

CALIFORNIA STATE UNIVERSITY CHANNEL ISLANDS

COURSE MODIFICATION PROPOSAL

Courses must be submitted by October 15, 2012, and finalized by the end of the fall semester to make the next catalog (2013-14) production

DATE (CHANGE DATE EACH TIME REVISED): 7/2/2012; REV 11.7.12; REV 12.10.12

PROGRAM AREA(S): EDUCATION

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. Indicate Changes and Justification for Each. [Mark all change areas that apply and follow with justification. Be as brief as possible but, use as much space as necessary.]

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

Justification: This course was previously increased from 3 to 4 units to add literacy methods within the content methods course. With new California Core standards that specify literacy requirements for content areas, we have submitted a 2 unit stand-alone course for the literacy content (see EDSS 540). The literacy course will remove the need for the extra content in this methods course. However, we have kept two literacy objectives in this course so that the content area methods teachers can reinforce good literacy practices. Additionally, with the emergence of the Common Core National Standards in Mathematics, the curriculum and objectives of this class have been revised to be in line with the research based document that outlines mathematics teaching and learning in our country.

2. Course Information.

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

OLD	NEW
Prefix EDSS Course# 541	Prefix EDSS Course# 541
Title Teaching Mathematics in High Schools Units (4)	Title Teaching Mathematics in High Schools Units (3)
4 hours lecture per week	3 hours seminar per week
☐ hours blank per week	☐ hours blank per week
☒ Prerequisites: Admission to the Single Subject Credential Program	☒ Prerequisites: Admission to the Single Subject Credential Program
☐ Consent of Instructor Required for Enrollment	☐ Consent of Instructor Required for Enrollment
☒ Corequisites: EDSS 570, EDSS 580, EDSS 575, or EDSS 585	☒ Corequisites: EDSS 570, EDSS 580, EDSS 575, or EDSS 585
Catalog Description (Do not use any symbols): A study of content, methodology, materials and current research in teaching secondary mathematics courses including a focus on literacy. Focuses on the curricular framework of mathematics as appropriate for high school courses. Emphasizes reflective practice based on California teacher performance expectations and the use and alignment of curricula to the academic content standards for California public schools. Emphasizes teaching in multicultural, multilingual and inclusive classrooms.	Catalog Description (Do not use any symbols): A study of content, methodology, materials and current research in teaching secondary mathematics courses including a focus on literacy SKILLS IN MATHEMATICS. Focuses on the curricular framework of mathematics as appropriate for high school courses. Emphasizes reflective practice based on California teacher performance expectations and the use and alignment of curricula to the academic content MATH standards for California public schools, AND THE CALIFORNIA COMMON CORE STATE STANDARDS FOR MATHEMATICS. Emphasizes DEVELOPING THE STANDARDS FOR MATHEMATICAL PRACTICE FROM THE CA CCSS-M WHILE teaching in multicultural, multilingual and inclusive classrooms.
General Education Categories: ☐	General Education Categories: ☐
Grading Scheme (Select one below): ☒ A – F	Grading Scheme (Select one below): ☒ 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:
☐ Undergraduate
☒ Post-Baccalaureate
☐ Graduate

☐ Credit/No Credit
☐ Optional (Student's Choice)
 Repeatable for up to ☐ units
 Total Completions ☐
 Multiple Enrollment in Same Semester Y/N ☐
 Course Level:
☐ Undergraduate
☒ Post-Baccalaureate
☐ Graduate

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

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

Existing

Proposed

	Units	Hours Per Unit	Benchmark Enrollment	Graded		Units	Hours Per Unit	Benchmark Enrollment	Graded	CS No. (filled out by Dean)
Lecture	4	1	20	Y	Lecture		1			
Seminar		1			Seminar	3	1	20	Y	
Lab		3			Lab		3			
Activity		2			Activity		2			
Field Studies					Field Studies					
Indep Study					Indep Study					
Other blank					Other blank					
Online					Online					

4. 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-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 ☐ 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).

☐ 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 is a required course for students seeking a Single Subject Credential in Mathematics.

☐ Requirement for the Major/Minor

☐ Elective for the Major/Minor

☐ Free Elective

NEW

This is a required course for students seeking a Single Subject Credential in Mathematics.

☐ Requirement for the Major/Minor

☐ 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).

OLD

Through this course, students will be able to

- Identify important issues of modern secondary mathematics curriculum
- Align lessons and lesson plans to the California State Academic Content Standards
- Apply effective teaching techniques to the instruction of high school mathematics content
- Recognize and utilize effective problem-solving strategies in the high school mathematics curriculum and to integrate it into all content area topics
- Discuss pedagogy and demonstrate teaching methods for various student levels and a diverse student population in high schools

• Use modern technology and mathematics software in the classroom

• develop a variety of means of evaluating student needs and student learning.

