REVISED AGENDA FOR NOVEMBER 20, 2001
(PLEASE KEEP YOUR MAILED AGENDA FOR THE
NOVEMBER 27 MEETING. THANK YOU.)

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

Agenda
ACADEMIC SENATE
Tuesday, November 20, 2001
UU220, 3:00 to 5:00pm

I. Minutes: none.

II. Communications and Announcements:

III. Reports:
   A. Academic Senate Chair:
   B. President's Office:
   C. Provost's Office:
   D. Statewide Senators:
   E. CFA Campus President:
   F. ASI Representatives:
   G. Other:
      1. Dunklau/Madjedi: Presentation on Telecomm, a two year project to
         upgrade the telecommunications infrastructure in all state owned
         buildings.
      3. Brar: Electronic (Library) Reserves

IV. Consent Agenda:

V. Business Items:
   A. Approval of new MS in Agribusiness: Hannings, chair of the Curriculum Committee,
      second reading (pp. 2-4).
   B. Approval of new MS in Polymers and Coatings: Hannings, chair of the Curriculum
      Committee, second reading (pp. 5-10).
   C. Resolution on Name Change for Extended Studies: Parks, Dean of Extended
      Studies, second reading (pp. 11-14). [THIS ITEM HAS BEEN PULLED FROM THE
      AGENDA. IT WILL BE RETURNED FOR SECOND READING DURING WINTER
      QUARTER 2002.]
   D. Resolution on Distance Education Policy: Hannings, chair of the Curriculum
      Committee/Grimes, chair of IACC, first reading (pp. 15-21).

VI. Discussion Item(s):

VII. Adjournment:
1. **Title of Proposed Program.**

   Master of Science in Agribusiness

2. **Reason for Proposing the Program.**

   The Master of Science in Agribusiness Program is designed to emphasize graduate level study of economic and agribusiness management concepts and their application to food and agricultural business situations. Students enrolled in the M.S. in Agribusiness will study concepts and tools, such as quantitative methods, that can be used by practicing managers to make better decisions within the firm. Along with understanding the agricultural business environment in which the firm operates, students will learn management theories and tools to address marketing, production, leadership, and strategic issues facing agricultural businesses.

   Given the dynamic global, technological, and competitive environment in which agribusiness managers find themselves in the 21st century, fulfillment of the following five objectives will equip students of this graduate program with the necessary competencies to provide effective managerial and leadership acumen for agribusiness firms:

   1. Develop communication/leadership skills and competencies.
   2. Develop an understanding of the global marketplace.
   3. Develop quantitative methods/technological change competencies.
   4. Develop critical thinking/problems solving competencies.
   5. Develop independent thought and research methods.

3. **Anticipated Student Demand.**

<table>
<thead>
<tr>
<th>Number of Students</th>
<th>3 years after initiation</th>
<th>5 years after initiation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Majors</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>Number of Graduates</td>
<td>7</td>
<td>10</td>
</tr>
</tbody>
</table>

4. **Indicate the kind of resource assessment used in developing the program proposal. If additional resources will be required, the summary should indicate the extent of department and/or college commitment(s) to allocate them.**

   A thorough analysis of faculty, classroom space, library, and computer resources has been completed. Since the curriculum was approved as a Specialization within the Masters in Agriculture in 2000-2001, the courses in the program are currently being offered with existing resources, and no additional resources are projected to be required. In fact, the M.S. in Agribusiness will encourage fuller utilization of existing resources.
5. If the program is occupational or professional, summarize evidence of need for graduates with this specific education background.

A mail survey of two hundred potential employers was undertaken. Of the sixty-eight responses, 91.2 percent said that they would consider hiring graduates of this program. The most frequently specified positions were marketing management, product management, import/export sales, and financial analyst. Additionally, the Cal Poly Agribusiness Department Advisory Council has stated that there will be substantial demand from employers for the graduates from this program.

