CURRICULUM COMMITTEE

Course Approval Form

Department: Mathematics

Title: Computer Field Experiences

Sponsor(s): Jack Cimprich

No. of Credits: 3-6

Approved by the department: [ ]

Graduate: ( )

Undergraduate: ( )

Not recommended by the department: [ ]

Information copies forwarded: Academic Dean; Chairman; Curriculum Committee

Signature: Department Chairman

ACADEMIC DEAN

Consultation on proposal has been held

Comments:

Signature: [Signature]

ACADEMIC DEAN

CURRICULUM COMMITTEE

Proposal received: 4/10

Open Hearing held: 3/12

Returned to the department for the following reason(s):

Approved by the Curriculum Committee

Presented to Executive Committee of the Faculty Senate as information

Notifications forwarded: Academic Dean; Department Chairman

Signature: Chairman, Curriculum Committee
I have reviewed the final documents as approved and concur with same. Budget, faculty and library resources are adequate for immediate implementation.

I have reviewed the final documents as approved and concur with same. Budget, faculty and/or library allocations for the current academic year are inadequate for immediate implementation or implementation in the next fiscal year. The earliest that the proposal might be implemented would be

HEGIS Taxonomy Number: __________________

Signature: Academic Dean

Copies forwarded: Chairman, Curriculum Committee; Department Chairman; Provost; Registrar

Registrar

Approved course description received

Signature: Registrar

Provost

Official copy and approval sheet filed

Signature: Provost (or designee)

Note: 1) Course proposal format is attached
2) A copy of this approval form should accompany each proposal
3) A copy of a proposed catalogue description of the course must accompany the proposal as a separate page.
I. Identification of the Proposal

A. **Course Title:** Computer Field Experiences

B. **Sponsor:** Jack R. Cimprich, Department of Mathematics

C. **Administrative Responsibility:** Dr. John Sooy, Chairman, Department of Mathematics

II. Outline of the Proposal

A. **Semester hours of credit granted:** 3 - 6 variable.

B. **Course level and Prerequisites:** upper division, undergraduate background in computer science and permission of the instructor.

C. **Curricula Pattern:** Required course in currently proposed computer science concentration.

D. **Enrollment:** 15 per section offered once a year.

E. **Staff and Resource Requirement:** No new staff or equipment are needed for this course. Library holdings are adequate. Contacts at area computer sites have been lined up to assure us of satisfactory access to industry facilities necessary for this course.

F. **Uniqueness of the course:** Although many other departments at Glassboro have "field-experience" type courses (e.g., industrial, geography, and psychology), the math department has no such course and no such course in computer science exists at this time. Because of the "practical" nature of computer science, this area lends itself to a field experience approach. This broadening of the mathematics department "academic" offerings would enhance the opportunity for students seeking an applications-oriented training and will create an important offering within the presently proposed computer science concentration.

G. **Objectives of the Course:**

1. Students will investigate off-campus computer centers in industry and institutions in order to study programming, operations, and systems. They will be closely supervised by the field experience coordinator who will be responsible for seeing that the students get placed are given two weeks of in-class orientation and lectures at the beginning of the course are individually told their responsibilities and objectives pertaining to the particular location they will investigate and are evaluated
by means of final exam, class discussions, bi-weekly progress reports, and an end-of-semester report to the class.

2. By being immersed in a real-life environment, the student will be able to integrate and appreciate much of the material he has learned in the classroom.

3. In addition, the student will be learning much that is not available in the classroom. He will add to his knowledge of jargon used in the computer profession, specific facts about computers and computer-related equipment, computer-job positions and their functions and responsibilities; use of documents, forms, and computer manufacturer manuals.

4. Extensive field experience will be conducted in a number of ways: part-time jobs, field trips, and student research projects will be employed.

III. Rationale

A. There is very much written evidence as well as actual experience of the author obtained in teaching similar courses at another college that student contact with industry while still at school increases his motivation for the subject, adds to his understanding and knowledge, gives insight and training in dealing with people and looking for employment, and, perhaps, most importantly, increases the student's chance of finding a job. For these reasons many other departments at Glassboro have such field-experience type courses. An additional benefit to the college which should not be overlooked is the interaction of the faculty with the surrounding industries.

IV. Course Outline

A. Introduction (given to the class as a group during first two weeks)
   - presentation of course objectives and requirements
   - description of different computer center environments.
   - computer job classification and responsibilities

B. Organization of student placement in the field (given to the students on an individual basis during 3rd week)
   - background on employer
   - student's position and duties with employer
   - particular goals student is to achieve at his job
C. **Student work in the field (4th through 13th weeks)**

- Student will report on his progress to the course instructor on a bi-weekly basis.

D. **Student presentation of work-experience to the class (14th and 15th weeks)**

- experience of individual students will be shared by their giving 20-minute presentations at the end of the semester to the class
- presentation techniques and delivery will be important and should include audio/visuals such as slides, overhead transparencies, flip-charts, and hand-outs.

E. **Summary of objectives accomplished (given by the course instructor during last week)**

- wrap-up
- final exam

V. **Catalog Description**

Computer Field Experience

(Prerequisites: 0704.0204, 0704.315, and permission of instructor)

Students will investigate off-campus computer centers in industry to study programming, operations, and systems. Reports will be required and experiences shared during on-campus seminars. Students must obtain the computer field experience supervisor's approval before signing up.