CALIFORNIA STATE UNIVERSITY CHANNEL ISLANDS

PROGRAM MODIFICATION

DATE: 11.8.06 PROGRAM AREA: COMPUTER SCIENCE SEMESTER /YEAR FIRST EFFECTED: FALL 2007

Please use the following format to modify any existing program. Any deletions from an existing program need to be underlined (left hand column), and any additions/changes to the program need to be in CAPS (right hand column).

EVICTING DDOODAM				
EXISTING PROGRAM	PROPOSED PROGRAM			
Name of Degree Program	Name of Degree Program			
Computer Science	Computer Science			
Catalog Description of the Program	Catalog Description of the Program			
The Computer Science degree offers the	The Computer Science degree offers the			
latest cutting edge education for	latest cutting edge education for			
various industrial and applied fields.	various industrial and applied fields.			
Students will be given a strong	Students will be given a strong			
background in computer hardware and	background in computer hardware and			
software, as well as a substantial	software, as well as a substantial			
amount of hands-on experience. The	amount of hands-on experience. The			
program will stress interdisciplinary	program will stress interdisciplinary			
applications in other sciences and	applications in other sciences and			
business and prepare students for	business and prepare students for			
graduate studies.	graduate studies.			
Requirements for the Degree Program	Requirements for the Degree Program			
(122 UNITS)	(122 UNITS)			
Lower Division Required Major Courses	Lower Division Required Major Courses			
(42)	(42)			
Upper Division Required Major Courses	UPPER DIVISION REQUIRED MAJOR COURSES			
(28)	(31)			
Upper Division Elective Major Courses	UPPER DIVISION ELECTIVE MAJOR COURSES			
(12)	(9)			
Elective Courses (6)	Elective Courses (6)			
General Education and American	General Education and American			
Institutions Requirement (34)	Institutions Requirement (34)			
Note: General Education Included in	Note: General Education Included in			
Major Requirements (18)	Major Requirements (18)			
Lower Division Requirements	Lower Division Requirements			
COMP 150 Object-Oriented Programming,	COMP 150 Object-Oriented Programming,			
GE-B4 (4)	GE-B4 (4)			
COMP 151 Data Structures and Program	COMP 151 Data Structures and Program			
Design (4)	Design (4)			
COMP 162 Computer Architecture and	COMP 162 Computer Architecture and			
Assembly	Assembly			
Language (3)	Language (3)			
Assembly	Assembly			
Language (3)	Language (3)			

COMP 232 Programming Languages (3) COMP 232 Programming Languages (3) 262 Computer Organization and COMP COMP 262 Computer Organization and Architecture (3) Architecture (3) MATH 150 Calculus I, GE-B3 (4) MATH 150 Calculus I, GE-B3 (4) 151 Calculus II (4) 151 Calculus II (4) MATH MATH 240 Linear Algebra (3) 240 Linear Algebra (3) MATH MATH 230 Logic, GE-A3, B3 (3) 230 Logic, GE-A3, B3 (3) MATH MATH Science: A 2 semester science sequence Science: A 2 semester science sequence and an additional and an additional science course (one lab section science course (one lab section required) in Physics, Biology, or required) in Physics, Biology, or Chemistry (11-12, G.E. B1 and B2) Chemistry (11-12, G.E. B1 and B2) **Upper Division Requirements Upper Division Requirements** 350 Introduction to Software COMP 350 Introduction to Software COMP Engineering (3) Engineering (3) 362 Operating Systems (3) COMP COMP 362 Operating Systems (3) COMP 447 Societal Issues in COMP 447 Societal Issues in Computing, Computing, GE-B4, D, UDID (3) GE-B4, D, UDID (3) 454 Automata, Languages and COMP COMP 454 Automata, Languages and Computation (3) Computation (3) 499 Senior Colloquium (1) COMP COMP 491 CAPSTONE PREPARATION (1) COMP 499 CAPSTONE PROJECT (3) MATH 300 Discrete Mathematics (3) 300 Discrete Mathematics (3) MATH MATH 352 Probability and Statistics 352 Probability and Statistics MATH (3) (3) MATH 354 Analysis of Algorithms (3) MATH 354 Analysis of Algorithms (3) MATH 448 Scientific Computing, GE-B3, MATH 448 Scientific Computing, GE-B3, B4, UDID (3) B4, UDID (3) Choose 3 units from the following: Choose 3 units from the following: COMP 420 Database Theory and Design COMP 420 Database Theory and Design (3) (3) COMP 464 Computer Graphics I (3) COMP 464 Computer Graphics I (3) Choose 12 Elective units from: CHOOSE 9 ELECTIVE UNITS FROM: COMP 337 Perspectives in Computer COMP 337 Perspectives in Computer Gaming Gaming (3, GE B, UD) (3, GE B, UD) COMP/ 345 Digital Image Processing COMP/ 345 Digital Image Processing (3) (3) PHYS PHYS COMP 421 Unix for Programmers (3) COMP 421 Unix for Programmers (3) COMP 422 Design of Compilers (3) 422 Design of Compilers (3) COMP COMP 424 Computer System Security COMP 424 Computer System Security (3) (3) COMP 425 Computer Game Programming COMP 425 Computer Game Programming (3) (3) COMP 429 Computer Networks (3) COMP 429 Computer Networks (3) 437 Foundations of Computer COMP COMP 437 Foundations of Computer Game Development (3, GE B, UD) Game Development (3, GE B, UD)

