### General Education and Breadth Requirements

#### Approved Course Additions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUM 305X</td>
<td>Latin American Culture</td>
<td>C.3.</td>
</tr>
<tr>
<td>NRM 101</td>
<td>Natural Resources of America</td>
<td>F.2.</td>
</tr>
<tr>
<td>AE 340</td>
<td>Irrigation Water Management</td>
<td>F.2.</td>
</tr>
<tr>
<td>NRM 201</td>
<td>Environmental Management</td>
<td>F.2.</td>
</tr>
<tr>
<td>GEOL 202X</td>
<td>Earth History</td>
<td>B.1.a.</td>
</tr>
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</table>
The following are my comments on recent Academic Senate resolutions:

General Education and Breadth Requirements (AS-188-85):

Formal response to this resolution was apparently overlooked. The courses have been included in the 1986-88 catalog and can be considered approved. I do have some reservations about those courses in Area F as noted in my comments below.

General Education and Breadth (AS-189-86/GE&B):

This resolution is approved with the exception of the two courses falling into Area F: NRM 101 and NRM 201. My comments regarding these and other courses in Area F can be found in the next section.

General Education and Breadth Course Proposals (AS-211-86/GE&B)

I concur with the non-approval of HE 203.

I do not agree with the Senate's approval of additional courses for Area F, either those in this resolution or in AS-188-85 and AS-189-86/GE&B as noted above.

My objection rests on the Knowledge and Skills Statements that were adopted by referendum of the faculty during the process of developing and implementing the new GE&B program. There continues to be some confusion between sections 7 and 9, both of which bear on the intent of courses admitted to Area F.

Section 7 requires that Cal Poly students in particular should "understand how technology influences and is influenced by cultural and environmental factors, the applications of technology to contemporary problems, and the potential of technology to both positively and negatively affect individuals and societies." It goes on to indicate that this can be achieved by including experiences in which students "gain an awareness of their increasing dependence on technology and how it is guided, managed, and controlled."
In addition, students "should be able to evaluate and assess questions of value and choice underlying technologies and how, in the course of their development, these questions have been addressed and answered."

Section 9 requires that Cal Poly graduates "be exposed to courses taught within the technological areas, so that they will have a basis for developing a better understanding of how technology influences and is influenced by present day cultures and other environmental factors."

Students should "develop an awareness of typical problems addressed by technology, such as methods of world food production, applications of the computer, or the production, distribution, and control of energy."

They should also "have an opportunity to learn the difficulties inherent in solving technological problems," especially in "the application of theoretical knowledge to practical matters such as:

(1) The consequences and implications of applied technology for environmental factors of climate, water quality, soil, and plant resources.

(2) Problems stemming from the interactions of population growth, technology and resource consumption, such as climate change, the energy crisis, world hunger and soil erosion."

Students are further expected to "develop an awareness of issues raised by the interaction of culture and technology."

These statements raise two immediate issues: What do we mean by "courses taught within the technological areas"? And what is Area F attempting to accomplish in the education of our undergraduates?

Up to this time, we have limited courses in Area F to those taught by the Schools of Agriculture, Architecture, and Engineering. This may be an artificial limitation; certainly there are faculty and departments in other schools of the university capable and interested in offering courses for Area F. The current Senate resolutions propose some courses for Area F to be offered by departments outside these three schools, and before a decision is made regarding their approval, I would like the statement "taught within the technological areas" clarified for the entire campus.

As I read Section 7 and Section 9, and as I consider my own thinking about General Education, I believe Area F should concern itself with providing the student an opportunity to consider the benefits of technology, and at the same time to reach some understanding of the "consequences and implications" of technology, both practical and ethical.

When I review the courses currently in Area F, I find only two courses of the approximately 33 listed which, at least on paper, appear to be consistent with the statements noted above: ENGR 301 and AG 301. To add more courses to Area F would only aggravate the situation and further dilute this area of General Education and Breadth.
As a result of these and other considerations, I am withholding approval of any courses for AREA F and requesting the Academic Senate to clarify the issues centering around Area F. This will need to be accomplished in time for the next curricular cycle so that necessary changes can be incorporated in the 1988-90 catalog.

