
RESOLVED: That the Academic Senate requests that the Provost charge all departments and colleges to review and approve RPT guidelines in a discipline-specific manner, including a definition of the Teacher-Scholar Model based on the AS-725-11 RSCA definition as a guide for all faculty members in order to create a sustainable and rewarding career for faculty; and be it further

RESOLVED: That the Academic Senate Faculty Affairs Committee serve as a resource for best RPT practices.

Proposed by: Academic Senate RPT Task Force
Date: May 15 2012

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1 This acronym stands for: “Western Association of Schools and Colleges Teacher-Scholar Model Capacity and Preparatory Review Report” (http://www.wasc.calpoly.edu/cpr/index.html)
2 This acronym stands for: “Retention, Promotion, and Tenure Focus Group Report” (http://digitalcommons.calpoly.edu/senateresolutions/724/).
3 The following are merely examples of RPT criteria in various disciplines and departments across the CSU that could serve as documents we could compare with Cal Poly RPT departmental criteria: Example 1. The teaching, scholarly, and service activities that can be considered in evaluating faculty going through the RPT process in the Biological Sciences Department at Humboldt State University (http://www.humboldt.edu/aps/docs/RTP/RTP_Criteria/BiologicalSciencesDepartment/RTPCriteriaStandardsFINAL.pdf) Example 2. RPT criteria for Dance at Dominguez Hills (http://www.csudh.edu/academicaffairs/RTP_Scholarship_Definitions/CAH/Dance.pdf) Example 3. RPT criteria for Psychology at San Francisco State University (http://academic.sfsu.edu/CMS_uploads/files/27faffE547.pdf)
RESOLUTION ON PROPOSED NEW DEGREE PROGRAM:
BACHELOR OF ARTS IN LIBERAL ARTS AND ENGINEERING STUDIES

WHEREAS, The College of Engineering (CENG) and the College of Liberal Arts (CLA) are jointly proposing the implementation of the Bachelor of Arts in Liberal Arts and Engineering Studies (LAES); and

WHEREAS The Bachelor of Arts in Liberal Arts and Engineering Studies (LAES) has been functioning as a successful pilot degree for the past five years; and

WHEREAS, The Bachelor of Arts in Liberal Arts and Engineering Studies underwent a rigorous and successful program review, which indicated that the BA LAES is a worthwhile and rewarding program for Cal Poly students; and

WHEREAS The LAES program, with the support of the College of Engineering and the College of Liberal Arts, now proposes to convert this degree program to permanent status; and

WHEREAS, The CENG and CLA Curriculum Committees carefully considered the proposal and recommended its approval; and

WHEREAS, The Academic Senate Curriculum Committee carefully considered the proposal and recommends its approval; and

WHEREAS, A summary of the proposal is attached to this resolution, with the full proposal available in the Academic Senate Office; therefore be it

RESOLVED: That the proposed degree program, Bachelor of Arts in Liberal Arts and Engineering Studies, be approved by Cal Poly’s Academic Senate, and the proposal be sent to the Chancellor’s Office for final approval.

Proposed by: Academic Senate Curriculum Committee
Date:
Cal Poly, San Luis Obispo
Summary Statement of Proposed New Degree Program for
Academic Senate
May 9, 2012

1. Title of Proposed Program.

Bachelor of Arts, Liberal Arts & Engineering Studies

Brief description: The Bachelor of Arts in Liberal Arts and Engineering Studies was originally proposed and then run as a pilot degree program to allow flexibility in developing the program and working out its idiosyncrasies as the first interdisciplinary, cross-college degree granting program before being sent forward to become a full part of Cal Poly’s curriculum. The pilot program approach was taken with the Masters in Polymers and Coatings Science, a degree program that was successfully added to the regular Cal Poly curriculum in 2008.

The LAES program has been successful in creating a new avenue for students to pursue a STEM-related, interdisciplinary degree as they transfer from other, technical-based programs into a new line of study that gives them wider access to university offerings. This is an innovative interdisciplinary program with a strong foundation in mathematics, science, engineering and liberal arts, enhanced whenever possible by a substantive global perspective experience. Students integrate the planning, testing, evaluation and development work that underlies engineering studies with the study of creative expression, ethical investigation and aesthetics that form the core of the liberal arts.

2. Reason for Proposing the Program.

This degree is being proposed for two main reasons: to meet workforce needs and to increase retention of talented students.