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

The program is currently a Specialization within the Master of Science in Agriculture. Conversion to a stand-alone Master of Science in Agribusiness is proposed for the sake of academic clarity and accuracy – students completing the program will have studied Agribusiness, and not the other subject areas in Agriculture. A precedent for such a stand-alone masters was established with the approval of the Cal Poly M.S. in Forestry Sciences in the 2001-2003 Catalog.

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 CSU Board of Trustee policy calling for “broadly based programs,” provide rationale:

N/A. Agribusiness and agricultural economics are widely accepted graduate fields of study at universities throughout the United States and the world.

8. Briefly describe how the new program fits with the department/college/university strategic plans.

The Cal Poly Agribusiness Department's Strategic Plan speaks of “providing a diverse group of future leaders to the agribusiness industry who are global in their perspective, market driven, and balanced in theory and application.”

The strategic plan for the Cal Poly College of Agriculture states that one of the missions of the college is “to provide the highest quality graduate programs in selected disciplines to complement the undergraduate program.” A Masters of Science in Agribusiness would deliver high-quality post-baccalaureate education in an important discipline and would complement a very successful undergraduate program.

The most recent university strategic plan states: “Cal Poly shall affirm its polytechnic orientation emphasizing undergraduate, graduate, and post-baccalaureate professional and technical programs” and “Cal Poly shall support and develop high quality post-baccalaureate programs that complement the mission of the university.” The proposed Master of Science in Agribusiness fits in with this objective as a professional and technical program that will complement the university's mission.
Curriculum Display for the Proposed Master of Science in Agribusiness

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units (Quarter System)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGB 433/435/422</td>
<td>Agricultural Price Analysis/Linear Programming in Agriculture/Logistics in Global Agribusiness</td>
<td>4</td>
</tr>
<tr>
<td>AGB 450</td>
<td>Agricultural Strategy Formulation</td>
<td>4</td>
</tr>
<tr>
<td>AGB 460/SS 501</td>
<td>Research Methodology in Agribusiness/Research Planning</td>
<td>2/4</td>
</tr>
<tr>
<td>AGB 510</td>
<td>International Development and Agribusiness</td>
<td>4</td>
</tr>
<tr>
<td>AGB 514</td>
<td>Agribusiness Managerial Leadership and Communication</td>
<td>4</td>
</tr>
<tr>
<td>FNR 532*</td>
<td>Forestry Applications in Biometrics and Econometrics</td>
<td>4</td>
</tr>
<tr>
<td>AGB 543</td>
<td>Agricultural Policy and Program Analysis</td>
<td>4</td>
</tr>
<tr>
<td>AGB 554</td>
<td>Food Systems Marketing</td>
<td>4</td>
</tr>
<tr>
<td>AGB 555</td>
<td>Technological and Economic Change in Agriculture</td>
<td>4</td>
</tr>
<tr>
<td>AGB 563</td>
<td>International Agribusiness Trade: Cases and Theory</td>
<td>4</td>
</tr>
<tr>
<td>AGB 599</td>
<td>Thesis or Scholarly Project in Agribusiness</td>
<td>6</td>
</tr>
<tr>
<td>400/500</td>
<td>Committee Approved Elective at the 400/500 level</td>
<td>3/4</td>
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</table>

Total Units: 47-50**

* This course was included because of its particular statistical applications for economics and business forecasting that are appropriate to this masters.

** Similar courses or course equivalents already completed at the undergraduate level will require that the student complete additional "committee approved" elective units, but not reduce the degree unit requirement. Those electives are to be selected from the College of Agriculture or the College of Business at the 400 or 500 level.
Title of Proposed Program.

Master of Science, Polymers and Coatings Science

This program will be submitted as a pilot program. According to CSU guidelines:
- A pilot program is authorized to operate only for five years. If no further action is taken by the end of the five years, no new students could be admitted to the program.
- A pilot program could be converted to regular-program status and approved to continue to operate indefinitely if the following conditions are met:
  - The campus committed the resources necessary to maintain the program beyond five years;
  - A thorough program evaluation (including an on-site review by one of more experts in the field) showed the program to be of high quality; to be attractive to students, and to produce graduates attractive to prospective employers and/or graduate programs, as appropriate;
  - Approval by the board and the chancellor would be required after review and comment by the Chancellor’s Office.

