CALIFORNIA STATE UNIVERSITY CHANNEL ISLANDS

COURSE MODIFICATION PROPOSAL

Courses must be submitted by November 2, 2009, to make the next catalog (2010--2011) production

Date (Change date each time revised): 9/29/2009 REV 11.16.09

PROGRAM AREA(S): CHEMISTRY

Directions: All of sections of this form must be completed for course modifications. All documents are stand alone sources of course information.

1. Course Information.

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

Prefix CHEM Course# 499 Title CHEMISTRY CAPSTONE COLLOQUIUM Units (2) hours lecture per week 2 hours seminar per week x Prerequisites: CHEM 305, CHEM 371 and CHEM 492 or 494 (or concurrent enrollment) Consent of Instructor Required for Enrollment Corequisites: Catalog Description (Do not use any symbols): Oral and written presentation of work completed or work-in progress projects of CHEM 492 or 494 courses. Graded credit/no-credit.

~		Graded		_	
General Education		x CR/NC	Repeatable		
Cat	egories		for ι	ıp to	units
	Lab Fee Requested	A - F	Tota	ıl	
			Con	npletio	ons
Cou	ırse Level:			Mult	iple
	Undergraduate	Optional	tional Enrollment in		nt in
	Post-bac/Credential	(Student's	same semester		
	Graduate	choice)			

		NEW
Prefix CHEM Course#	<mark>499</mark>	Title
CHEMISTRY CAPSTON	E U	nits (<mark>2</mark>)
hours lecture per	wee	ek
2hours seminar per wee	ek	

x Prerequisites: CHEM 305, CHEM 371

Consent of Instructor Required for Enrollment Corequisites:

Catalog Description (Do not use any symbols):

Students in their final academic year learn to communicate scientific information to other scientists. Students present scientific information from work completed or work-in progress of their independent research (CHEM 494), internship (CHEM 492), or extensive literature research.

		Graded	
Gen	neral Education		Repeatable for
Cate	egories egories	CR/NC	up to units
	Lab Fee Requested	x A - F	Total
	-		Completions
Cou	ırse Level:		Multiple
XX	Undergraduate	Optional	Enrollment in same
	Post-bac/Credential	(Student's	semester
	Graduate	choice)	

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

Existing

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

Proposed

	Units	Hours Per Unit	Benchmark Enrollment	Graded		Units	Hours Per Unit	Benchmark Enrollment	Graded	CS No. (filled out by Dean)
Lecture		<u>1</u>			Lecture		<u>1</u>			
Seminar	<u>2</u>	<u>1</u>	<u>24</u>		Seminar	<u>2</u>	<u>1</u>	<u>24</u>	x.	
Lab		<u>3</u>			Lab		<u>3</u>			
Activity		<u>2</u>			Activity		<u>2</u>			
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 further processing.

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-4 Computers and Information Technology

C (Fine Arts, Literature, Languages & Cultures)

B-3 Mathematics – Mathematics and Applications

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 US History 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).

4. Justification and Requirements for the Course. [Make a brief statement to justify the need for the course]

OLD

This course is typically taken by students in the Chemistry major in their last semester of study. This course will be an upper-division requirement for students majoring in chemistry.

x Requirement for the Major/Minor Elective for the Major/Minor Free Elective NEW

This course is typically taken by students in the Chemistry major in their last semester of study. This course will be an upper-division requirement for students majoring in chemistry.

x Requirement for the Major/Minor Elective for the Major/Minor Free Elective

Submit Program Modification if this course changes your program.

5. Learning Objectives. (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:

OLD

Students who successfully complete this course will be able to:

Upon completion of the course, the student will be able to: **NEW**

Students who successfully complete this course will be able to:

- Evaluate a chemical problem and determine how molecular shape, electronic structure, thermodynamics, kinetics, and intermolecular interactions are involved in the behavior of the system.
- Present and discuss results of scientific work in a professional, well-organized and substantive way.
- Communicate chemical information to both a colloquial and specialized audience.
- Evaluate a chemical problem and determine how molecular shape, electronic structure, thermodynamics, kinetics, and intermolecular interactions are involved in the behavior of the system.
- Present and discuss results of scientific work in a professional, well-organized and substantive way.
- Communicate chemical information to both a colloquial and specialized audience.