A. Meeting Workforce Needs

First, a number of programs have been developed at other universities to meet workforce needs that indicate those trained in either traditional technological and liberal arts areas could benefit from some cross-pollination. Widespread student interest in technology and culture has led to the creation of these interdisciplinary programs that integrate traditional engineering studies with programs of study in the performing arts, humanities, ethics, history, politics, and culture. These new programs have been running successfully now at many schools that compete directly with Cal Poly for the same cadre of high caliber students. The Bachelor of Arts in Liberal Arts and Engineering Studies is a distinctive—and tested—solution that Cal Poly can offer to address these workforce concerns.

The following quote from the NRC-NSF convocation on Undergraduate Education exemplifies these concerns: "The needs of the work force are changing (American Society for Engineering Education, 1994; National Academy of Sciences, 1995). Rapid shifts in the labor market are creating a paucity of jobs in some areas and exciting new opportunities in others. This dynamism in the labor market is putting a premium on students who have a broad knowledge of different subjects, skills in synthesizing and communicating information, and the ability to work in teams. Students educated with a narrow disciplinary focus and in
solitary learning styles can have difficulties adjusting to such an environment. Indeed, such difficulties are a dominant theme in the complaints voiced by business leaders about contemporary under-graduate education." (National Research Council, pg.19)

Nearly 10 years later, in Educating the Engineer of 2020, the bachelor of arts in engineering is described as the "liberal arts’ degree for the twenty-first century. The traditional liberal arts degree was characterized as providing the knowledge, skills, and breadth of thinking to perform in leadership roles in government, industry, and more broadly, all aspects of society. As our everyday life becomes more driven by technology and the panoply of decisions that we must make regarding the use (or rejection) of technological solutions, understanding of the ‘engineering approach’ should likewise become more valued to all well-informed citizens." (National Academy of Engineering [NAC], 2005, pg. 46)

Successful Graduates

During the pilot period, the 22 students who graduated (by Fall 2011) from the LAES program were nearly all successful in entering the marketplace directly in the multidisciplinary fields toward which they were aiming their studies. Out of the additional 9 (estimated) students slated to graduate in Spring, 2012, nearly all have employment already lined up for them upon graduation. Every contact the program has had with its outside commercial partners during the pilot period confirmed that the type of cross-disciplinary training and curricular flexibility provided by LAES matches almost perfectly with the needs of multi-disciplinary industries. This matching of LAES training and design with commercial and marketplace requirements is evident in the recent surveys completed as part of the LAES program self study.

B. Retention of Talented Students

The LAES program has demonstrated that it increases retention among native students admitted into the engineering program who find, early on, that although they have the aptitude, they no longer are interested in engineering as a career. As noted in the LAES self study, the flexibility of the program’s curricular structure, along with its direct connection with the engineering college, have been the key factors that have kept many current LAES students at Cal Poly. As noted by our external reviewers, LAES is, "...highly successful at retaining passionate and talented students who are capable and interested in science and technology, but equally committed to artistic or cultural studies. The flexibility of the curriculum appeals to students who strongly value independence and the freedom to shape their own academic experiences; these students are an asset to the greater Cal Poly community and to the university reputation..."

For a number of years, Cal Poly has lost a sizeable number of its engineering students during the Freshman and Sophomore years as these students, for various reasons, become disinterested with traditional engineering study. In general, these types of students have followed one of two pathways: transfer to other degree programs on campus or transfer to other universities that offer a more diverse collection of interdisciplinary programs, thereby allowing students to more easily integrate their interests in engineering and technology with their interests in arts and culture. The interdisciplinary approach to education provided by the LAES program, "...offers a clear cross-discipline perspective through the requirement that students complete both an engineering and a liberal arts concentration. It also provides a powerful model of
integrative learning and an emphasis on solving real-world problems in the four core LAES courses..."

For information purposes, IP&A’s 6-year persistence data for first-time freshmen in engineering showed that for the Fall 2000 through Fall 2005 freshman-engineering cohorts (the most current data available), an average of 142 engineering students changed to majors outside of the college (with a high of 181 students for the 2001 FTF cohort and a low of 95 for the 2005 FTF cohort; the data do not specify to which majors they changed nor their level when they changed majors). In addition, more recent data show that 62 students in the 2009 FTF cohort left the university in either the freshman \((n = 28)\) or sophomore \((n = 34)\) year (these students were not disqualified), while another 43 changed majors outside of engineering in either the freshman \((n = 10)\) or sophomore \((n = 33)\) year. The consistent influx of students who have been drawn to the LAES program since inception, with only a minimal amount of program promotion, indicates that there is a strong and sustainable interest in this kind of program to ensure its continuing viability and (if resources allow in future) for its potential expansion.

