CALIFORNIA STATE UNIVERSITY CHANNEL ISLANDS COURSE MODIFICATION PROPOSAL

Courses must be submitted by October 15, 2010, to make the next catalog (2011-12) production

Date (Change date each time revised): 6/9/10; REV 9.20.10

PROGRAM AREA(S): COMPUTER SCIENCE

Directions: All of sections of this form must be completed for course modifications. Use YELLOWED areas to enter data. All documents are stand alone sources of course information.

1. Course Information.

[Follow accepted catalog format.] (Add additional prefixes i f cross-listed)

OLD			NEW		
Prefix COMP Course# 424 Units (3)	Title Compu	ter System Security	Prefix COMP Course# 424 Title Computer System Security Units (3)		
3 hours lecture per week			3 hours lecture per week		
hours blank per week			hours blank per week		
nours blank per week			nours stank per week		
X Prerequisites: Comp 350 and Comp 362			X Prerequisites: Comp 350 and Comp 362		
Consent of Instructor Required for Enrollment			Consent of Instructor Required for Enrollment		
Corequisites:			Corequisites:		
Catalog Description (Do not use any symbols): Security			Catalog Description (Do not use any symbols): Security		
techniques in operating systems, data bases, and computer			techniques in operating systems, data bases, and computer		
networks. Analysis of formal security models. Introduction to			networks. Analysis of formal security models. Introduction to		
cryptography, and public key security schemas.			cryptography, and public key security schemas.		
ory prographly, and paorie no	Graded		Graded		
General Education		Repeatable	General Education Repeatable for		
Categories	CR/NC	for up to units	Categories CR/NC up to units		
Lab Fee Requested	X A-F	Total	Lab Fee Requested X A - F Total		
		Completions	Completions		
Course Level:		Multiple	Course Level: Multiple		
X Undergraduate	Optional	Enrollment in	X Undergraduate Optional Enrollment in same		
Post-bac/Credential	(Student's	same semester	Post-bac/Credential (Student's semester		
Graduate	choice)		Graduate choice)		
	,				

2. Mode of Instruction (Hours per Unit are defaulted)

Hegis Code(s)_______(Provided by the Dean)

Existing Proposed CS No. Graded Graded Hours Benchmark Hours Benchmark (filled out Units Per Enrollment Units Per Enrollment by Dean) Unit Unit Lecture Lecture <u>1</u> <u>1</u> Seminar Seminar <u>1</u> <u>1</u> Lab <u>3</u> Lab <u>3</u> <u>2</u> Activity <u>2</u> Activity Field Studies Field Studies Indep Study Indep Study Other blank Other blank

3. Course Attributes:

General Education Categories: All courses with GE category notations (including deletions) must be submitted to the GE website: http://summit.csuci.edu/geapproval. Upon completion, the GE Committee will forward your documents to the Curriculum Committee for A (English Language, Communication, Critical Thinking) A-1 Oral Communication A-2 English Writing A-3 Critical Thinking B (Mathematics, Sciences & Technology) **B-1 Physical Sciences** B-2 Life Sciences – Biology B-3 Mathematics – Mathematics and Applications B-4 Computers and Information Technology C (Fine Arts, Literature, Languages & Cultures) C-1 Art C-2 Literature Courses C-3a Language C-3b Multicultural D (Social Perspectives) E (Human Psychological and Physiological Perspectives) **UDIGE/INTD Interdisciplinary Meets University Writing Requirement** Meets University Language Requirement American Institutions, Title V Section 40404: Government US Constitution Refer to website, Exec Order 405, for more information: http://senate.csuci.edu/comm/curriculum/resources.htm Service Learning Course (Approval from the Center for Community Engagement must be received before you can request this course attribute). **Justification and Requirements for the Course.** [Make a brief statement to justify the need for the course] The course is an elective course for Computer Science The course is an elective course for Computer Science majors. majors. Requirement for the Major/Minor Requirement for the Major/Minor Elective for the Major/Minor Elective for the Major/Minor Free Elective Free Elective Submit Program Modification if this course changes your program. 5. Student Learning Outcomes. (List in numerical order. You may wish to visit resource information at the following website: http://senate.csuci.edu/comm/curriculum/resources.htm) Upon completion of the course, the student will be able to: Upon completion of the course, the student will be able to: **OLD NEW** Discuss and design modern security protocols * Describe modern security protocols Assess vulnerabilities of a computer systems and * Design security protocols corresponding threats · Assess vulnerabilities of a computer systems and

- Explain impediments to security
- Assess the strength of a cryptographic system
- Organize and express ideas clearly and convincingly in oral and written forms.
- corresponding threats
- Explain impediments to security
- Assess the strength of a cryptographic system
- Synthesize and articulate ideas clearly and convincingly in oral and written forms.