Reason for Proposing the Program.
- No other CSU campuses currently offer or are proposing similar Masters degree programs. Several CSU campuses offer traditional Chemistry Masters degree programs but this proposed program is significantly different from all of these programs. No similar programs exist anywhere in California.
- This program provides students with thorough training in modern polymer chemistry and its applications to coatings, with an extensive emphasis on industrial applications.
- This program takes advantage of the highly successful undergraduate concentration in Polymers and Coatings.
- This program builds on the highly successful partnership between the polymers and coatings industry and the Chemistry and Biochemistry Department. This partnership has already resulted in substantial support for the program including:
  - Funding for Cal Poly’s first endowed chair ($1,000,000)
  - Funding for graduate research fellowships ($350,000)
  - Funding for instrumentation ($150,000)
  - Funding for scholarships ($10,000/year)
- This program will help meet unmet demand by industry for chemists with advanced training in modern polymers and coatings chemistry.
3. Anticipated Student Demand.

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<tr>
<th></th>
<th>Number of Students</th>
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4. Indicate the kind of resource assessment used in developing the program proposal. If additional resources will be required, the summary should indicate the extent of department and/or college commitment(s) to allocate them.

The following constituencies have already examined the resources required for this program and found them to be fully adequate: Scheduling and Curriculum Committee of the Chemistry and Biochemistry Department, faculty of Chemistry and Biochemistry Department, Curriculum Committee of the College of Science and Mathematics, Curriculum Committee of the Academic Senate.

The resources for this program are already in place. This includes faculty required to teach the courses and direct research, laboratories and instrumentation. In addition, industry has provided funding for research fellowships, scholarships and future instrumentation through endowments specifically established for this program. Industry is also committed to supporting industrial research projects for students in the program.

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

Although this program is not considered occupational nor professional in the traditional sense, the demonstrated need for professionals with advanced training in polymers and coatings science is evident from the level of support provided for this program by industry and by the numbers of positions available in these fields.

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

Although an undergraduate concentration in Polymers and Coatings currently is available for Chemistry and Biochemistry majors, this program is an outgrowth of that program, and not a conversion.

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 CSU Board of Trustee policy calling for "broadly based programs," provide rationale:
This program was specifically designed to not be like other MS programs in chemistry. The program is highly focused in an area with a demonstrated need in California. The program provides a coherent and integrated approach to polymers and coatings, providing theoretical, practical and industrial training. The program should prove attractive to a broad clientele, including recent graduates from chemistry, biochemistry, materials engineering, chemical engineering, and related majors, as well as current workers in the field interested in strengthening their background in the science of polymers and coatings.

8. Briefly describe how the new program fits with the department, college, and university strategic plans.

From COSAM Strategic Plan:

A Statement of Basic Goals and Values, Curriculum, Planned Initiatives

"Establish strongly focused and interdisciplinary MS programs that emphasize the strengths of Cal Poly.

Advancement, Planned Initiatives

Develop college image in all areas of advancement including public relations, external relations with alumni, friends, parents, corporations and foundations, and development activities.

Develop new and innovative opportunities for external constituencies to support the college and departments through financial support, volunteer involvement, students employment/internships, advice, and special projects."

Ten Priority Initiatives

"Undergraduate and Graduate Research: The College will take initiatives to increase the opportunities for substantial research experiences for students, especially undergraduate students, in partnership with professional research agendas of the faculty. We expect to see significant enhancements in faculty and student participation, commitment of college resources, procurement of external resources, and presentation of results both internally and externally."

