Hendrix College
Proposed Curricular Revision

Department: Mathematics and Computer Science Date: Oct 24, 2006

Proposed change (one sentence summary; please attach departmental catalog copy as it would appear with the proposed change):

Add CSCI 400 Technical Communication and Analysis to the department course offerings and to the department’s major requirements.

Rationale for course within departmental and collegiate context. (Use separate sheet, if necessary)

We feel our students should take a course emphasizing communication skills within their discipline. We have attempted to incorporate these into our regular courses – and we will continue to do so – but we find that this approach gives inadequate attention to communication skills.

Currently, students are required to complete a senior project as part of the major, to be completed outside the domain of any credit-bearing courses. To reduce this additional load somewhat, and to provide more emphasis on communicating the project results, we plan for the communication components of the senior project to be rolled into this course. This will constitute approximately 1/3 of the course; the remainder will be communication assignments specialized to CSCI 400. [We feel the course is worth adding outside the context of the senior project; the choice of this structure is to reduce the overall student burden.]

Proposed code(s): Which, if any, course codes (Challenges of the Contemporary World, Domains, Capacities, Physical Activities) will this course fulfill? [Note that a listing of codes with approved criteria are listed in the Catalog and on the Hendrix website].

W2

On a separate sheet of paper indicate which of the criteria are met by the course, and how the course meets those criteria.

Does this replace a course? ___ no ___ Specify

This will be a ___ permanent ___ temporary course.

How often will the course be offered?

Annually, each spring semester. (The course will be tied to the senior projects that the students are completing at the same time.)

Prerequisite(s) and/or recommended prior courses: Senior standing.

How will the change be staffed?

It is within the competence of all current computer science faculty members, and it should continue to be so in the future.

Equipment, supply, and bibliographic requirements (Items and cost) None

Will the above items be covered by a present budget? n/a

Proposed date of implementation:

The first students under the new requirement would be those entering in Fall 2007. Thus, the first offering would likely be when those students become seniors, in Spring 2011.

Signatures

Initiator(s) of Proposal ________________________________

Department Chair ________________________________
MAJOR IN COMPUTER SCIENCE

13 courses distributed as follows:
* CSCI 150 Foundation of Computer Science I
* CSCI 151 Foundation of Computer Science II
* MATH 130 Calculus I
* MATH 240 Discrete Mathematics
* CSCI 230 Computer Systems Organization
* CSCI 250 Programming Practicum
* CSCI 280 Algorithms and Problem-Solving Paradigms
* CSCI 330 Computer Architecture OR CSCI 420 Operating Systems and Concurrent Computing
* CSCI 380 Theory of Computation OR MATH 340 Combinatorics
* CSCI 400 technical Communication and Analysis
* Three additional CSCI courses numbered 300 or above

Each senior computer science major must also enroll in the year-long CSCI 497 Senior Seminar.

[The only changes to the catalog are the modification of "12 courses" to "13 courses" before the bullets and the addition of the "CSCI 400" bullet. Of course, the following course description would also be added.]

CSCI 400 Technical Communication and Analysis

Focuses on written and oral communication concerning computing, with a secondary emphasis on quantitative performance analysis and reading and research skills. Among the written assignments will be design documents and user documentation; a research paper and presentation will be the culminating assignments. Fundamental communication skills will receive special attention. Prerequisite: Senior standing.

On W2 skills: As a course where writing skills are a primary emphasis, the course will exceed the W2 guidelines. Students will write at least three documents of 5 pages or more, as well as several minor papers. For many of these writing assignments, the students will go through a draft-submission process, where they are “coached” by the instructor concerning revisions to make for the final submission.
Department: Mathematics and Computer Science
Date: 11/20/06

Proposed change (one sentence summary; please attach departmental catalog copy as it would appear with the proposed change.)

Add new course, MATH 210 Statistical Analysis

Rationale for course within departmental and collegiate context. (Use separate sheet, if necessary)

This course will attempt to address a growing need for an introduction to descriptive and inferential statistics from a general perspective, while drawing examples from the enrolled students’ areas of interest.

Proposed code(s): Which, if any, course codes (Challenges of the Contemporary World, Domains, Capacities, Physical Activities) will this course fulfill? [Note that a listing of codes with approved criteria are listed in the Catalog and on the Hendrix website].

QS (see course description for justification)

On a separate sheet of paper indicate which of the criteria are met by the course, and how the course meets those criteria.

Does this replace a course? NO Specify

This will be a permanent temporary course.

How often will the course be offered? One section each year

Prerequisite(s) and/or recommended prior courses: Sophomore standing or higher

How will the change be staffed? Existing staff

Equipment, supply, and bibliographic requirements (Items and cost) None

Will the above items be covered by a present budget? N/A

Proposed date of implementation: Fall 2007

MATH 210 Statistical Analysis (QS)

An introduction to some of the mathematical and statistical methods used in the analysis of social and natural scientific phenomena with an emphasis on the interpretation of experimental and survey data. Topics include elementary and combinatorial designs, basic statistical methods, correlation and inference, and regression analysis. Applications to the students’ major disciplines will be included throughout the course as well as in a culminating project. (This course will not satisfy any requirements for a major or minor in mathematics. Students may not receive credit for both this course and another introductory statistics course such as PSYC 290 or BUSI 250). Prerequisite: Sophomore standing or higher.
Hendrix College
Proposed Curricular Revision

Department  Physics  Date 11/29/06

Proposed change (one sentence summary; please attach departmental catalog copy as it would appear with the proposed change.)

In the catalog, section describing the Physics Major. Strike the sentence: "Students planning a career in physics or engineering should take all four of PHYS 320, 330, 370, and 380."

Rationale for course within departmental and collegiate context. (Use separate sheet, if necessary)

Change should have occurred when we were granted the change to the major last year. All four courses are now required.

Proposed code(s): Which, if any, course codes (Challenges of the Contemporary World, Domains, Capacities, Physical Activities) will this course fulfill? [Note that a listing of codes with approved criteria are listed in the Catalog and on the Hendrix website].

On a separate sheet of paper indicate which of the criteria are met by the course, and how the course meets those criteria.

Does this replace a course? Specify

This will be a _permanent _temporary course.

How often will the course be offered?

Prerequisite(s) and/or recommended prior courses:

How will the change be staffed?

Equipment, supply, and bibliographic requirements (Items and cost)

Will the above items be covered by a present budget?

Proposed date of implementation:

Signatures

Initiator(s) of Proposal

Department Chair

Area Chair