Adopted: May 29, 1990

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

**AS-343-90/GE&B**
**RESOLUTION ON**
**APPROVAL OF CSC x302 INTO GE&B AREA F.2**

RESOLVED: That CSc X302 be approved for credit in General Education and Breadth Area F.2.

Proposed By:
Academic Senate General Education and Breadth Committee
May 15, 1990

GENERAL EDUCATION AND BREADTH PROPOSAL

| | |
|---|---|
| 1. PROPOSER'S NAME<br>J. B. Connely | 2. PROPOSER'S DEPT.<br>Computer Science |

3. SUBMITTED FOR AREA (include section, and subsection if applicable)

F.2

4. COURSE PREFIX, NUMBER, TITLE, UNITS, DESCRIPTION, ETC. (use catalog format)

CSC X302 Computer Applications and Their Social and Cultural Implications 3 Units Lecture

The social and technological implications and effects of the applications of computer technology to the modern world. Examination of the positive and negative effects of those changes. Prerequisite: computer literacy or other CSC course and junior standing.

5. SUBCOMMITTEE RECOMMENDATION AND REMARKS

Approved.

6. GE & B COMMITTEE RECOMMENDATION AND REMARKS

Approved.

7. ACADEMIC SENATE RECOMMENDATION

# EXPERIMENTAL / SUBTITLE COURSE PROPOSAL

COURSE MASTER FILE NUMBER
(* to be completed by Academic Programs)

| SUBMISSION DEADLINES: | |
|---|---|
| Fall Quarter | April 1 |
| Winter Quarter | Sept. 15 |
| Spring Quarter | Nov. 15 |
| Summer Quarter | March 1 |

*Experimental Courses are normally valid for two years. Please attach an Expanded Course Outline.*
*Selected Advanced Topics (470, 471, 570, 571) are valid for one quarter only. Please attach an Expanded Course Outline. If the department plans to offer the proposed course for more than 1 quarter, the experimental course vehicle should be used.*
*Other Subtitle Courses The catalog description should indicate that the course has subtitles. For the "Prefix/Number/Title" box, please use the information as shown in the catalog. The individual subtopic title should be shown in "Title for Class Schedule."*

Department and School Computer Science/ SENG Date 2/6/90 Prepared by J. B. Connely JBConnely

| 1. PREFIX / NUMBER / TITLE | 2. UNITS | 3. GEB Area: * | 4. GRADING METHOD |
|---|---|---|---|
| CSC x302 Computer Applications and Their Social and Cultural Implications | 3 | F2 | Regular X CR/NC ___ |

**5. COURSE DESCRIPTION** *(follow catalog format; limit to 40 words)*

The social and technological implications and effects of the applications of computer technology to the modern world. Examination of the positive and negative effects of those changes. 3 units. Prerequisite: a computer literacy or other computer science course and junior standing.

| 6. PREREQUISITE | 7. QUARTER AND YEAR | 8. TITLE FOR CLASS SCHEDULE *(maximum of 13 characters)* |
|---|---|---|
| a computer literacy or other csc course & junior standing | Fall 1990 | C M P S O C C U L T I M P |

| ...S NUMBER(S) | 10. TYPE OF COURSE | 11. MISCELLANEOUS COURSE FEE *(MCF form is also needed)* |
|---|---|---|
| | Lec X Act ___ Lab ___ Sem ___ Supv ___ | None |

| 12. NUMBER OF SECTIONS ANTICIPATED | 13. HOW FREQUENTLY COURSE WILL BE OFFERED | 14. AVERAGE CLASS SIZE | 15. ANNUAL W.T.U. |
|---|---|---|---|
| Fall 1 Winter 1 Spring 1 Summer ___ | Yearly X Alternate Years ___ | 25 | 9 |

| 16. REQUIRED COURSE IN WHICH MAJOR/CONCENTRATION/MINOR | 17. ELECTIVE COURSE IN WHICH MAJOR/CONCENTRATION/MINOR |
|---|---|
| None | None |

**18. DUPLICATION OR APPROXIMATION OF COURSES NOW BEING OFFERED OR NOW BEING PROPOSED**

None - CSC has never before offered a GE&B course for F2

**19. STAFFING** *(Indicate either the need to hire new faculty or how present faculty utilization will be shifted to accommodate this course)*

We have available staff who have either taught such a course at other universities or are prepared in this area. We will not know the demand until it has been offered. Initially fewer other electives will be offered.

