

Approval Form

0701.200



Proposal Title: Course Proposal: Computing Environments

Sponsor(s) A. M. Berman Dept.: Computer Science Ext. 6521

D. Kramer, J. Tindall

Check one: Course Specialization Concentration Minor Achievement Certificate

Certification Program Major Program Minor Change (please name deletion or credit/title/catalog change)

Undergraduate Graduate 3 Credit Hours

Step 1 (Department)

Approved 2/5/91
Date

Not Approved

H.M. Berman
Dept. CC Chairperson

Reviewed 2/8/91
Date

Leah Bergman
Dept. Chairperson

Step 2 (Receipt) 45

SCC# 90-91-~~XXXX~~

Proposal Received 2.8.91
Date

Donna Hathaway
SCC Chairperson

Step 3 (School CC)

Reviewed 7/1/91

Approved
 Not Approved

Comments:

Carol Fisher
School Curr. Comm. Chairperson

Step 4 (Academic Dean) **Comments:**

Recommend
 Not Recommend
 Conditionally Recommend (see comments)

Reviewed. 4-11-91
Date

Mem. Rank
Signature, Dean of School

Step 5 (SCC)

Open Hearing 5/3/91 Approved by Senate Curriculum Committee 5/3/91
Date Date

Returned to sponsor(s) for the following reasons:

Step 6 (Senate)

Presented to Senate _____
Date

Approved Not Approved

Notification to Executive Vice-President/Provost _____
Date

Donna Hathaway
Signature, SCC Chairperson

Step 7 (Executive V.P./Provost)

Received 6/12/91
Date

Approved Yes No

If no, reasons are as follows:

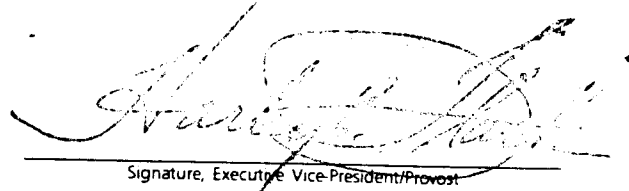
AS A COURSE ONLY, NOT YET
APPROVED FOR GEN. ED.
~~ED.~~

Student credit hours 3

Faculty load hours 3

Equalized credit hours 3

Official copy and approval sheet filed JUL 25 1991
Date



Signature, Executive Vice-President/Provost

Registrar

Approved course description received 22 July 91
Date

Hegis Taxonomy and Course Number assigned 0701.200

B F Kelvey
Signature, Registrar

22 July 91
Date

Notification forwarded:

- Senate Curriculum Committee Chairperson
- Department Chairperson(s)
- Academic Dean(s)
- Registrar
- Sponsor(s)

Glassboro State College
Department of Computer Science

Course Proposal: Computing Environments

1. Details

- | | |
|--------------------------------------|---|
| a. Course Title | Computing Environments |
| b. Sponsors | A. Michael Berman, Debbie Kramer, and Jean Tindall,
Department of Computer Science |
| c. Credit Hours | 3 |
| d. Course Level | Sophomore |
| e. Curricular Effect | <u>General Education</u> ? |
| f. Prerequisites | 0701.100, Computer Literacy or permission of the in-
structor |
| g. Suggested Time,
Implementation | One or two sections offered every
semester |
| h. Resources | Faculty, equipment, and library resources are adequate. |

2. Rationale

The Department of Computer Science is currently offering a course in Computer Literacy to teach students how to use microcomputers effectively. In addition to learning about the principles of computer hardware and software, students experience extensive hands-on use of word processing, spreadsheet and data base management software during a regularly scheduled in-class lab session. After this first computing experience, students often express an interest in taking a second course. Presently, the department can only suggest the student take a course in computer programming such as Introduction to Programming. Many of these students' fascination with computing meets an untimely death at this suggestion.

An exposure to the software covered in Computer Literacy is sufficient for many students and does indeed prepare them for future computing experiences. However, the fields of computers and information processing are expanding and changing at an incredible pace. Students will find themselves increasingly challenged to compete with other technically-oriented people at levels which cannot be achieved in the one semester Computer Literacy course.

A more advanced course would allow students greater exposure to the newly emerging tools and applications in the field. As a consequence, they will be technically qualified participants in today's working environment. The purpose of the course is not to enhance the training of computer scientists, but to encourage students in other disciplines to maximize their technical background and capabilities. Through discussions of a variety of platforms and environments, students will gain an understanding of the principles of computing which will enable them to adapt to future technological developments.

3. Essence of the course

a. Objectives in relation to student outcome:

Students will learn to enhance their productivity and talents through the use of software packages which are readily available to the public. As software applications and computing environments change, the course topics will be adjusted. Currently, user programming techniques, software tools for windowing and hard disk management, operating systems and platforms, application packages such as desktop publishing and presentation graphics, and communications and networking will be likely topics. The students will be exposed to computer platforms other than the IBM microcomputers (which are used exclusively in Computer Literacy). The course will include regularly scheduled in-class lab sessions.

b. Topic outline:

1. Tools

- Desktop managers
- Graphic User Interfaces such as Windows
- Hypertext
- Hard disk management

2. Platforms/Operating systems

- IBM Personal Computer/DOS
- DEC RISC/UNIX
- APPLE/MacIntosh
- VAX/VMS

3. Application Packages

- Graphics/Presentation Graphics
- Desktop Publishing
- Databases

4. Communications and Networking

- Communications Software
- Electronic Mail
- Groupware
- Local and Wide Area Networks