- Demonstrate the ability to write to the scientific audience using the accepted conventions of the day.
- Evaluate and accurately reference background information from previous studies in the literature.
- Discuss and critique other students' scientific work in a constructive way.
- Interpret, discuss, and evaluate a primary literature article.

- Demonstrate the ability to write to the scientific audience using the accepted conventions of the day.
- Evaluate and accurately reference background information from previous studies in the literature.
- Discuss and critique other students' scientific work in a constructive way.
- Interpret, discuss, and evaluate a primary literature article.

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

Organizing and Writing a Paper
Outlining and organizing results
Structure and conventions
Poster Presentation
Quality Figures
Presenting a Poster
Peer and Faculty Review
Peer Review of papers
Rewriting of papers
Presentation

Oral Presentation of Work

Final Paper Finishing touches Final review

General Audience Presentation

Organizing and Writing a Paper
Outlining and organizing results
Structure and conventions
Poster Presentation
Quality Figures
Presenting a Poster
Peer and Faculty Review
Peer Review of papers
Rewriting of papers
Presentation

Oral Presentation of Work

Final Paper Finishing touches Final review

General Audience Presentation

Does this course content overlap with a course offered in your academic program? Yes If YES, what course(s) and provide a justification of the overlap.		No 2
Does this course content overlap a course offered in another academic area? Yes If YES, what course(s) and provide a justification of the overlap.	No x	

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 Chair(s) of the other academic area(s) is required).
 - B. List each cross-listed prefix for the course:
 - C. Program responsible for staffing:

8. References. [Provide 3-5 references]

OLD

Dodd, J.S. (ed.) The ACS Style Guide, American Chemical Society, 2nd Ed., 1997 Huth, E.J. Scientific Style and Format, Cambridge University Press, 6th Ed., 1994 Beall, H.; and Trimber, J. A Short Guide to Writing about Chemistry, Longman, 2nd Ed., 2000

NEW

Dodd, J.S. (ed.) The ACS Style Guide, American Chemical Society, 2nd Ed., 1997 Huth, E.J. Scientific Style and Format, Cambridge University Press, 6th Ed., 1994 Beall, H.; and Trimber, J. A Short Guide to Writing about Chemistry, Longman, 2nd Ed., 2000

9. Tenure Track Faculty qualified to teach this course.

Simone Aloisio, Blake Gillespie, Phil Hampton

10.	Requested Effective Date or First Semester offered: Spring 2011
11.	New Resource Requested: Yes No x If YES, list the resources needed.
	A. Computer Needs (data processing, audio visual, broadcasting, other equipment, etc.)
	B. Library Needs (streaming media, video hosting, databases, exhibit space, etc.) C. Facility/Space/Transportation Needs:
	D. Lab Fee Requested: Yes No (Refer to the Dean's Office for additional processing) E. Other.
12.	Indicate Changes and Justification for Each. [Check all that apply and follow with justification. Be as brief as possible but use as much space as necessary.] Course title Prefix/suffix Course number Units Staffing formula and enrollment limits X Prerequisites/Corequisites X Catalog description Mode of Instruction Mode of Instruction Mode of Instruction Course Content Course Learning Objectives References GE X Other Grading Reactivate Course
	Justification: We no longer require CHEM 492 or CHEM 494, although almost all of our students take these courses. The prerequisites and course description were re-written to reflect this. This course should also probably be graded with a letter grade as students submit varying degrees of work.
13.	Will this course modification alter any degree, credential, certificate, or minor in your program? Yes If, YES attach a program update or program modification form for all programs affected. Priority deadline for New Minors and Programs: October 5, 2009 of preceding year. Priority deadline for Course Proposals and Modifications: November 2, 2009. Last day to submit forms to be considered during the current academic year: April 15 th .
Sim	none Aloisio 9/29/2009
	poser(s) of Course Modification Date of in name. Signatures will be collected after Curriculum approval.

Approval Sheet

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			
	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			
	Signature	Date	
Curriculum Chair			
	Signature	Date	
Dean of Faculty			
	Signature	Date	