This program fully meets the long-term goals of the College of Science and Mathematics

University strategic plan:

This program meets the long-term goals as stated in the University strategic plan, specifically, the program:

- is highly polytechnic in nature;
- is based on the educational needs of students and society and the efficient, effective and appropriate use of resources available;
- provides an alternative educational mode;
- includes a substantial off-campus component providing the opportunity to increase the quality and quantity of education and service provided;
- makes significant use of existing outside funding for its support; and
- involves industry partners to a high degree and will result in a strengthening of an already well-developed relationship with industry.
MASTER OF SCIENCE DEGREE IN POLYMERS AND COATINGS SCIENCE

General Characteristics

The MS in Polymers and Coatings Science offers a unique, focused program closely tied to industry. Students gain academic preparation in polymers and coatings science through lecture and laboratory courses, then undertake a rigorous industrial internship. While on the internship students specialize and develop advanced skills through directed study in areas related to their internship work. The program is designed to prepare students for challenging careers in the polymers and coatings industry. The program also provides excellent background for doctoral studies in areas related to polymer and coatings science. This program is unique in California and relies on the close relationship between the department and the polymers and coatings industry for its success.

Prerequisites

Students entering the program must have a bachelor's degree from an accredited institution with a minimum grade point average of 2.5 in the last 90 quarter units attempted. Applicants with majors in chemistry, biochemistry, materials engineering, chemical engineering or related fields will generally meet the prerequisites for courses in the program. Applicants with degrees in other areas may need to take supplemental courses in organic and physical chemistry and can be admitted conditionally. For information concerning additional departmental requirements, the student should contact the Graduate Advisor in the Chemistry and Biochemistry Department.

Advancement to candidacy requires completion of 12 units of an approved study plan with a minimum grade point average of 3.0.

Blended BS + MS Program in Chemistry or Biochemistry (BS) and Polymers and Coatings Science (MS)

The blended program provides motivated students with an accelerated route to the MS in Polymers and Coatings Science, with simultaneous conferring of both bachelor's and master's degrees. Students in the blended program are provided with a seamless process whereby they can progress from undergraduate to graduate status.

Eligibility

Students majoring in Chemistry or Biochemistry may be eligible to pursue the blended program toward the MS in Polymers and Coatings Science. Participation in the program is based on prior academic performance and other measures of professional promise, with a minimum GPA of 2.5 required (3.0 recommended). Students are generally selected for the blended program by a faculty committee during the junior year. Please see the catalog description on Blended Programs for eligibility criteria.

The blended program follows the same general study plan as the non-blended program but allows the student to earn graduate credit for several of their senior electives, effectively decreasing the
summed unit requirements for both degrees. Students may begin taking the required graduate courses in either their junior or senior year depending on their preparation. Students may not pursue both the Concentration in Polymers and Coatings and the MS in Polymers and Coatings Science. Students pursuing the concentration take the 400-level Polymers and Coatings Courses while those pursuing the MS degree take the 500-level Polymers and Coatings Courses. Students cannot receive credit for both 400 and 500-level courses in the same topic.

Students in the blended program are eligible to apply for the Graduate Internship upon completion of the required graduate-level chemistry courses.
CURRICULUM FOR MS POLYMERS AND COATINGS SCIENCE

**Required courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chern 544</td>
<td>Polymer Synthesis and Mechanisms (3 units)</td>
<td>3</td>
</tr>
<tr>
<td>Chern 545</td>
<td>Polymer Physical Chemistry and Analysis (3 units)</td>
<td>3</td>
</tr>
<tr>
<td>Chern 547</td>
<td>Polymer Synthesis Laboratory (2 units)</td>
<td>2</td>
</tr>
<tr>
<td>Chern 548</td>
<td>Polymer Characterization and Analysis Lab (2 units)</td>
<td>2</td>
</tr>
<tr>
<td>Chern 550</td>
<td>Coatings Formulation Principles (3 units)</td>
<td>3</td>
</tr>
<tr>
<td>Chern 551</td>
<td>Coatings Formulation Laboratory (2 units)</td>
<td>2</td>
</tr>
<tr>
<td>Chern 570</td>
<td>Directed Graduate Study (3 units per quarter for 3 quarters)</td>
<td>9</td>
</tr>
<tr>
<td>Chern 598</td>
<td>Graduate Internship (3 units per quarter for 3 quarters)</td>
<td>9</td>
</tr>
<tr>
<td>Stat 512</td>
<td>Statistical Methods (4 units) or Stat 513 Applied Experimental Design and Regression Models (4 units)</td>
<td>8</td>
</tr>
</tbody>
</table>

