## NEW CoURSE PROPOSAL

## Program Areas ___ MATH AND COMPUTER SCIENCE

1. Catalog Description of the Course. [Include the course prefix, number, full title, and units. Provide a course narrative including prerequisites and corequisites. If any of the following apply, include in the description: Repeatability (May be repeated to a maximum of $\qquad$ units); time distribution (Lecture $\qquad$ hours, laboratory $\qquad$ hours); non-traditional grading system (Graded CR/NC, ABC/NC). Follow accepted catalog format.]

COMP 105. COMPUTER PROGRAMMING INTRODUCTION (3)
Three hours of 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.
GenEd: B4
2. Mode of Instruction.

|  | Units | Hours per <br> Unit | Benchmark <br> Enrollment <br> $24 \_$ |
| :--- | :---: | :---: | :---: |
| Lecture | $-3 \_$ | $-1^{1}$ | - |
| Seminar | - | - | - |
| Laboratory | - | - | - |
| Activity |  |  |  |

3. 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]

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.
4. Is this a General Education Course

YES
If Yes, indicate GE category:

| A (English Language, Communication, Critical Thinking) |  |
| :--- | :--- |
| B (Mathematics \& Sciences) | B4 |
| C (Fine Arts, Literature, Languages \& Cultures) |  |
| D (Social Perspectives) |  |
| E (Human Psychological and Physiological Perspectives) |  |

5. Course Content in Outline Form. [Be as brief as possible, but use as much space as necessary]
6. Stacks and Queues
7. Components of a typical computer system
8. Introduction to Operating Systems
9. File systems
10. Algorithm design.
11. Functions and Procedures
12. References. [Provide 3-5 references on which this course is based and/or support it.]

A Structured Programming Approach Using C Behrouz A. Forouzan Brooks/Cole Publishing 20010534374824
7. List Faculty Qualified to Teach This Course.

All Computer Science faculty.
8. Frequency.
a. Projected semesters to be offered: Fall __X_ Spring ___ Summer ___
9. New Resources Required.
a. Computer (data processing), audio visual, broadcasting needs, other equipment

Use of existing computer lab.
b. Library needs
none
c. Facility/space needs
none
10. Consultation.

Attach consultation sheet from all program areas, Library, and others (if necessary)
11. If this new course will alter any degree, credential, certificate, or minor in your program, attach a program modification.

