CURRICULUM PROPOSAL FORM University-Wide Undergraduate Curriculum Committee

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				ActionDate	
		TITLE/AUTHOR OF C		•	
	CO	URSE/PROGRAM TITLE_	CO 105, Fundamentals of	Computer Science	٠.
		PARTMENT	Computer Science		•
			William Oblitey, X4491	(X2524)	•
•	0	. APPROVALS ohn Q. Cross partment Curriculum	Committee Dep	partment Chairperson	1
	 	Richard A. Robe	esta le	College Dean *	
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IV. DESCRIPTION OF CURRICULUM CHANGE 1 Caseles Deceriation No.

COURSE SYLLABUS

I. CATALOG DESCRIPTION

CO 105 Fundamentals of Computer Science

3c-01-3sh

Prerequisites: None

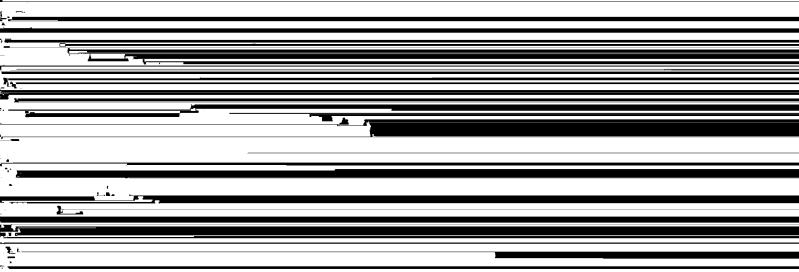
This is the first course for Computer Science majors. It is required of all Computer Science transfer students, and is appropriate for other Natural Sciences and Mathematics students. Topics include the fundamental concepts of computer architecture, algorithm development and analysis, programming languages, software engineering, data organization and representation, and systems software. Hands-on introduction to computer usage with an emphasis on terminology and the underlying connections within the discipline.

II. COURSE OBJECTIVES

- Students will understand what the fundamental concepts of Computer Science are.
- Students will develop a foundation from which they can understand the relevance and inter-relationships of Computer Science courses.
- Students will realize and be motivated to cope with the scope and dynamics of the Computer Science field.
- 4. Students will develop their abilities to think of problems in terms of the abstraction and refinement process, thus increasing their ability to develop solutions to complex problems by structuring them as intellectually manageable subproblems.

III. COURSE OUTLINE

The following outline of the material to be cowered in the



Use of the Computer
1. Using the terminal
2. Editing text files
3. Introduction to microcomputers System commands 4. Introduction to minicomputers and mainframes

Introduction to supercomputers 5.

В.

(5 hrs)

(2 hrs) Systems Software Η. Operating systems
Compilers, interpreters and assemblers
Linkers and loaders Data Structures 1.



VII. BIBLIOGRAPHY

Behforooz, A. & O.P. Sharma, <u>An Introduction to Computer Science</u>, Prentice-Hall, 1986.

Brookshear, J.G., <u>Computer Science</u>, <u>An Overview</u>, Benjamin Cummings, 1985.

Denning, P. J., Report of the ACM Task Force on the Core of Computer Science, ACM Press, 1988.



CO 105 will be taught by one instructor. в1. No additional or corollary courses are needed with CO 71-

