CALIFORNIA STATE UNIVERSITY CHANNEL ISLANDS

COURSE MODIFICATION PROPOSAL

Courses must be submitted by October 15, 2014, and finalized by the end of the fall semester to make the next catalog (2015-16) production

DATE (CHANGE DATE EACH TIME REVISED): 9/29/2014, 10.07.14, 10/14/14

PROGRAM AREA(S): CHEMISTRY COURSE NO: CHEM 499

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

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1. Indicate Changes and Justification for Each. *[Mark an X by all change areas that apply.*

- Course title
- Prefix/suffix
- Course number
- Units
- Staffing formula and enrollment limits
- Prerequisites/Corequisites
- Catalog description
- Mode of Instruction
- Course Content
- Course Learning Outcomes
- References
- GE
- x Other Grading
- Reactivate Course

Justification:

(Please provide justification(s) for each marked item above). *Be as brief as possible but use as much space as necessary.]:*

The chemistry department discussed changing this to a course to be graded as credit/no-credit.

2. Course Information.

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

OLD

Prefix CHEM Course# 499
Title CHEMISTRY CAPSTONE Units (2)
2 hours seminar per week
2 hours per week

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 comminicate 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. Professional development intended to help individuals transition from students to scientists.

General Education Categories:
Grading Scheme (Select one below):
x A – F
Credit/No Credit
Optional (Student's Choice)
Repeatable for up to units
Total Completions
Multiple Enrollment in Same Semester Y/N
Course Level:
x Undergraduate
Post-Baccalaureate
Graduate

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Total Completions
Multiple Enrollment in Same Semester Y/N
Course Level:
x Undergraduate
Post-Baccalaureate
Graduate

3. Mode of Instruction (Hours per Unit are determined by CSU Policy) **Hegis Code(s)**_____
(Provided by the Provost Office)

	Existing				Proposed				
	Units	Hours Per Unit	Default Section Size	Graded	Units	Hours Per Unit	Default Section Size	Graded	CS No. (filled out by Provost Office)
Lecture		1				1			
Seminar	2	1	24	x	2	1	24	x	
Lab		3				3			
Activity		2				2			
Field Studies									
Indep Study									
Other blank									
Online									

4. Course Attributes:

General Education Categories: All courses with GE category notations or changes (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.

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 (Graduation Writing Assessment Requirement)
Meets University Language Requirement

American Institutions, Title V Section 40404: Government US Constitution US History
Regarding 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).

Online Course (Answer YES if the course is ALWAYS delivered online).

5. 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

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Elective for the Major/Minor
Free Elective

Submit Program Modification if this course changes your program.

6. Student Learning Outcomes. (List in numerical order. Please refer to the Curriculum Committee's "Learning Outcomes" guideline for measurable outcomes that reflect elements of Bloom's Taxonomy: *http://senate.csuci.edu/comm/curriculum/resources.htm*. The committee recommends 4 to 8 student learning outcomes, unless governed by an external agency (e.g., Nursing).

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

OLD

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.

• 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.

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• 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.

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

OLD

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

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Outlining and organizing results
Structure and conventions
Poster Presentation
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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 **No** x
If YES, what course(s) and provide a justification of the overlap.

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

Overlapping courses require Chairs' signatures.

8. **Cross-listed Courses (Please note each prefix in item No. 1)** *Beyond three disciplines consult with the Curriculum Committee.*
   - **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: CHEM**

9. **References.** *[Provide 3-5 references. For references more than 10 years old, provide a one-sentence explanation of relevance.]*

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

Coughling, A.M. and Garson, L.R. The ACS Style Guide, American Chemical Society, 4th Ed., 2007
Robinson et, al. Write Like a Chemist, Oxford University Press, 1st Ed, 2008
Isever, C., Peach, K. Presenting Science, Oxford University Press, 1st Ed., 2010

10. **Tenure Track Faculty qualified to teach this course.**
ALOISIO, AWAD, GILLESPIE, HAMPTON

11. **Requested Effective Date or First Semester to be offered: Spring 2016**

12. **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** **(Lab fee requests should be directed to the Student Fee Committee)**
- **E. Other.**

13. **Will this course modification alter any degree, credential, certificate, or minor in your program? Yes** **No** x
If, YES attach a program update or program modification form for all programs affected.
Deadline for New Minors and Programs: October 1, 2014.
Deadline for Course Proposals and Modifications, and for Program Modifications: October 15, 2014.
Last day to submit forms to be considered during the current academic year: April 1, 2015.

Simone Aloisio — Sep 29, 2014

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

Approval Sheet

Course Prefix and number: CHEM 499

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.

The CI program review process includes a report from the respective department/program on its progress toward accessibility requirement compliance. By signing below, I acknowledge the importance of incorporating accessibility in course design.

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
AVP		
	Signature	Date