

Approval Form

Proposal Title: Computer Laboratory Techniques 270215

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

Check one: Course Specialization Concentration Minor Achievement Certificate
 Certification Program Major Program Minor Change (please name deletion or credit/catalog change)

Undergraduate Graduate 3 Credit Hours

<p>Step 1 (Department)</p> <p><input checked="" type="checkbox"/> Approved <u>1/27/93</u> Date</p> <p><input type="checkbox"/> Not Approved</p> <p><u>A. Michael Berman</u> Dept. CC Chairperson</p> <p><input checked="" type="checkbox"/> Reviewed <u>2/4/93</u> Date</p> <p><u>Don C. Stone</u> Dept. Chairperson</p>	<p>Step 2 (Receipt)</p> <p><input checked="" type="checkbox"/> SCC# <u>41113065</u></p> <p>Proposal Received _____ Date</p> <p><u>Mary J. Putman</u> SCC Chairperson</p>	<p>Step 3 (School CC)</p> <p>Reviewed <u>4-28-93</u></p> <p><input checked="" type="checkbox"/> Approved <input type="checkbox"/> Not Approved</p> <p>Comments:</p> <p><u>J. Caldwell</u> School Curr Comm Chairperson</p>
---	---	---

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

Recommend
 Not Recommend
 Conditionally Recommend (see comments)

Reviewed _____
Date

Signature, Dean of School

Step 5 (SCC)

Open Hearing 10/27/93 Approved by Senate Curriculum Committee 10/19/94
Date Date

Returned to sponsor(s) for the following reasons:

Step 6 (Senate)

Presented to Senate 10/26/94 Approved Not Approved
Date

Notification to Executive Vice-President/Provost 10/26/94 Harold J. Goehner
Date Signature SCC Chairperson

Step 7 (Executive V.P./Provost)

Received 11/4/94
Date

Approved Yes No

If no, reasons are as follows:

Student credit hours _____

Faculty load hours _____

Equalized credit hours _____

Official copy and approval sheet filed _____
Date

Donald L. Coyle
Signature, Executive Vice-President/Provost

Registrar

Approved course description received 30 Jan 94
Date

Hegis Taxonomy and Course Number assigned 0711203

B. J. Keenan
Signature, Registrar

22 Jan 94
Date

Notification forwarded:

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

92-93 (5)

**Rowan College of New Jersey
Department of Computer Science**

Course Proposal: Computer Laboratory Techniques

0701.205

1. Details

- a. Course title: Computer Laboratory Techniques
- b. Sponsor: A. Michael Berman, Department of Computer Science
- c. Credit hours: Three
- d. Course level: Sophomore
- e. Curricular Effect: Major requirement.
- f. Prerequisites: Programming for Computer Scientists¹
- g. Suggested time, Implementation: This course will be offered each semester.
- h. Resources: Current and projected staff and laboratory facilities will be adequate for this course.

2. Rationale

Computer Science is by its nature a blend of the theoretical and the technical. Students work in the computer science laboratory both to explore theoretical ideas and to develop practical skills. While the concepts of Computer Science change little over time, recent years have seen an explosion in the practical skills needed by a student to work efficiently in the lab. Just over a decade ago, the students only access to a computer was via the card punch. Now, students have available a rich variety of computers, environments, and networks. Currently in our lab we have computers running four different operating systems, connected via five different types of networks, offering a wide range of programming and productivity tools.

In this environment, the instructor faces a dilemma: how can the student be prepared to use these resources without taking class time from the important ideas in the curriculum? Leaving the students to train themselves is not always a realistic solution. Typically, the result is that the lab facilities are not used to their full potential, and students lose the benefits they could derive from using the best technologies.

Note that by its nature the exact topics to be covered cannot be specified in advance. These will depend on the technologies currently available in Departmental labs, and will evolve over time.

¹Note that this is the proposed new name for the course currently called "Structured Programming in Pascal".

3. Essence of the course

- a. Objectives in relation to student outcomes
 - 1. Students will have a practical working knowledge of the key operating systems and hardware in the department labs.
 - 2. Students will be able to use Local Area Networks and the Global Internet, to facilitate their work and research, and communicate with students and faculty in our department and around the world. They will be able to find and obtain resources on and off campus via the networks.
 - 3. Students will have a foundation in programming using the programming language or languages required for intermediate and advanced computer science courses.
- b. Topics
 - 1. Overview of available hardware, software, and networks.
 - 2. Concepts of key operating systems.
 - 3. Understanding and using local area networks.
 - 4. Understanding and using the Internet.
 - 5. Programming with the languages for advanced computer science.
- c. Evaluation and grading procedure of students: Students will be evaluated based on laboratory projects, one or more in-term examinations, and a final examination.
- d. Course Evaluation: The course will be evaluated as part of the curriculum review for our next departmental Self-Study, scheduled for 1996--97.

4. Results of Consultations

This course was developed in discussion with members of the computer science department during the process of our departmental Self-Study in 1991--92.

5. Additional Information

Once this course is established in the curriculum, we will submit a proposal to make it a prerequisite for certain advanced courses in the major.

6. Catalog Description

Computer Laboratory Techniques

(Prerequisite: Computer Science and Programming 0704.103)

A practical introduction to the hardware, software and networks used by the Computer Science Department. A foundation in programming using the language or languages required for intermediate and advanced computer science courses will be included.

Suggested hegis #: 0701.212