General Education and Breadth Course Proposals (AS-212-86/GE&B):

Both recommendations are acceptable: The "Human Values in Agriculture" course is approved for Area C.3. and Math 201 is approved for Area B.2. However, I request a change in title for MATH 201. I would prefer the elimination of "Appreciation" and substitution of something more appropriate to the content and intent of the course. This course and all other math courses will have to be in compliance with the CSU policy on Baccalaureate Credit for Intermediate Algebra as outlined in GE&B Notes #8 (May 12, 1986) and in EP&R 86-32 (June 5, 1986).
To: Lloyd Lamouria, Chair
   Academic Senate

From: Malcolm W. Wilson
      Interim Vice President
      for Academic Affairs

Subject: General Education and Breadth Requirements

Correction to memorandum from President Baker to Senate Chair Lamouria, 23 July 1986, subject: Academic Senate Resolutions (AS-189-86/GE&B).

The subject memorandum should be corrected to indicate that NRM 101 and NRM 201 have already been included in the 1986-88 catalog and because of this will be considered approved pending resolution of the general concerns raised in regard to Area F. courses.
Correction to my memo of transmittal dated January 14, 1986 on Resolution AS-189-86/GE&B: The entire General Education & Breadth package was approved. Since there was a negative recommendation by GE&B concerning AE 340, Irrigation Water Management, this course is to be deleted from the five referenced courses in my memo. My thanks to a diligent committee chair, George Lewis, for catching this error and my apology to those who must now follow up with the correction.
Date: January 17, 1986

To: Warren J. Baker, President

From: Lloyd H. Lamouria, Chair

Subject: Proceeding of the Academic Senate, January 14, 1986

The following recommendations were approved on January 14, 1986 and are herewith forwarded for your consideration and adoption:

1. General Education and Breadth Requirements, AS-189-86

   HUM. 305X  Latin American Culture  Area C.3.
   NRM 101  Natural Resources of America  F.2.
   AE 340  Irrigation Water Management  F.2.
   NRM 201  Environmental Management  F.2.
   GEOL 202X  Earth History  B.1.a.

2. Resolution on Removal of Ceiling on Replacement Instructional Equipment, AS-190-86 (attached)

3. Resolution on Apartheid, AS-191-86 (attached)

   This resolution was approved on a unanimous vote in favor of the preamble and with only one dissenting vote on the resolution.
II. The committee recommends as indicated on the following courses proposed for inclusion in the General Education and Breadth requirements:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Subcommittee Recommendation</th>
<th>GE &amp; B Comm. Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. HUM 301X</td>
<td>The Renaissance in Italy.</td>
<td>C.3. against</td>
<td>against</td>
</tr>
<tr>
<td>2. HUM 305X</td>
<td>Latin American Culture.</td>
<td>C.3. for</td>
<td>for</td>
</tr>
<tr>
<td>3. ART 208</td>
<td>Sculpture.</td>
<td>C.2. against</td>
<td>against</td>
</tr>
<tr>
<td>4. NRM 101</td>
<td>Natural Resources of America.</td>
<td>F.2. for</td>
<td>for</td>
</tr>
<tr>
<td>5. AE 340</td>
<td>Irrigation Water Management.</td>
<td>F.2. for</td>
<td>for</td>
</tr>
<tr>
<td>6. FOR 201</td>
<td>Forest Resources.</td>
<td>F.2. for</td>
<td>against</td>
</tr>
<tr>
<td>7. NRM 201</td>
<td>Environmental Management.</td>
<td>F.2. for</td>
<td>for</td>
</tr>
<tr>
<td>8. GEOL 202X</td>
<td>Earth History.</td>
<td>B.1.a. for</td>
<td>for</td>
</tr>
<tr>
<td>9. AE 121, 124, 131, 134, 141, 142, 231, 315, 321, 335, 337</td>
<td>F.2. against</td>
<td>against</td>
<td></td>
</tr>
<tr>
<td>10. ENGL 362</td>
<td>Myth and Symbol in Literature for Youth.</td>
<td>C.3. against</td>
<td>against</td>
</tr>
<tr>
<td>11. HUM 302</td>
<td>Human Values in Agriculture.</td>
<td>C.3. not ready to recommend</td>
<td>likewise</td>
</tr>
<tr>
<td>12. EL 339</td>
<td>Electrical Engineering: Its Development and Impact on Our Society and Culture</td>
<td>F.2. against</td>
<td>against</td>
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</tbody>
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1) SS 121 is a prerequisite, and is already in F.2.
2) GE & B failed to approve by a 5-5 tie vote.
3) Area C subcommittee has not had sufficient time to consider. GE & B Committee concurs.