**Electives**

8 units approved electives (graduate – 500 level, and advanced undergraduate – 400 level) chosen from CHEM, MATE, Bioengineering. Examples of courses satisfying the elective requirement include: Chem 405 (3 units - Advanced Physical Chemistry), Chem 420 (3 units - Advanced Organic Chemistry), Chem 439 (5 units - Instrumental Analysis), Chem 446 (3 units - Surface Chemistry of Materials), Chem 470 (1-3 units - Selected Advanced Topics), MATE 530 (4 units - Biomaterials), MATE 560 (3 units - Thin Film Processing), ENGR 450 (4 units - Special Topics in Bioengineering), approved course in management (IME 556 – 4 units – Technological Project Management or other approved management course).

Satisfactorily complete the comprehensive examination on the principles of polymers and coatings science based on the required 500-level chemistry courses and topics specifically related to the industrial research work.

**Total units**

45
RESOLUTION ON
NAME CHANGE FOR EXTENDED STUDIES

WHEREAS, Extended Studies has requested its name be changed to the College of Continuing Studies to better reflect the program currently being offered; and

WHEREAS, The request for this name change has been approved by the Provost and Academic Deans Council; therefore, be it

RESOLVED: That the name of Extended Studies be changed to the College of Continuing Studies.

Proposed by: Extended Studies
Date: October 8, 2001
Memorandum

To: Unny Menon, Chair
    Academic Senate

From: Paul J. Zingg
      Provost and Vice President for Academic Affairs

Subject: Name Change Request—Extended Studies

Enclosed is a request from Dr. Dennis Parks, Dean of Extended Studies, to change the name of Extended Studies to the College of Continuing Studies.

I would appreciate it if the Academic Senate would review this request as soon as possible as there are a number of pending matters in Extended Studies awaiting this review. This name change request was favorably reviewed by the Academic Deans’ Council at its September 24 meeting.

Thank you, and should you have any questions regarding this issue, please do not hesitate to contact Dr. Parks directly.

Enclosures
Extended Studies is:
> A continuing education, lifelong learning, outreach, and public service unit of Cal Poly
> Primarily an academic credit unit; an average of 70% of all revenue (excluding conferences) is generated by courses and programs awarding academic credit
> A composite of programming functions implementing a strategic plan to extend Cal Poly's academic resources to the region and the state
> A place for innovation, discovery, and exploration
> An access point to Cal Poly for those normally excluded

Mission Statement – The mission of Extended Studies is to provide the highest quality educational activities and opportunities for the citizens of California, the nation, and the world. Extended Studies accomplishes this mission by expanding the intellectual resources of Cal Poly, furthering the University's outreach and public service mission, and providing lifelong learning opportunities to a variety of identified constituencies.

Vision Statement – By 2005, Extended Studies will be a comprehensive, multidisciplinary academic unit capable of meeting the lifelong learning needs of a global community through credit and non-credit programs offered through traditional and eLearning methodologies.

Extended Studies function is to:
> Develop academic programs in support of Cal Poly's mission
> Develop academic programs and services for traditional and non-traditional age students
> Provide lifelong learning opportunities to businesses, corporations, K-12 education, community organizations, and other constituencies
> Design, plan, and implement conferences, seminars, workshops for internal and external organizations
> Support program development efforts arising from Cal Poly's academic units
> Serve as a multidisciplinary unit where departments and units from all colleges can collaborate, share ideas, and develop new programs for traditional and non-traditional students

Extended Studies serves:
> About 10,000 people each year: 4,000 in courses and 6,000 through conferences
> Faculty, staff, and regularly matriculated students at Cal Poly
> The business, corporate, agricultural, governmental, and industrial sector
> K-12 educators
> Cal Poly alumni and friends
> Citizens of the Central Coast

In the future, Extended Studies will become a stronger academic unit as:
> Academic programs like Jump-Start, and summer quarter enhancements are coordinated through Extended Studies
> More people enroll through Open University
New programs that serve a blended population (traditional age and non-traditional age students) are developed and support on-campus programs and activities.