**20. JUSTIFICATION** *(Explain the need for this course)*

There has been a bottleneck with technology courses offered for the F2 category.

**21. FACILITIES, MATERIALS, AND EQUIPMENT NEEDED TO ACCOMMODATE COURSE**

classroom, possibly a p.c. lab.

APPROVALS

Department Head | School Dean | Associate Vice President for Academic Affairs and University Dean

*This form will be returned to the department by the Academic Programs Office with the number noted after a Course Master File catalog number has been assigned by the computer.*
*Courses proposed for inclusion in GE&B must be submitted to the GE&B Committee.*

9/86

CSc 302X (3)
Computer Applications and Their Social and Cultural Implications
April 1990
Prepared by: John B. Connely

I. Catalog Description

The social and technological implications and effects of the applications of computer technology to the modern world. Examination of the positive and negative effects of those changes. 3 units. Prerequisite: a computer literacy or other computer science course and junior standing.

II. Required Prerequisite Preparation

A computer literacy course in which skills have been developed in the use of an operating system and several software tools, e.g., a word processor, a database program and a spreadsheet program.

III. Expected Outcomes.

The student should be able to discuss the myriad ways in which computers are being applied to various tasks in our society, the impact of these applications on the workplace and home, and the social and cultural implications of the information society.

IV. Text and References

Texts:

Forester, Tom, The Information Technology Revolution, MIT Press, 1985.

References:

Asimov, Issac, "The Fourth Revolution", Saturday Review, 24, Oct. 1970.

Corn, J.J., ed. Imagining Tomorrow: History, Technology, and the American Future, MIT Press, 1986.

Drucker, Peter, "The Age of Discontinuity: Guidelines to Our Changing Society", Harper & Row, 1969.

Hofstadter and Dennett, The Mind's I - Fantasies and Reflections on Self and Soul, Basic Books, 1981.

Toffler, Alvin, Future Shock, Bantam Books, 1970.

_____, Third Wave, Bantam Books, 1980.

Waldrop, Mitchell, "Machinations of Thought", Science, pp. 38-45, March, 1989.

Weizenbaum, Joseph, Computer Power and Human Reason, W.H. Freeman, 1976.

V. Minimum Student Materials Required

Pencil and Paper and texts.

VI. Minimum Facilities

Classroom.

VII. Expanded Description of Content and Method of Instruction

A. The role of computers in today's world
B. The Information Society
C. Aspects of Computer Science
   a. Software and Hardware
   b. Interfaces
   c. Large databases, worm drives, cd and optical disk technology.
   d. Networks
   e. Telecommunications

D. The individual and social effects of computer technology
   a. The changing concept of work, e.g., telecommuting
   b. Job creation and displacement
   c. Privacy
   d. The humanization of the workplace

E. Legal and ethical considerations
   a. Responsibility, Safety and Liability
   b. Security considerations

F. The Future
   a. The computerized house, university, society and world
   b. Speech and image recognition
   c. Automation and robotics
   d. The smart environment

VIII. Methods of Evaluating Outcomes

Reading assignments in textual materials and articles, short research papers, quizzes, a mid-term and final examination.

State of California

# Memorandum

RECEIVED
JUN 20 1990
Academic Senate

FILE COPY

CAL POLY
SAN LUIS OBISPO
CA 93407

To :James Murphy, Chair
Academic Senate

Date :June 18, 1990

File No.:

Copies :Philip Bailey
William Rife

From :Warren J. Baker
President

Subject: ACADEMIC SENATE RESOLUTIONS

Based upon the recommendations by the Academic Affairs staff, I am pleased to approve the following resolutions of the Academic Senate: Resolution on Interdisciplinary General Education & Breadth Courses (AS-341-90/GE&B), Resolution on the Listing of Newly Approved GE&B Courses in the Class Schedule (AS-342-90/GE&B), and Resolution on Approval of CSc X302 into GE&B Area F.2 (AS-343-90/GE&B).

FILE COPY

State of California

# Memorandum

RECEIVED

JUN 12 1990

Academic Senate

CAL POLY
SAN LUIS OBISPO
CA 93407

To : James L. Murphy, Chair
Academic Senate

Date June 8, 1990

File No.:

Copies Philip Bailey
Jan Pieper

From : Warren J. Baker
President

Subject: **ACADEMIC SENATE RESOLUTIONS FROM MAY 29 MEETING** AS-343-90

This will acknowledge receipt of your June 5 memo with which you transmitted the resolutions numbered 338 through 344. These resolutions are under review, and I will respond to them when the review has been completed.