## CALIFORNIA STATE UNIVERSITY CHANNEL ISLANDS

## **NEW COURSE PROPOSAL**

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

PROGRAM AREAS \_\_\_\_\_BIOLOGICAL AND PHYSICAL SCIENCES, MATH AND COMPUTER SCIENCE

	repeated to a maximum of units); time distribution (Lecture hours, laboratory hours); non-traditional grading system (Graded CR/NC, ABC/NC). Follow accepted catalog format.]  COMP 232. PROGRAMMING LANGUAGES (3) Three hours of lecture in the lab per week. Prerequisite: COMP 151 and COMP 162. Discussion of issues in the design, implementation, and use of high-level programming languages. Topics include: historical background; how languages reflect different design philosophies and user requirements; technical issues in the design of major imperative (procedural) programming languages; other approaches to programming: functional programming, logic programming, and object-oriented programming.				
2.	Mode of Instruction.	Units	Hours per Unit	Benchmark Enrollment	
	Lecture	3	1	24	
	Seminar				
	Laboratory				
	Activity	<del></del>			
	•				
<ul> <li>Justification and Learning Objectives for the Course. (Indicate whether required or elective, and whether it me Writing, and/or Language requirements) [Use as much space as necessary]</li> <li>The course is a required course for Computer Science majors according to accreditation guidelines.</li> <li>Through this course, students will be able to</li> <li>Explain how languages are designed and implemented</li> </ul>					•
	<ul> <li>Select the most appropriate language for solving a specific problem</li> <li>Assess the quality of a language</li> <li>Write a program in each of a imperative, applicative, rule-based, object-oriented language</li> <li>Organize and express ideas clearly and convincingly in oral and written forms.</li> </ul> This course is not designed to satisfy the University Writing or Language requirements.				
4.	Is this a General Education Course If Yes, indicate GE category:	NO			
	A (English Language, Communication	n, Critical Thinki	ng)		
	B (Mathematics & Sciences)	& Cultures		_	
	C (Fine Arts, Literature, Languages  D (Social Perspectives)	& Cuitures)		-	
	E (Human Psychological and Physiol	ogical Perspective	es)		
			/		

5. Course Content in Outline Form. [Be as brief as possible, but use as much space as necessary]

**NEWCRSFR** 9/30/02

Standardization and Internationalization Language Translation and Grammar Regular Grammar **Recursive Descent Parsing** Introduction to LISP Perl Parameter Transmission Heap Storage Garbage Collection Overview of C and C++ Introduction to Java **References.** [Provide 3 - 5 references on which this course is based and/or support it.] Sebesta, Concepts of Programming Languages, Addison-Wesley 5th edition ISBN: 02017529536 Pratt and Zelkowitz, Programming Languages - Design and Implementation, Prentice-Hall 4th edition, ISBN: 0130276782 7. List Faculty Qualified to Teach This Course. All Computer Science faculty. Frequency. a. Projected semesters to be offered: Fall \_\_\_X\_ Spring \_X\_\_\_ Summer \_\_\_X\_\_ New Resources Required. a. Computer (data processing), audio visual, broadcasting needs, other equipment Use of existing computer lab. b. Library needs none 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. Proposer of Course Date

Introduction to Languages