The University takes advantage of the CSU special session option to offer degrees and other programs.

Academically sound non-credit programs for teachers, executives, and others seek approval to be offered as credit courses/programs (especially with the elimination of professional development credit).

Continuing Education Units at other CSU's:
- CSUSB – College of Extended Learning
- CSPU – College of the Extended University
- SDSU – College of Extended Studies
- CSUN – College of Extended Learning
- CSULB – University College and Extension Services
- SSU – School of Extended Education

Why Change the Name Now?
- Phase one of the reorganization is complete – Extended Education is now merged into Extended Studies.
- The time is right - Extended Studies is currently in a transitional stage as it seeks new ways to fulfill its mission and vision.
- The term “extended” is not widely recognized outside of higher education in general and in California specifically.
- The name Extended Studies is often confused with an Agricultural Extension Unit.
- Within Cal Poly, people still use various names to refer to the University’s continuing education operation including Open University, EUPS, Extended Education.
- A strong and identifiable continuing education operation will help Cal Poly fulfill its state-wide mission and move to the next tier of national recognition.
- To enhance fundraising activities in support of college specific and university wide needs.

It was therefore recommended that Extended Studies change its name to:

The College of Continuing Studies
WHEREAS, Distance education has become an accepted form of teaching; and

WHEREAS, Some courses and programs at Cal Poly are using distance education as a teaching tool while Cal Poly has no approved distance education policy; and

WHEREAS, The Academic Senate Curriculum Committee and the Instructional Advisory Committee on Computing have approved the attached policy entitled Distance Education Policy at Cal Poly, San Luis Obispo; therefore, be it

RESOLVED: That the Academic Senate adopt the attached Distance Education Policy at Cal Poly, San Luis Obispo document.

Proposed by: Academic Senate Curriculum Committee and the Instructional Advisory Committee on Computing
Date: October 22, 2001
Revised: November 6, 2001
Distance Education Policy
at Cal Poly, San Luis Obispo
November 6, 2001 Draft

Preamble
This policy is designed to be a guide for those faculty who plan to use distance education (DE). Cal Poly will continue to encourage responsible innovation in teaching, embracing experimentation whose goal is to improve the quality of education. While Cal Poly should remain receptive to innovative forms of teaching such as distance education, the University must also ensure that there is proper oversight and review to uphold the standards of quality already established at Cal Poly. The basic principle is that best teaching/learning practices will drive the technology that will be considered and used in the curriculum. We must continually discuss and address the questions:

- How can information technology assist Cal Poly to gain/preserve what it most wants/needs in order to be true to its mission and identity?
- How can information technology help Cal Poly not lose what it most needs and wants?
- How can information technology strengthen Cal Poly’s core institutional characteristics, such as: polytechnic, “learn by doing,” undergraduate focus, teaching emphasis, residential, competitive admission, statewide service area, and graduates who are competent and employable on graduation?

At Cal Poly, we have placed considerable emphasis on securing up-to-date information technology for students and faculty. However, as I and Provost Paul Zingg have stated clearly on previous occasions, we embrace this technology primarily as a means to enhance teaching and learning on our campus. We want teachers and learners to have access to the burgeoning Internet resources, to be able to contact the library and other information sources 24 hours a day, and to be able to use the revolutionary software and Web products that serve as important educational tools. This technology is not intended to provide impetus that will transform Cal Poly into a “virtual university,” offering a large number of courses on-line or through telecommunications networks to our core student body.