COMP/ 445 Image Analysis & Pattern COMP/ 445 Image Analysis & Pattern Recognition, Recognition, GE-B1, B4, UDID (3) MATH/PHYS GE-B1, B4, UDID (3) MATH/PHYS COMP/ 449 Human Computer Interaction, COMP/ 449 Human Computer Interaction, GE-B4, GE-B4, PSY E, UDID (3)PSY E, UDID (3) COMP/ 452 Computational COMP/ 452 Computational Bioinformatics (4) Bioinformatics (4) MATH MATH 462 Advanced Object Oriented COMP 462 Advanced Object Oriented COMP Programming (3) Programming (3) COMP 464 Computer Graphics I (3) COMP 464 Computer Graphics I (3) COMP 466 Computer Graphics II (3) 466 Computer Graphics II (3) COMP COMP 469 Artificial COMP 469 Artificial Intelligence/Neural Nets (3) Intelligence/Neural Nets (3) COMP 490 Topics in Computer Science COMP 490 Topics in Computer Science (3) (3) 492 Internship (1-3) 492 Internship (1-3) COMP COMP 494 Independent Research(1-3) 494 Independent Research(1-3) COMP COMP COMP 497 Directed Study (3) COMP 497 Directed Study (3) 499 Senior Colloquium (1) 482 Technical Writing (3) COMP ENGL 482 Technical Writing (3) ENGL MATH 429 Operations Research (3) 429 Operations Research (3) MATH **Upper Division Interdisciplinary Courses Upper Division Interdisciplinary Courses Required Supporting and other GE Courses Required Supporting and other GE Courses Emphasis or Option Requirements Emphasis or Option Requirements Additional Courses Additional Courses**

SUMMARY OF CHANGES

We are introducing a culminating experience for majors in the form of a two-semester sequence of courses: Capstone Preparation(1 unit) and Capstone Project (3 units). The Capstone Project replaces the Colloquium(1 unit) in the major. We are changing the number of electives required so that the size of the major is unchanged.

JUSTIFICATION

Many programs have a culminating experience that enables students to draw on ideas from the entire degree program. In many majors this takes the form of a capstone project. We currently do not have such an experience and wish to modify the major to include one.

Date

William J. Wolfe 10/20/06

Proposer of Program Modification

Approvals

 Program Chair
 Date

 Curriculum Committee Chair
 Date

Dean

Date

California State University Channel Islands Program Modification Consultation Sheet

1. Course Title:

2. Program Area: _____

Recommend Approval

Program Area/Unit	Program/Unit Chair	YES	NO	Date
			(attach objections)	
Art			objections)	
Biology				
Business &				
Economics				
Education				
English				
History				
Liberal Studies				
Mathematics & CS				
Multiple Programs				
Psychology				
Library				
LIDIALY				
Information				
Technology				