Because the BA LAES utilizes course credits accumulated during the normal progression within the initial engineering major, coupled with required lower division GE courses taken in the first few quarters, the transition to the new BA LAES should be a much more efficient pathway to entrance (and graduation) for these internal transfers, thereby allowing for faster replacement of student positions in the participating engineering programs, while also increasing the graduation and retention rates for those same programs (as calculated by some, but not all indices).

Thus, this program is designed to meet the needs of talented students who are as equally interested in inventing and refining new technologies as they are interested with working directly in the arts and cultures of the communities that put these new technologies to use. Students nationwide have been enrolling in larger and larger numbers in innovative interdisciplinary programs.

3. Anticipated Student Demand.

At its maximum, the program will not, as presently configured ever enroll more than 45-55 students, all of whom will have been moved into the program through internal transfers.

<table>
<thead>
<tr>
<th>Number of Students</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Internal Transfers</td>
<td>Continuing Students</td>
</tr>
<tr>
<td><strong>Historical</strong></td>
<td></td>
</tr>
<tr>
<td>Spring 2008</td>
<td>7</td>
</tr>
<tr>
<td>2008-09 AY</td>
<td>16</td>
</tr>
<tr>
<td>2009-10 AY</td>
<td>13</td>
</tr>
<tr>
<td>2010-11 AY</td>
<td>11</td>
</tr>
<tr>
<td>2011-12 AY*</td>
<td>9</td>
</tr>
<tr>
<td>2012-13 AY*</td>
<td>12</td>
</tr>
<tr>
<td><strong>Anticipated</strong></td>
<td></td>
</tr>
<tr>
<td>Year One*</td>
<td>12</td>
</tr>
<tr>
<td>Year Three*</td>
<td>15</td>
</tr>
<tr>
<td>Year Five*</td>
<td>15</td>
</tr>
</tbody>
</table>

*estimated
4. Indicate the kind of resource assessment used by the campus in determining to place the program on the academic plan. If additional resources will be required, the summary should indicate the extent of university commitment to allocate them and evidence that campus decision-making committees were aware of the sources of resource support when they endorsed the proposal.

Resource assessment was based upon the pilot. The resource needs of the program were reviewed by the curriculum committees, the associate deans, and the deans of the two colleges involved. Further discussion involving the provost also took place. As a result of these discussions, the following has been agreed upon:

To maintain the program at about 50 enrolled students, 44 units of assigned time will be allocated as follows: 22 units for program administration, development, and advising, ideally split between the two co-chairs (one from engineering, one from liberal arts) and 22 units of assigned time for providing instruction in the program. In addition, a .80 11/12 ASC provides administrative support, and there is an O&E budget of $11,000. Dean Larson (CENG), Dean Halisky (CLA), and Provost Enz Finken have all committed to long-term support of the program at this current level. Their MOU is attached.

5. If the program is occupational or professional, summarize evidence of need for graduates with this specific education background.

This program is not intended as an ABET-accredited engineering program nor is it intended for students interested in careers as professional engineers.

6. If the new program is currently a concentration or specialization, include a brief rationale for conversion.

California Polytechnic State University, San Luis Obispo is proposing the conversion of the Bachelor of Arts in Liberal Arts and Engineering Studies program from a pilot program to a permanent degree program in the Cal Poly curriculum commencing Spring 2013 based on its successful pilot and favorable program review.

7. If the new program is not commonly offered as a bachelor’s or master’s degree, provide compelling rationale explaining how the proposed subject area constitutes a coherent, integrated degree major, which has potential value for students. If the new program does not appear to conform to the Trustee policy calling for “broadly based programs,” provide rationale:

No other CSUs offer a similar program. The degree provides a niche area for Cal Poly that is not available at UCSB, UC-Davis, UCLA, UCSD, Stanford, Cal Tech, or Berkeley. The program is unique on this campus and to the CSU. No other program on campus or in the CSU combines the mathematical and scientific foundation of Engineering with advanced studies in the Liberal Arts.