5. User Programming

- Macros
- Batch files
- Hypercard
- Databases
- Expert Systems

c. Procedure for evaluating and grading students

Each student will be evaluated by exams, projects, and papers. These assignments will be designed to test the student's knowledge of the computing environments and software covered by the course.

d. Procedure for evaluating the course

The course will be evaluated via the following:

1. student SIR's
2. review by the department curriculum committee
3. as part of the department's five-year program review

4. Consultants

Dr. Gary Itzkowitz, Chairperson, Department of Mathematics, Glassboro State College

Leigh Weiss, Department of Technology, Glassboro State College

Dr. John Frisone, Department of Psychology, Glassboro State College

Jack Cimprich, Director of Academic Computing, Glassboro State College

Diane Hamilton, Chairperson, Department of Management and MIS, Glassboro State College

Dr. Dick Scott, Chairperson, Department of Geography/Anthropology, Glassboro State College

Dr. Bob Newland, Department of Physical Sciences, Glassboro State College

5. Additional information

Possible texts:

In the short run, we do not expect to find a textbook for this course and anticipate using several topic-specific books which will be supplemented by course notes. Over time, as the demand for similar courses grows on other campuses, acceptable books are more likely to be available.

Catalog Description

Computing Environments

(Prerequisite: 0701.100, Computer Literacy; or permission of instructor)

Extensive hands-on use of different platforms and operating systems, exposing students to a variety of computing environments. Topics covered will include user tools, user programming techniques, application packages, and networking and communications. Students will gain an understanding of the principles of computing which will enable them to adapt to future technological developments.

Suggested hegis #: 0701.200

**Glassboro State College
Department of Computer Science**

**Addendum to Course Proposal: Computing Environments
Report on Consultation**

Jack Cimprich, Director of Academic Computing

On January 24, 1991, Debbie Kramer and Jack Cimprich discussed the proposed course entitled "Applications and Principles of Computing". Mr. Cimprich was very receptive to the concepts to be covered in the course and expressed his opinion that a need existed for the course. In his opinion, appropriate topics would include networking (involving online information retrieval and electronic mail), utility programs such as Norton Utilities and anti-viral software, desktop publishing, professional presentation software, and PC Paintbrush. He also stated, as the head of Academic Computing, that sufficient resources were available on campus to support the computing requirements of this course which will include application software, system software, and computer hardware.

Diane Hamilton, Department of Management and MIS

On January 28, 1991, Debbie Kramer and Diane Hamilton discussed the proposed course "Applications and Principles of Computing". Diane was very enthusiastic about the prospect of a class being offered which would better prepare business students for today and tomorrow's technically-oriented job market. She felt topics such as networking and communications, desktop publishing, databases, graphical user interfaces, and the use of graphics packages for professional presentations would be appropriate for this course. The study of a variety of computer platforms and environments would be useful as well.

Leigh Weiss, Department of Technology

On January 23, 1991, Mike Berman and Debbie Kramer discussed the proposed course "Applications and Principles of Computing" with Leigh Weiss of the Technology Department. Mr. Weiss was very receptive to the idea of adding a new course that would address the latest technological developments in the computing field. He enthusiastically suggested the course include topics such as CAD, Desktop Publishing, Graphics Manipulation, Harvard Graphics and Harvard Business Presentation, Optical Character Recognition and Scanning, and Graphics Capture.

Dr. John Frisone, Department of Psychology

On January 24, 1991, Debbie Kramer contacted Dr. John Frisone regarding the proposed course "Applications and Principles of Computing". Dr. Frisone felt the course should expose the student to the issues surrounding operating systems and the platforms upon which they reside. He did not object to topics such as desktop publishing, networks and communications software, and graphics application packages being covered in the course as long as other departments on campus did not teach specialty courses in these areas. Overall, he felt the course would be desirable for students wishing to continue their study of computers after a first course in Computer Literacy.

Dr. Gary Itzkowitz, Department of Mathematics

Debbie Kramer discussed the possibilities of the Computer Science Department offering a course entitled "Applications and Principles of Computing" with Dr. Itzkowitz on January 24, 1991. His response was positive and he acknowledged that this course would be welcomed by students wishing to expand their computer background after successfully completing a course in Computer Literacy. He felt the topic of desktop publishing was timely, perhaps being taught in Wordperfect, which would expand upon the word processing instruction already provided in Computer Literacy. He also felt students should be exposed to networks and communications software including topics such as electronic mail.

Dr. Dick Scott, Department of Geography/Anthropology

Debbie Kramer contacted Dr. Scott on January 24, 1991 to discuss the proposed course "Applications and Principles of Computing". He was receptive to the concept of the course and felt the course covered interesting material.

Dr. Bob Newland, Department of Physical Sciences

There was not time to contact Dr. Newland prior to submitting the proposal to the SCC; we intend to contact him soon.

Catalog Description

Computing Environments

(Prerequisite: 0701.100, Computer Literacy; or permission of instructor)

Students will be exposed to a variety of computing environments. The course will include extensive hands-on use of different platforms and operating systems. Topics covered will include user tools, user programming techniques, application packages, and networking and communications. Students will gain an understanding of the principles of computing which will enable them to adapt to future technological developments.

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