We should keep in mind, however, that these resources may offer opportunities to bring our special expertise to practicing professionals with continuing education needs and perhaps even enhance funding for our academic departments. At the same time it should be noted that any expansion in distance learning will be determined by faculty and departments, and this activity will not be allowed to impact the quality or kind of learning on which our reputation is based.
Yes, like the solo bowler, some of our students, out of choice or circumstance, will learn alone. The new information technologies increasingly available to them and us means that we can accommodate them more readily. I urge, though, that no matter which learners we serve or what technologies we employ, we explicitly aim to foster collaborative learning, social discourse, and other attributes of effective learning communities.

—Paul Zingg, “Learning Alone Should Not Mean Learning Apart”

**Definition**

Technology Mediated Instruction (TMI) is defined by the Academic Senate of the California State University as “all forms of instruction that are enhanced by or utilize electronic and/or computer-based technology. It specifically includes distance education, instructional modules delivered via mass media, and computer assisted instruction” (AS-2321-96). This policy focuses on the Distance Education component of Technology Mediated Instruction, referred to here as DE, in which some students are geographically separated from the instructor while classes are being conducted. (See S and A Below)

**Chancellor’s Office Definitions for Academic Planning Data Base (APDB)**

- **F** = Course section is conducted "Face-to-Face," i.e., the students meet with an in-person instructor in a contained space setting.
- **S** = Course is not conducted Face-to-Face, but it occurs at a regularly scheduled time, e.g., a televised broadcast. Such a method of instruction is known as "Synchronous" mode.
- **A** = Course is not conducted Face-to-Face and does not occur at a regularly scheduled time, e.g., student self-pace instructional material accessed via the web. Such a method of instruction is known as "Asynchronous" mode.

**Applicability**

This policy shall apply to all new and existing credit-bearing courses and programs offered using DE by Cal Poly, including those offered through the Open University. Any department or faculty group offering DE programs in which more than half of the units are offered through distance education is expected to meet Western Association of Schools and Colleges (WASC) requirements and be guided by policy established by the University. In addition, a department or faculty group is expected to address, in its self-studies and/or proposals for institutional change, the following policy guidelines, which will be reviewed by the University and perhaps by the regional accrediting commission.*

**Instructional Methods and Academic Responsibility**

Cal Poly faculty have final responsibility for determining the pedagogies and instructional methods most appropriate for the instructional modules, courses, and/or academic programs which the University offers. Among the factors to be considered in determining the suitability of a particular course for DE are the following: (a) Does the use of DE improve
the quality of the course by enhancing teaching effectiveness, achieving the desired learning outcomes, suiting students’ different learning styles, or increasing student access to education? (b) Does sufficient student demand exist? (c) Are the necessary instructional and student support resources available to facilitate the use of DE (for example, access to advising and information sources)?

Quality
While the University prizes academic freedom and wishes to encourage innovation in instruction, the faculty also have a collective responsibility to ensure the academic quality and integrity of the University's courses, programs, and degrees. This responsibility extends to those courses and programs offered using DE. The quality of instructional modules, courses, and academic programs delivered by or using DE must be at least equivalent to the quality of curricular offerings currently approved at Cal Poly. The purposes of DE are to increase the quality of instruction and to increase the access of students to faculty, to educational resources, and to each other (for example, there may be only one expert on a particular subject in the system, and technology can make her available to all CSU students). If DE results in increased class sizes or student-faculty ratios beyond traditional classroom and curricular standards, additional resources or workload adjustments necessary to maintain the quality of instruction must be provided. In some cases, DE may offer the opportunity for cost savings, increased student access, or other benefits. While these are laudable, care should taken to ensure that these advantages do not come at the expense of quality education.

Assessment
Criteria for assessing the quality of technology mediated instruction shall be developed by the academic units from which the instruction originates. DE courses, sections, and programs shall be held to the same standards as traditional classroom instruction when reviewed by department, college, university curriculum, and program review committees. Any new course that includes, or any existing course being changed to include, a DE component that will replace 33% or more of face-to-face time shall have this indicated on the Course Description form to be reviewed by the curriculum committees as part of the regular curriculum review process (face-to-face time is defined as interaction between the instructor and the students, with the instructor present in the same classroom at the same time as the students). Program Review committees shall evaluate the educational effectiveness of DE 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 DE courses and programs to prevailing quality standards in the field of distance and distributed education. DE courses and programs shall be consistent with the educational missions and strategic plans of the Department, College, and University.