Similar programs are successfully established at many schools that compete directly with Cal Poly for the same cadre of high caliber students. Universities that offer similar programs include:

Dartmouth University (A.B., Engineering)
Harvard University (A.B., Engineering)
Johns Hopkins University (B.A., Biomedical Engineering; B.A., Computer Science, B.A., Electrical Engineering, B.A., General Engineering)
Lafayette College (A.B. Engineering)
Princeton University (A.B. in Engineering and the Liberal Arts)
Purdue University (B.S., Interdisciplinary Engineering)
Rice University, (B.A., Electrical Engineering)
Rochester Institute of Technology (B.A., Engineering Science)
University of Arizona (B.A., Engineering)
University of Rochester (B.A., Engineering Science)
Worcester Polytechnic Institute (B.A., Liberal and Engineering Studies)
Yale University (B.A., Engineering Sciences)

Two unique aspects of the Cal Poly LAES program are its project-based learning component and the incorporation of a global perspectives component met through Study Abroad, National Student Exchange or the completion of 8 units of related coursework in global perspectives.

The project-based learning component is introduced in the first two courses students take as a major, LAES 301 - Project-Based Learning in Liberal Arts and its companion course, LAES 302 - Advanced Project Based Learning in Liberal Arts and Engineering Studies, which builds upon and refines the work students completed in LAES 301. Currently students take LAES 301 together with students taking LAES 302. These courses are offered every Fall and Spring and create a cohort of new LAES students who, through their project work in the class, come to understand the type of planning, collaboration, intellectual integration and cross-disciplinary design that is part and parcel of studies in the LAES program. Students taking LAES 302 additionally serve in a leadership and mentorship capacity to help out new students who are taking LAES 301 and entering the LAES program for the first time.

After completing the bulk of their studies from their chosen concentration areas, and often after completing their study abroad work, students then work through the final project-based learning courses in the LAES program, LAES 461 and 462. This two-course senior project development sequence provides students with the opportunity to carry out collaborative research arising from the questions central to each student's area of specialization and helps them to focus and vastly improve the quality of their senior project work, thus providing an effective summation of their undergraduate study. The capstone course (LAES 462) allows students to complete, present, discuss, share, refine and finalize the research and development work involved with their senior project or other projects.

The project-based nature of the program has been the primary means of interesting new students in the degree, but it has been the study abroad portion of the degree that has, for many students, proven to be the most compelling way to pull together their multi-disciplinary studies in the LAES program. This study abroad experience is designed to provide an opportunity for each student 1) to deepen his/her knowledge of how technology interacts with culture both at home and abroad; 2) to be a contributing member of an interdisciplinary, international team to work on, refine, or initiate a project; and 3) to reflect on one's own experience and the experience of others in this endeavor.

The LAES program provides students with a global perspectives component to their study best fulfilled by having students participate in one quarter/semester of a study abroad experience, with the further opportunity to work on an overseas research/development project during that time. The study abroad aspect of this program makes the program highly
competitive with many of the top interdisciplinary engineering, arts and sciences programs currently enrolling students around the country. Because of the importance of the study abroad experience, all efforts are made to make sure that this is a viable and affordable option for the students.

As our external reviewers noted, the study abroad and work/internship abroad components of the program contribute in large measure to the success of our graduates in the workplace. In their review of our student surveys, the external reviewers noted, “Formal feedback from alumni has been limited, but alumni were included in a survey that focused on the international experience of the program. LAES alumni who responded did provide the following useful comments that highlight the value of this aspect of the curriculum:

- My internship abroad helped me get an internship in Haiti after I graduated!
- Cal Poly didn’t have any Game Development courses, but the courses at QUT did. I was able to take advantage of the courses, and when I got back I was able to use the skills to find a job in the industry.
- My experience with an internship abroad had influenced my studies and brought me to where I am today. I learned skills that not only came into use at Cal Poly, but also in "real world" situations. After my internship I became more confident in my abilities and became optimistic for my career in the future. Over a year later, I continue to use the skills learned that summer.”

In order for the United States to remain a leader in science and technology, an educated workforce is needed—capable of working in an international research environment and in a global market. By participating in study abroad, LAES students acquire the international experience they will need to compete in the job market, while at the same time gain valuable cross-cultural skills and, when relevant, learn another language. In addition, such international experience promotes flexibility, autonomy, leadership skills, innovation, maturity, ambition, and independence. It is the kind of high-level, first-hand overseas experience that many progressive and smart employers seek from new employees.

