



Academic Affairs - Course Proposal

Form A

CALIFORNIA STATE UNIVERSITY, SACRAMENTO

Academic Unit: Computer Science		Department Chair: Du Zhang	
Type of Course Proposal: New__ Change_X_ Deletion__		Date: March 28, 2006	
Does this course fulfill a requirement for single-subject or multiple subject credential students? Yes ___ No <u>X</u>		For Catalog Copy: Yes <u>X</u> No__	CCE: Yes__ No <u>X</u>
<i>Change in title, prerequisite, and catalog description</i>		Semester Effective: Fall <u>X</u> Spring__ 2006__	
Prefix &No. CSC 010	Title: Introduction to Programming	Units: 3	

Change to:

Prefix &No. CSC 010	Title: Introduction to Programming Logic	Units: 3
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JUSTIFICATION:

Changes are necessary to reflect current practice and clarify the prerequisite to facilitate entry into the course for newly arriving students. (Former prerequisite was "Passing score on the ELM.")

NEW COURSE DESCRIPTION: (Not to exceed 80 words, and language should conform to catalog copy.)

See <http://www.csus.edu/acaf/univmanual/crspsl.htm> - Guidelines for Catalog Course Description

Introduction to computer science with an emphasis on programming concepts and methodology. Intended to assist students with little or no programming experience to understand the basic principles of programming logic. Topics include computer hardware and software, problem solving and algorithm development, flow of control, modular design using techniques that can be applied to common programming languages. Lecture two hours, technical activity and laboratory, two hours.

Note:

Prerequisite: Intermediate Algebra (Math 11 or equivalent)

Corequisite:

CAN (California Articulation Number):

Graded: Letter X Credit/No Credit__ **Instructor Approval? Yes__ No X**

Course Classification: 04 13 **Title for SIS+ (not more than 25 characters)**
INTRO PROGRAMMING LOGIC

Cross Listed? Yes__ No X **If yes, with what course:**

How Many Times Can This Course be Taken for Credit? Once

FOR NEW COURSE PROPOSALS OR SUBSTANTIVE CHANGES ONLY:

Description of the Expected Learning Outcomes: Describe outcomes using the following format: “Students will be able to: 1), 2), etc.” See the example at <http://www.csus.edu/acaf/example.htm>

Successful students will demonstrate the ability to:

- read and analyze problem descriptions.
- analyze the input and output needs for a specified problem.
- develop or choose appropriate algorithms for solving problems.
- design algorithms using the control structures of structured programming.
- represent algorithms using an approach acceptable in the modern software development industry.
- simulate the execution of algorithms using a systematic desk-checking approach.
- describe the relationship between algorithm design and computer programming in modern high-level programming languages.
- describe the relationship between simulated execution of algorithms (desk-checking) and the actual computer execution of programs that implement those algorithms.
- develop a modular design for a software implementation to solve a problem.
- describe several approaches for communication of data within a modular software design.
- use preconditions and post-conditions to describe the behavior of a “black-box” module.

**Attach a list of the required/recommended course readings and activities [Note: it is understood that these are updated and modified as needed by the instructor(s).] This attachment should be forwarded only to your Dean's office, not Academic Affairs.

Assessment Strategies: A description of the assessment strategies (e.g., portfolios, examinations, performances, pre- and post-tests, conferences with students, student papers) which will be used by the instructor to determine the extent to which students have achieved the learning outcomes noted above:

Laboratory projects, lecture/discussion assignments that require algorithms, structure charts, and desk checks; statements about the purpose of the specific algorithm and comments throughout the algorithm; examinations.

For whom is this course being developed?

Majors in the Dept X Majors of other Depts X Minors in the Dept X General Education Other

Is this course required in a degree program (major, minor, graduate degree, certificate)? Yes No

If yes, identify program(s):

Does the proposed change or addition cause a significant increase in the use of College or University resources (lab room, computer facilities, faculty, etc.)? Yes No X

If yes, attach a description of resources needed and verify that resources are available.

Indicate which department or programs will be affected by the proposed course (if any). _____

The Department Chair's signature below indicates that affected programs have been sent a copy of this proposal form.

Approvals: If proposed change, new course or deletion is approved, sign and date below. If not approved, forward without signing to the next reviewing authority, and attach an explanatory memorandum to the original copy.

Signatures:

Date

Department Chair:	
College Dean or Associate Dean:	
CPSP (for school personnel courses ONLY)	
Associate Vice President and Dean for Academic Programs	

Distribution: Academic Affairs (original), Department Chair and College Dean. Dean's office to send original after approval to Jerri McAtee, at zip 6016. An electronic copy must also be sent to mcatee@csus.edu.