Curriculum and Instruction
Each course or program using DE shall provide the opportunity for substantial, personal, and timely interactions between faculty and students, and among students. Interactions may be face-to-face, or via synchronous or asynchronous e-mail or other means.
Tenured or probationary faculty shall direct any culminating experience or capstone of a DE program.

Cal Poly faculty assume responsibility for and exercise oversight over DE courses and programs, ensuring both their rigor and their quality of instruction. This includes:

- Ensuring that standards consistent with the contract are followed in setting course-loads per instructor.
- Selecting and evaluating the faculty who create the courses.
- Maintaining approximately the same ratio of tenured/probationary faculty to adjunct/part-time faculty in DE programs as in campus-based programs.
- Ensuring that the technology used suits the nature and objectives of the courses and program.
- Ensuring the currency of materials, courses, and program.
- Ensuring the integrity of student work and the credibility of the degrees and credits the University awards. It is the responsibility of the faculty to ensure that reasonable safeguards are in place to prevent academic dishonesty.

**Contracting**

The University shall not agree in a contract with any private or public entity to deliver or receive DE courses or programs for academic credit without the prior approval of the relevant department and college. Ideally, the impetus for such a contract should originate with the Cal Poly faculty, who would decide whether there is an instructional need and how best to fill it.

**Intellectual Property Rights**

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

**Resources**

Students shall have adequate access to library resources, and to laboratories, facilities, and equipment appropriate to the DE courses and programs. Students shall have adequate access to the range of student services appropriate to support DE courses and programs, including admissions, financial aid, academic advising, delivery of course materials, and placement and counseling. Students shall be provided with technical advice on how to solve hardware and software problems, and with an adequate means for resolving student complaints.
The University shall offer appropriate training and support services to faculty who teach DE courses and programs through professional development programs, technical support programs, equipment acquisition, library resources, staff resources and development, and the construction of appropriate instructional facilities.

Forms of technology mediated instruction frequently rely on technology infrastructure (computers, networks, help desk, etc.) that may not be employed in current course delivery at Cal Poly. Therefore, development of an appropriate infrastructure to support DE is a basic university responsibility prior to offering the courses. Needs for enhancement in areas such as access to library resources, information technology, instructional design and technical support, faculty development in the use of DE, computer and network support, and student services should be identified at the department, college, and university levels. Cross-unit and cross-institutional sharing of learning and resources should be encouraged.

Any DE course or program must receive resource approval from the respective college dean(s) prior to commencing operation; faculty need to make certain they identify their intention and needs with sufficient lead time to allow administrative units to evaluate whether appropriate infrastructure exists or can be in place prior to the DE offerings.

**Admissions**
Admissions criteria shall be comparable for students on and off campus. Agencies providing funding for DE courses or programs shall not acquire any privileges regarding the admission standards, academic continuation standards, or degree requirements for students or faculty.

**Truth in Advertising**
Faculty and students have a right to know the modes of delivery and technological requirements of each course, program, and degree offered by the University. At a minimum, this information will be indicated for DE courses in the schedule booklet each quarter.

**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 modes of delivery is to be used as a basis for personnel decisions. The role and value of DE should be made explicit in the personnel policies of departments and colleges.
(Refer to Faculty Affairs Committee)

**Final Note**
Technology mediated instruction is an optional mode of instruction. Nothing in this policy shall imply that DE is a preferred or required mode of instruction.
The Western Association of Schools and Colleges (WASC) has developed guidelines for distance education. The guidelines are an extension of the Principles developed by the Western Interstate Commission for Higher Education. The Cal Poly policy outlined above reflects many of the WASC guidelines set forth as of 03/08/00. The language used in the WASC guidelines has been incorporated into this policy, when deemed appropriate, but has been adapted to reflect conditions at this University. For the text of the WASC guidelines, please refer to the Web site of WASC at http://www.wascweb.org/senior/guide/.