8. Briefly describe how the new program fits with the campus mission statement.

The Bachelor of Arts in Liberal Arts and Engineering Studies fits well with the university and college strategic plans/missions in that it

- looks towards the future of the university as embodied in the university’s mission statement:

  Cal Poly fosters teaching, scholarship, and service in a learn-by-doing environment where students, staff, and faculty are partners in discovery. As a polytechnic university, Cal Poly promotes the application of theory to practice. As a comprehensive institution, Cal Poly provides a balanced education in the arts, sciences, and technology, while encouraging cross-disciplinary and co-curricular experiences. As an academic community, Cal Poly values free inquiry, cultural and intellectual diversity, mutual respect, civic engagement, and social and environmental responsibility.

- affirms Cal Poly’s comprehensive polytechnic orientation by fostering a cross-disciplinary experience combining integrated coursework in engineering, science, and math with an integrated plan of study in the liberal arts.
CURRICULUM DISPLAY

The BA:LAES is a 180-unit degree program distributed as follows:

**Major Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAES 301 Project-Based Learning in LAES</td>
<td>4</td>
</tr>
<tr>
<td>LAES 302 Advanced Project-Based Learning in LAES</td>
<td>4</td>
</tr>
<tr>
<td>LAES 461 Senior Project (or other approved SP course)</td>
<td>4</td>
</tr>
<tr>
<td>LAES 462 Capstone Senior Seminar in LAES</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 124 General Chemistry for Engineering (B3/B4)*</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 149 Technical Writing for Engineers (A3)*</td>
<td>4</td>
</tr>
<tr>
<td>MATH 141 Calculus I (B1)*</td>
<td>4</td>
</tr>
<tr>
<td>MATH 142 Calculus II (B1)*</td>
<td>4</td>
</tr>
<tr>
<td>MATH 143 Calculus III (B5)*</td>
<td>4</td>
</tr>
<tr>
<td>MATH 241 Calculus IV</td>
<td>4</td>
</tr>
<tr>
<td>MATH 244 Linear Systems</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 141 General Physics IA</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 132 General Physics II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 133 General Physics III</td>
<td>4</td>
</tr>
<tr>
<td>STAT 312/321/350</td>
<td>4</td>
</tr>
<tr>
<td>Engineering Concentration (minimum 8 units 300-400 level)</td>
<td>34-35</td>
</tr>
<tr>
<td>Liberal Arts Concentration (minimum 12 units 300-400 level)</td>
<td>24</td>
</tr>
<tr>
<td>Study Abroad or Global Perspectives courses (300-400 level)</td>
<td>8</td>
</tr>
</tbody>
</table>

Total: 126-127

**General Education (GE)**

72 units required; 20-32 of which are listed in Major, depending on concentration.

Minimum of 12 units required at the 300-400 level.

Area A Communication (8 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1 Expository Writing</td>
<td>4</td>
</tr>
<tr>
<td>A2 Oral Communication</td>
<td>4</td>
</tr>
<tr>
<td>A3 Reasoning, Argumentation, and Writing *4 units in Major</td>
<td>0</td>
</tr>
</tbody>
</table>

Area B Science and Mathematics (4 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1 Mathematics/Statistics *4 units in Major</td>
<td>0</td>
</tr>
<tr>
<td>B1 Mathematics/Statistics *4 units in Major</td>
<td>0</td>
</tr>
<tr>
<td>B2 Life Science</td>
<td>4</td>
</tr>
<tr>
<td>B3 Physical Science *4 units in Major</td>
<td>0</td>
</tr>
<tr>
<td>B4 One lab taken with either a B2 or B3 course</td>
<td>0</td>
</tr>
<tr>
<td>B5 Elective *4 units in Major</td>
<td>0</td>
</tr>
</tbody>
</table>

Area C Arts and Humanities (16 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1 Literature</td>
<td>4</td>
</tr>
<tr>
<td>C2 Philosophy</td>
<td>4</td>
</tr>
<tr>
<td>C3 Fine/Performing Arts</td>
<td>4</td>
</tr>
<tr>
<td>C4 Upper-division elective</td>
<td>4</td>
</tr>
</tbody>
</table>

