

SENATE

PROPOSAL SCC #99/00- 220

(R)

CURRICULUM PROPOSAL FORM 1999-2000

RECEIVED

NON-GENERAL EDUCATION PROCESS A

*DEADLINES: Deadline dates for 1999/2000 submissions: Regular proposals: October 22, 1999 to be implemented in Fall 2000; Short-Term proposals: December 10, 1999 to be implemented in Fall, 2000; Regular proposals February 18, 2000 to be implemented in Spring, 2001; March 24, 2000 for short-term courses to be implemented in Spring 2001.

0704.400

PROPOSAL TITLE: Minor Curricular Change. Prerequisites for Computer Science Senior Project

SPONSOR(S): Ganesh Baliga

DEPARTMENT: Computer Science

COLLEGE: LAS

IF LAS CHECK ONE: History/Humanities Math/Sciences Social/Behavioral Sciences

Check one: Undergraduate Graduate

THE ATTACHED NON-GEN-ED PROPOSAL IS BEST DESCRIBED BY THE ITEM(S) CHECKED.

New non-gen-ed course

Short-term non-gen-ed course

Minor curricular changes (fewer than three) to:

existing non-gen-ed course

non-gen-ed degree requirements

major

minor, specialization, concentration, track, certificate program

DEPARTMENT (Signature indicates approval)

Dept. Curriculum Chair / Date 10/21/99

Dept. Chairperson / Date 10/21/99

ACADEMIC DEAN

Approved Not Approved Comments:

Dean's Signature/Date [Signature] 11/2/99

COLLEGE CURRICULUM COMMITTEE

Date of open hearing (if necessary) 11/30/98 Approved _____ Not Approved _____

Comments:

small type correction

Signature of College Chair/Date: *[Signature]* 11/30/98

UNIVERSITY CURRICULUM COMMITTEE

Date Received/Processed 4/17/00

Comments:

[Signature]

Curriculum Chair Signature _____ Date Announced At Senate 4/16/00

EXECUTIVE VICE PRESIDENT/PROVOST

Approved Not Approved _____ If no, reasons are as follows:

Student Credit Hours _____ Faculty Load Hours _____ Equalized Credit Hours _____

Official Copy & Approval Sheet Filed (Date): _____ Executive VP/Provost Signature/Date *[Signature]* 4/26/00

REGISTRAR

Date Approved Course Description Received _____ Hegis Taxonomy & Course Number Assigned 0704.400

Registrar Signature/Date *[Signature]* 4/27/00

NOTIFICATION FORWARD

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

Rowan University
Department of Computer Science

Minor Curricular Change
Changing Prerequisites for Computer Science Senior Project

1. Details

a. Change requested:

Add the course **Design and Analysis of Algorithms 0707.340** as a prerequisite for **Computer Science Senior Project 0704.400** and reflect that change in the catalog description (Note: the textual description of the course content for **Computer Science Senior Project 0704.400** *does not* change)

b. Sponsor: Ganesh R. Baliga, Associate Professor, Computer Science Department

2. Rationale

a. Statement of "need" for such a change:

The Computer Science Senior Project is a capstone course taken by computer science majors. Students in this course design and implement large-scale individual software projects, hence it is imperative that they be conversant with the design of efficient algorithms for solving various problems.

b. Statement of curricular effect:

None

3. Results of Consultation

This was approved at a Computer Science Department meeting. The Mechanical and Electrical and Computer Engineering Departments were also consulted.

Catalog Description

0704.400 3 s.h.

Computers Science Senior Project

(Prerequisite: 0707.340)

This is an advanced programming course in which students work on large-scale individual and team programming projects and make a formal presentation on their work. The course discusses program development, methodologies and strategies.

From: Tirupathi R Chandrupatla
To: Kay, Jennifer S.
Date: 10/22/99 9:51AM
Subject: Consultations

Jennifer:

We support the following minor changes and course proposals from Computer Science.

Minor Changes:

- Change Semester Hours of Data Structures and Algorithms
- Change Restricted Electives for CS Majors
- Change Prereq's for CS Senior Project
- Drop pre-calc minimum grade requirement for CS majors

Course Props

- Data Structures For Engineers
- Grad Topics in CS
- Embedded Systems Programming

T.R.

