## Course Modification Proposal

Date: November 22, 2005
Program Area COMPUTER SCIENCE

1. Catalog Description of the Course. [Follow accepted catalog format.] (If Cross-listed please submit a form for each prefix being modified)

## OLD

Prefix COMP Course\# 105 Title Computer Programming Introduction Units (3)
3 hours per week
$\square$ Prerequisites
$\square$ Corequisites
Description Three hours lecture in the lab per week. An introduction to the design, development and expression of algorithms including: algorithms and their stepwise refinement; expression of algorithms in a formal language. Not open to students who have completed COMP 150

## Q Gen Ed

Categories B4
$\square$ Lab Fee Required

| Graded |  |
| :--- | :---: |
| $\square$ CR/NC | $\square$ Repeatable for |
| $\square$ A - Z | up to |
| $\square$ units |  |

2. Mode of instruction

|  | Existing |  |  |  | Proposed |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Units | Hour Per Unit | Benchmark Enrollment | CS\# Units (filled out by Dean) |  | Units | Hour Per Unit | Benchmark Enrollment | CS\# Unit (filled out by Dean) |
| Lecture | $\underline{3}$ | 1 | $\underline{24}$ |  | Lecture | $\underline{3}$ | 1 | $\underline{24}$ |  |
| Seminar |  |  |  |  | Seminar |  |  |  |  |
| Laboratory |  |  |  |  | Laboratory |  |  |  |  |
| Activity |  |  |  |  | Activity |  |  |  |  |

3. Course Content in Outline Form if Being Changed. [Be as brief as possible, but use as much space as necessary]

| OLD |  |
| :--- | :--- |
| 1. | Stacks and Queues |
| 2. | Components of a typical computer system |
| 3. | Introduction to Operating Systems |
| 4. | File systems |
| 5. | Algorithm design. |
| 6. | Functions and Procedures |

## NEW

1. Data Representation and Organization
2. Components of a typical computer system
3. Introduction to Operating Systems and Networks
4. File systems
5. Algorithm Design and Problem Solving
6. Functions and Procedures
7. Computers and Society
8. Justification and Learning Objectives for the Course. (Indicate whether required or elective, and whether it meets University Writing, and/or Language requirements) [Use as much space as necessary]

## OLD

The course is an introductory Computer Science course for computer science and other students.

Through this course, students will:

1. Be able to organize and express computer
programming ideas clearly in oral and written form.
2. Be able to implement simple computer programs.

## NEW

The course is an introductory Computer Science course for computer science and other students.

Through this course, students will:

1. Be able to organize and express computer
programming ideas clearly in oral and written form.
2. Be able to implement simple computer programs.
3. Be able to design simple algorithms.
4. Be able to use simple data structures including lists and arrays.
5. Be able to implement simple computer program debugging techniques.
6. Be able to organize and express ideas clearly and convincingly in oral and written forms.

This course is not designed to satisfy the University Writing or Language requirements.
3. $\quad$ Be able to design simple algorithms.
4. Be able to use simple data structures including arrays.
5. Be able to implement simple computer program debugging techniques.
6. Be able to understand concepts and issues in computing including computer terminology
7. Gain a broad appreciation of the fundations of computer science, software, and hardware, as well as the effects of computing on society.

This course is not designed to satisfy the University Writing or Language requirements.
5. References. [Provide 3-5 references on which this course is based and/or support it.]

OLD
A structured programming approach using C Behrouz A Fourzan. Brooks/Cole 2001
6. Indicate Changes and Justification for Each. [Check all that apply and follow with justification. Be as brief as possible but, use as much space as necessary.]
$\square$ Course title
$\square$ Prefix/suffix
$\square$ Course number
$\square$ Units
$\square$ Staffing formula and enrollment limits
$\square$ Prerequisites/corequisites
Q Catalog description
Ø Course content
$\square$ References
GE
Other
Justification Course broadened beyond programming to give a foundation to whole program. New catalog description better reflects the content of the course.
7. If this modification results in a GE-related change indicate GE category affected and Attach a GE Criteria Form: A (English Language, Communication, Critical Thinking)
A-1 Oral Communication
A-2 English Writing
A-3 Critical Thinking
B (Mathematics, Sciences \& Technology)
B-1 Physical Sciences
B-2 Life Sciences - Biology
B-3 Mathematics - Mathematics and Applications
B-4 Computers and Information Technology
C (Fine Arts, Literature, Languages \& Cultures)
C-1 Art
C-2 Literature Courses
C-3a Language
C-3b Multicultural
D (Social Perspectives)
E (Human Psychological and Physiological Perspectives)
UD Interdisciplinary

## NEW

see attached

8. New Resources Required. YES $\square$ NO $\boxtimes$

If YES, list the resources needed and obtain signatures from the appropriate programs/units on the consultation sheet below.
a. Computer (data processing), audio visual, broadcasting needs, other equipment)
b. Library needs
c. Facility/space needs
9. Will this course modification alter any degree, credential, certificate, or minor in your program? YES NO $\boxtimes$ If, YES attach a program modification form for all programs affected.

Anna Bieszczad, Bill Wolfe
6/3/05
Proposer of Course Modification

Date

## Approvals

Program Chair Date
Curriculum Committee Chair Date

Dean Date