Area D/E Society and the Individual (20 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1 American Experience (40404)</td>
<td>4</td>
</tr>
<tr>
<td>D2 Political Economy</td>
<td>4</td>
</tr>
<tr>
<td>D3 Comparative Social Institutions</td>
<td>4</td>
</tr>
<tr>
<td>D4 Self Development (CSU Area E)</td>
<td>4</td>
</tr>
<tr>
<td>D5 Upper-division elective</td>
<td>4</td>
</tr>
</tbody>
</table>

Area F Technology (upper division)            | 52    |

Free Electives                                | 1-2   |

Total: 180
OTHER DEGREE REQUIREMENTS:
Cal Poly, Higher Ed, and Major GPA must all be at least 2.5

All students must complete:
United States Cultural Pluralism Requirement
Graduation Writing Requirement
60 units Upper Division (any 300-400 level classes)
Upper Division units in the Major: 48 required in the major out of 60 overall
Residency Requirements: See Degree Progress Report for details

* GE classes

** Because this is a 180-unit degree, the Liberal Arts GE program, which requires upper division courses in Areas D (D5) and F, as well an additional course in Area B (B5) is the appropriate GE plan of study. In most Liberal Arts concentration options, at least 4 units will double-count in GE areas C or D at the upper or lower division level. See concentrations for more specific information.

*** A fall quarter/semester Study Abroad experience will be strongly encouraged for all students and efforts will be made to make sure that this is a viable and affordable option. Financial aid and scholarships may be available to support students who have completed the Free Application for Federal Student Aid (FAFSA) form. For those students who cannot participate in the study abroad portion of the program, National Student Exchange or eight units of integrated, upper division study in Global Perspectives may be selected from a list of approved electives, with an advisor’s approval. Neither of these would meet the goals of the program as well, but have been identified as acceptable substitutes. The International Education and Programs Office already has in place several special affiliation agreements with a number of programs spanning a number of countries and continents, and welcomes the opportunity to pursue more such agreements as programs and needs are identified.

Students choose both an Engineering Concentration and a Liberal Arts Concentration. These are chosen in consultation with the program directors to create areas of depth that are further developed in other areas of the program (e.g., study abroad, senior project).

Students will select one Engineering Studies concentration from among the following three concentrations (34-35 units):

**CSC – Computer Graphics Concentration (34 units)**
CSC/CPE 123 – Introduction to Computing (4)
CSC/CPE 101 – Fundamentals of Computer Science I (4)
CSC/CPE 102 – Fundamentals of Computer Science II (4)
CSC/CPE 103 – Fundamentals of Computer Science III (4)
CSC 141 – Discrete Structures I (4)
CSC/CPE 225 – Introduction to Computer Organization (4)
CSC 303 – Teaching Computer Science (2)
CSC/CPE 357 – Systems Programming (4)
CSC/CPE 471 – Introduction to Computer Graphics (4)

**Electrical Engineering – Power Concentration (34 units)**
EE 111/151 – Introduction to EE, Laboratory (1,1)
EE 112 – Electric Circuit Analysis I (2)
EE 211/241 – Electric Circuit Analysis II, Laboratory (3,1)
EE 212/242 – Electric Circuit Analysis III, Laboratory (3,1)
EE 255/295 – Energy Conversion Electromagnetics, Laboratory (3,1)
EE 335/375 – Electromagnetics, Laboratory (4,1)
EE 406 – Power Systems Analysis I (4)
EE 407/444 – Power Systems Analysis II, Laboratory (4,1)
Advisor approved power technical elective (4)
Industrial/Manufacturing Engineering – System Design Concentration (34-35 units)
IME 101 – Intro Industrial & Manufacturing Engineering (1)
IME 223 – Process Improvement Fundamentals (4)
IME 239 – Industrial Costs and Controls (3)
IME 301 – Operations Research I (4)
IME 303 – Project Organization and Management (4)
IME 314 – Engineering Economics (3)
IME 319/320 – Human Factors and Technology (*GE Area F) (4)
IME 326 – Engineering Test Design and Analysis (4)
*IME 420 – Simulation (4)
*IME 443 – Facilities Planning and Design (4)

*Industrial and Manufacturing Engineering prerequisite MOU is in process.