6. Course Content in Outline Form. (Be as brief as possible, but use as much space as necessary)

NEW Introduction Introduction Encryption Encryption Viruses and Covert Channels Viruses and Covert Channels

Operating System Security Operating System Security

Data Base Security Networks and Distributed System Security	Data Base Security Networks and Distributed System Security
Does this course content overlap with a course offered in you If YES, what course(s) and provide a justification of the over	
Does this course content overlap a course offered in another If YES, what course(s) and provide a justification of the over	
Overlapping courses require Chairs' signatures.	
7. Cross-listed Courses (Please note each prefix in item No. 1) A. List cross-listed courses (Signature of Academic B. List each cross-listed prefix for the course: C. Program responsible for staffing:	Chair(s) of the other academic area(s) is required).
8. References. [Provide 3-5 references]	
OLD Schneier, Secrets and lies: digital security in a n	•
Pfleeger, Security in Computing, 2 Edition, Prentice-Hall (19)	nd
Kaufman, Perlman and Speciner, <i>Network security: private c</i> (2002) ISBN 0130460192	ommunication in a public worla, Prentice-Hall, 2 edition
NEW Schneier, Secrets and lies: digital security in a networked	d world, Wiley 2000 ISBN 0471253111
Pfleeger, Security in Computing, 2 nd Edition, Prentice-Hall (19	96) ISBN 0133374866
Kaufman, Perlman and Speciner, <i>Network security: pri</i> edition (2002) ISBN 0130460192	vate communication in a public world, Prentice-Hall, 2 nd
9. Tenure Track Faculty qualified to teach this course. Computer Science faculty	
10. Requested Effective Date or First Semester offered: Fall 201	1
11. New Resource Requested: Yes No X If YES, list the resources needed.	
A. Computer Needs (data processing, audio visual, broadcas	sting, other equipment, etc.)
B. Library Needs (streaming media, video hosting, database	es, exhibit space, etc.)
C. Facility/Space/Transportation Needs:	
D. Lab Fee Requested: Yes No (Refer to the D	ean's Office for additional processing)
12. Indicate Changes and Justification for Each. [Check all tha	t apply and follow with justification. Be as brief as possible but,
use as much space as necessary.]	
	ourse Content ourse Learning Objectives
Course number R	eferences
	EE Other
	eactivate Course
Catalog description	

Mode of Instruction

Justification: Student learning outcome refined for assessability.

13. Will this course modification alter any degree, creder If, YES attach a program update or program modification Priority deadline for New Minors and Programs: Octob Priority deadline for Course Proposals and Modification Last day to submit forms to be considered during the current.	on form for all programs affected. oer 4, 2010 of preceding year. as: October 15, 2010.	No X
Pater Smith	6/9/10	

Peter Smith

Proposer(s) of Course Modification
Type in name. Signatures will be collected after Curriculum approval.

Date

Approval Sheet

Course: COMP 424

If your course has a General Education Component or involves Center affiliation, the Center will also sign off during the approval process.

Multiple Chair fields are available for cross-listed courses.

Program Chair			
<u> </u>	Signature	Date	
Program Chair			
	Signature	Date	
Program Chair			
	Signature	Date	
General Education Chair			
	Signature	Date	
Center for Intl Affairs Director			
	Signature	Date	
Center for Integrative Studies Director			
	Signature	Date	
Center for Multicultural Engagement Director			
	Signature	Date	
Center for Civic Engagement and Service Learning Director			
and control forming billionic.	Signature	Date	
Curriculum Chair			
	Signature	Date	
Dean of Faculty			
<u> </u>	Signature	Date	