Dr. Tirupathi R. Chandrupatla, P.E.
Professor and Chair
Mechanical Engineering
Rowan University
201 Mullica Hill Rd
Glassboro, NJ 08026
Ph: 856-256-5340 Fax: 856-256-5241

From: John L. Schmalzel
To: Kay, Jennifer S.
Date: 10/21/99 11:41PM
Subject: Re: Consultations

MEMORANDUM

Date: 21 OCT 1999

TO: Dr. Jennifer Kay, and CS Curriculum Committee
FR: J. Schmalzel, Chair ECE (jls)

SUBJ: Course/Curriculum Review

I have had a chance to review your department's proposed course/curriculum changes. In an effort to get you some immediate feedback, I am providing the following comments. In the case of Embedded Systems, additional comments to follow.

A. Minor Changes:

1. Change Semester Hours of Data Structures and Algorithms.

ECE Response: We understand your desire for more lab contact with your students. We wish it would have been possible under the original 3-SCH version of the course in order to avoid necessitating a new version of Data Structures intended for ECE students only. However, we have a firm cap on our total SCH required for the degree (128 SCH).

2. Change Restricted Electives for CS Majors.

ECE Response: This is a CS-Department decision taken in response to self-assessment of curricular objectives.

3. Change Prereq's for CS Senior Project.

ECE Response: This is a CS-Department decision taken in response to self-assessment of curricular objectives.

4. Drop pre-calc minimum grade requirement for CS majors.

ECE Response: This is a CS-Department decision taken in response to self-assessment of curricular objectives.

B. Course Proposals

1. Data Structures For Engineers.

ECE Response: (Continuation of comment from A.1. above.) A desirable outcome of the course development/planning process would be to determine a way to teach a hybrid course that would allow both CS and ECE students to co-exist within a single Data Structures course framework. We believe that it is important for our students to be mixed with your majors to enhance multidisciplinary opportunities--an objective that is not served by separating them by course.

A possible approach may be suggested by an experiment we've performed with our electronics course (0909.311), which has both ECE and ME students required to take it. We were able to create a hybrid course by sharing a single common lecture time per week, and then splitting off into second lecture/lab sessions to handle the perceived need for somewhat different focus between the groups. In the case of Data Structures, this might mean 2 lectures a week + lab, shared by both ECE and CS students, and a 3d lecture per week for CS students only. Other variations could be tried.

We would welcome the opportunity to explore options with your faculty.

2. Grad Topics in CS.

ECE Response: This is a CS-Department decision taken in response to self-assessment of curricular objectives.

3. Embedded Systems Programming.

ECE Response: (A more detailed response needs to be developed. Embedded systems development is dependent on hardware vs. software trade-offs, which is an ECE core element.)

{end memo}

>>> Jennifer S. Kay 10/21/99 09:48PM >>>
John,

Sorry for filling your mailbox tonight. We're still waiting for consultations from you on the following proposals:

Minor Changes:

- Change Semester Hours of Data Structures and Algorithms
- Change Restricted Electives for CS Majors
- Change Prereq's for CS Senior Project
- Drop pre-calc minimum grade requirement for CS majors

Course Props

- Data Structures For Engineers
- Grad Topics in CS
- Embedded Systems Programming

Any chance you could zap me an email with a copy of the above list of topics and "We support these" or any concerns that you have so that I can stick it on the back of our props? (In particular, let me know if you think the prereq's for the DS for Engineers makes sense)

I'm still waiting on some of our committee to finish looking over your two, My guess is that we'll have no problems with Adaptive Filters, but maybe some concerns over ANN's. I'm pushing people to finish reviewing so we can formally get back to you. I'll send you something or call you tomorrow morning.

Thanks!

-- Jennie

Jennifer S. Kay
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<http://www.rowan.edu/~kay>

CC: Baliga, Ganesh; Bergmann, Seth; ECE_Faculty; Tinkham, Nancy; Waksman, Adlai