Students will select one Liberal Arts concentration from among (or modeled after) the following (24 units):

Culture, Society & Technology Concentration (24 units)
Required Courses:
ES/WS 350 – Gender, Race, Science, & Technology (4) USCP
HUM 303 – Values & Technology (4) or PHIL 341 – Professional Ethics (4) or PHIL 337 – Business Ethics (4) All GE Area C4
POLS 451 – Technology & Public Policy (4)
Advisor Approved Elective Courses (Select at least 3 from the list below for a total of 12 units):
ANT 360 – Human Cultural Adaptations (4) GE Area D5
COMS 317 – Technology & Human Communication (4)
GEOG 316 – Applications in GIS (4)
GEOG 333 – Human Impact on Earth (4) or HUM 350 – The Global Environment (4) GE Area F
HIST 354 – History of Network Technology (4) GE Area F
HIST 359 – Living in the Material World (4) GE Area F
JOUR 331 – Contemporary Advertising (4)
JOUR 470 – Selected Advanced Topics in Journalism (4)
PHIL 322 – Philosophy of Technology (*GE Area C4) (4)
PHIL 340 – Environmental Ethics (*GE Area C4) (4)
*POLS 328 – Politics of Developing Areas (4)
POLS 333 – World Food Systems (*GE Area F) (4)
POLS 346 – Politics in Literature (4)
POLS 347 – Politics & Popular Culture (4)
POLS 470 – Selected Advanced Topics (4)
PSY 311 – Environmental Psychology (*GE Area D5) (4)
PSY 494 – Psychology of Technological Change (4)

*Political Science prerequisite MOU located in Appendix 1, Letters of Support.

Interactive Communication Concentration: Cinematic Focus (24 units)
Required Courses:
TH 210 – Introduction to Theatre (4) GE Area C3
ENGL 371 – Film Styles and Genres (4) GE Area C4
ENGL 411 – New Media Art I (4)
Advisor Approved Elective Courses (Select 3 from the list below for a total of 12 units):
ENGL 210 – New Media Technology (4)
ENGL 370 – World Cinema (4) GE Area C4
ENGL 372 – Film Directors (4) GE Area C4
ENGL 412 – New Media Art II (4)
ENGL 416 – New Media Study (4)  
ENGL 419 – Advanced New Media Projects (2) (must be repeated)  
COMS 311 – Communication Theory (4)  
COMS 385 – Media Criticism (4)  
COMS 419 – Media Effects (4)  
POLS 470 – Selected Advanced Topics (4)

**Interactive Communication Concentration: Theatrical Focus (24 units)**

**Required Courses:**
- TH 210 – Introduction to Theatre (4) GE Area C3  
- TH 227 – Theatre History I (4) GE Area C3 or TH 228 – Theatre History II (4) GE Area C3  
- ENGL 411 – New Media Art I (4)

**Advisor Approved Elective Courses:** (Select 3 from the list below for a total of 12 units – no more than 1 lower division)
- ENGL 210 – New Media Technology (4)  
- ENGL 412 – New Media Arts II (4)  
- TH 220 – Acting Methods (4)  
- TH 310 – Women’s Theatre (4) or TH 320 – Black Theatre (4) or TH 360 – Theatre in the United States (4) or TH 390 – Global Theatre and Performance (4) All GE Area C4  
- TH 230 – Stagecraft I (4)  
- TH 330 – Stagecraft II (4)  
- *TH 430 – Scenic Design (4)  
- *TH 434 – Lighting Design (4)  
- HUM 320 – Values, Media & Culture (4) GE Area C4

*Theatre and Dance prerequisite MOU located in Appendix 1, Letters of Support.

**Publishing Technology Concentration (24 units)**

**Required Courses:**
- GRC 101 – Introduction to Graphic Communication (3)  
- *GRC 201 – Electronic Publishing Systems (3)  
- *GRC 211 – Substrates and Ink (4)  
- HUM 303 – Values & Technology or PHIL 341 – Professional Ethics or PHIL 337 – Business Ethics (4) All GE Area C4

**Advisor Approved Elective Courses (Select at least 3 from the list below for a total of 10 units):**
- COMS 317 – Technology & Human Communication (4)  
- *GRC 316 – Flexographic Printing Technology (3)  
- *GRC 328 – Sheetfed Printing and Platemaking (4)  
- *GRC 329 – Press Methods and Procedures for Web Offset & Gravure (3)  
- *GRC 402 – Digital Printing and Emerging Technologies in Graphic Communication (3)  
- PSY 494 – Psychology of Technological Change (4)

*Graphic Communication prerequisite MOU located in Appendix 1, Letters of Support.

