SCHOOL OF ENGINEERING AND APPLIED SCIENCE UNIVERSITY OF CALIFORNIA LOS ANGELES

COURSE PROPOSAL

TO: Office of Student Affairs Date: ___**February 2, 1999**___ 6426 Boelter Hall

FROM: ___L. Lichten, D.S. Parker ____Computer Science ____ (Proposers) Department

Course No. _CS133A_ Title _Introduction to Computer Science II_ Units _4_ New Course _____ Revision ____X_ Deletion _____ Prerequisites _____

CATALOG DESCRIPTION (Limit 40 words):

Existing catalog description:

32. Introduction to Computer Science II. Lecture, four hours; discussion, two hours; outside study, six hours. Prerequisite: course 31. Limited to majors in computer science and engineering and computer science majors. Not open to students with credit for course 23. Object-oriented programming, overloading, inheritance, polymorphism. Object-oriented view of data structures: lists, stacks, queues. Memory management. Sorting and searching algorithms and their performance. Trees, graphs, and associated algorithms. Case studies and exercises from computer science applications.

Proposed revision:

32. Introduction to Computer Science II. Lecture, four hours; discussion, two hours; outside study, six hours. Prerequisite: course 31. Limited to computer science and electrical engineering majors. Object-oriented software development. Abstract data type definition and use. Overloading, inheritance, polymorphism. Object-oriented view of data structures: stacks, queues, lists. Algorithm analysis. Trees, graphs, and associated algorithms. Searching and sorting. Case studies and exercises from computer science applications.

JUSTIFICATION FOR PROPOSAL:

Existing catalog description is out of date.

Does this modification affect major or minor field program? Yes _____ No ___X___

Submit major field program sheets with handwritten correction.

| This course is recommende | ed | to | sat | isf | y an e | lectiv | e c | ons | tra | int | as | |
|--|----|----|-----|-----|----------|--------|-----------------------|------|------|-----|------|--|
| indicated below: | | | | | | | Constraints | | | | | |
| Suggested Units | | | | | | | Units Approved by UPC | | | | | |
| (please circle) | | | | | | | | | | | Ì | |
| Design | 0 | 1 | 2 | 3 | 4 | 0 | 1 | 2 | 3 | 4 | Ì | |
| Engineering Science_ | 0 | 1 | 2 | 3 | 4 | 0 | 1 | 2 | 3 | 4 | Ì | |
| Laboratory | 0 | 1 | 2 | 3 | 4 | 0 | 1 | 2 | 3 | 4 | Ì | |
| <pre> Engineering and</pre> | | | | | | DO | NOT_ | _FI | LL_: | IN_ | | |
| Science in Society | | | | | | | | | | | | |
| Mathematics - Upper division RECOMMENDED Signatures(s): | | | | | | | | | | | | |
| DEPARTMENT CHAIRMAN | | | | | PROPOSER | | | | | Ι | DATE | |
| ACADEMIC POLICY COMMITTEE (CSD) CHAIRMAN | | | | | PROPOSER | | | | | | DATE | |
| Signature: | | | | | | | | | | | | |
| EXECUTIVE COMMITTEE (SEAS CHAIRMAN | 3) | | | | INSTR | UCTOR | IN (| CHAI | RGE | | DATE | |