**Technical Communication Concentration (24 units)**

**Required Courses:**
- ENGL 317 – Technical Editing (4)  
- ENGL 319 – Information Design & Production (4)  
- COMS 317 – Technology & Human Communication (4)

**Advisor Approved Elective Courses (Select 3 from the list below for a total of 12 units):**
- ENGL 210 – New Media Technology (4)  
- ENGL 310 – Corporate Communication (4)  
- HUM 303 – Values & Technology (4) GE Area C4  
- PHIL 337 – Business Ethics (4) GE Area C4 or PHIL 341 – Professional Ethics (4) GE Area C4  
- COMS 213 – Organizational Communication (4)  
- COMS 301 – Business and Professional Communication (4)
ENGL 418 – Technical Communication Practicum (4) or ENGL 420 – Client-Based Technical Communication (4)

Liberal Arts Individualized Course of Study (ICS – 24 units)

Students choosing the Liberal Arts ICS pursue a course of study that meets their individual needs and interests. Courses are selected with the advice of the student's academic advisor and approved by the program chair.

The Liberal Arts ICS must meet one of the following requirements: 24 units of an advisor-approved integrated course of study from courses offerings in the College of Liberal Arts designed to meet the LAES learning objectives, with at least half of the units at the upper division level OR an approved minor program in the College of Liberal Arts selected from among the following minors:

<table>
<thead>
<tr>
<th>MINOR</th>
<th>UNITS</th>
<th>Required GE</th>
<th>Other GE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology-Geography</td>
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<td>Art History</td>
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<td>German</td>
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<td>Gerontology (PSY/CD)</td>
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<td>Latin American Studies</td>
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<td>Law &amp; Society (POLS)</td>
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<td>Values, Technology, &amp; Society</td>
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<td>Women's and Gender Studies</td>
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</table>

Courses in the Liberal Arts ICS may double count with GE courses.
WHEREAS, Among the recurring issues the Presidential Task Force on Substance Abuse and Sexual Assault ("PTF") learned is that there a lack of clarity regarding the definition and expression of the traits and values Cal Poly expects its students to cultivate (http://studentaffairs.calpoly.edu/content/sexual-assault-recommendations); and

WHEREAS, Recommendation 6.4 of the PTF report calls for:

"In conjunction with the Academic Senate and ASI, among others in Student Affairs, the University should consider developing a "Traits and Expectations of a Mustang" document."

WHEREAS, Cal Poly Orientation Programs, University Housing, and ASI, would all be among the campus units that would use a "Traits and Expectations of a Mustang" document in their communications with prospective and current students; and

WHEREAS Associated Students Inc. ("ASI") picked up the charge in recommendation 6.4 by consulting widely in the development of "The Mustang Way," which articulates Cal Poly traits and values of Cal Poly students (attached); and

WHEREAS, The list of consultees includes the Academic Senate Chair and Vice Chair, Provost, Vice President of Administration and Finance, Interim Vice President of Student Affairs/Director of Housing, Athletic Director, Cal Poly Corporation, Orientation Programs, Interhousing Council, Poly Reps, Student Athletic Leadership (Block P), Student Community Liaison Committee, San Luis Obispo City Mayor, San Luis Obispo City Manager, University President; and

WHEREAS, ASI appreciates the good relationship between students and faculty and so seeks support from and recognition of "The Mustang Way" from the full Academic Senate; therefore be it

RESOLVED That the Academic Senate accept and endorse the ASI proposed "The Mustang Way."

Proposed by: Associated Students Inc.
Date: May 10 2012
The Mustang Way

As Mustangs, we are united under these principles, honoring those who came before us and inspiring those who follow. The privilege of being a Cal Poly Mustang is celebrated for a lifetime.

EXCELLENCE  Learn by Doing is the foundation of our engaged pursuit of knowledge and scholarly achievement.

INCLUSIVITY  Mustangs strive to create an atmosphere of mutual respect, celebrating the positive differences that make us unique.

COMMUNITY  Personal commitment and participation in the Cal Poly community is the cornerstone of the Mustang experience.

RESPONSIBILITY  Mustangs support one another while also taking pride in accepting individual responsibility, thus strengthening the Cal Poly family.

INTEGRITY  Mustangs face all actions and decisions with perseverance, honor, and character.