*integrate effective literacy instruction techniques to increase access to / comprehension of reading materials

*integrate literacy instruction techniques to increase access to / comprehension of math vocabulary

* develop assignments to facilitate students' learning math content while also supporting their growth as readers and writers *develop methods for diagnosing students' literacy skills in math

*assess the appropriateness of reading materials for math students

NEW

Through this course, students will be able to

- Identify important issues of modern secondary mathematics curriculum

• Align lessons and lesson plans to the California State Academic Content Standards AND THE CALIFORNIA COMMON CORE STATE STANDARDS FOR MATHEMATICS, INCLUDING THE STANDARDS FOR MATHEMATICAL PRACTICE

• Apply effective teaching techniques to the instruction of high school mathematics content

• Recognize and utilize effective problem-solving strategies in the high school mathematics curriculum and to integrate it into all content area topics

• Discuss pedagogy and demonstrate teaching methods for various student levels and a diverse student population in high schools

• Use modern technology and mathematics software in the classroom

• develop a variety of means of evaluating student needs and student learning.

•integrate effective literacy instruction techniques to increase access to / comprehension of MATH reading materials

•integrate literacy instruction techniques to increase access to / comprehension of math vocabulary

•INTEGRATE EFFECTIVE TECHNIQUES FOR PROMOTING READING, WRITING, SPEAKING, AND LISTENING IN MATH CLASSES EVERY DAY

* develop assignments to facilitate students' learning math content while also supporting their growth as readers and writers

*develop methods for diagnosing students' literacy skills in math

*assess the appropriateness of reading materials for math students

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

OLD

NEW

History of Mathematics • Mathematics from a Multicultural Perspective • Teaching Mathematics to Diverse Learners • Assessment in Mathematics Education • Technology in the Secondary Mathematics Curriculum • Mathematics as Problem Solving • Teaching High School Mathematics Content
 *Literacy in Mathematics:
 -How Literacy Develops In The Learner
 -Assessment As A Key Tool, Both Diagnostic And Formative
 -Reading Mathematics: Strategies For Increasing Comprehension Of Text
 -Practical Techniques For Teaching Math Vocabulary
 *Textbook Analysis And Adaptation

History of Mathematics • Mathematics from a Multicultural Perspective • Teaching Mathematics to Diverse Learners • Assessment in Mathematics Education • Technology in the Secondary Mathematics Curriculum • Mathematics as Problem Solving • Teaching High School Mathematics Content
 *Literacy in Mathematics:
 -How Literacy Develops In The Learner
 -Assessment As A Key Tool, Both Diagnostic And Formative
 -Reading Mathematics: Strategies For Increasing Comprehension Of Math Texts
 -WRITING IN MATH CLASSES TO DEEPEN STUDENT UNDERSTANDING
 -Practical Techniques For Teaching Math Vocabulary
 *Textbook Analysis And Adaptation

Does this course content overlap with a course offered in your academic program? Yes ☐ No ☒
 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 ☒
 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)

- 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:

9. References. [Provide 3-5 references]

OLD

Reston, VA: NCTM. On reserve in the Science Library. National Council of Teachers of Mathematics Website: www.nctm.org
 Handbook of Research on Mathematics Teaching and Learning, NCTM, D. Grouws (Ed), Macmillan Publishing Co., (1992).
 Content area reading and learning : instructional strategies/Eds. Diane Lapp, James Flood, Nancy Farnan. Mahwah, N.J.: Lawrence Erlbaum, 2004.
 Content Area Reading: Literacy and Learning Across the Curriculum (8th Edition) by Richard T. Vacca, Jo Anne L. Vacca. Pearson Allyn & Bacon, 2005.

NEW

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 Handbook of Research on Mathematics Teaching and Learning, NCTM, D. Grouws (Ed), Macmillan Publishing Co., (1992).
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 Content Area Reading: Literacy and Learning Across the Curriculum (8th Edition) by Richard T. Vacca, Jo Anne L. Vacca. Pearson Allyn & Bacon, 2005.

10. Tenure Track Faculty qualified to teach this course.
Education Faculty

11. Requested Effective Date or First Semester offered: Spring 2013

12. New Resource Requested: Yes ☐ No ☒
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. ☐

13. Will this course modification alter any degree, credential, certificate, or minor in your program? Yes ☒ No ☐

If, YES attach a program update or program modification form for all programs affected.

Priority deadline for New Minors and Programs: **October 1, 2012** of preceding year.

Priority deadline for Course Proposals and Modifications: **October 15, 2012**.

Last day to submit forms to be considered during the current academic year: **April 15th**.

Mary Adler & Jeanne Grier

7/2/2012

Proposer(s) of Course Modification

Date

Type in name. Signatures will be collected after Curriculum approval.

Approval Sheet

Course: EDSS 541

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		
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Signature

Date

Program Chair		
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Signature

Date

Program Chair		
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Signature

Date

General Education Chair		
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Signature

Date

Center for Intl Affairs Director		
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Signature

Date

Center for Integrative Studies Director		
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Signature

Date

Center for Multicultural Engagement Director		
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Signature

Date

Center for Civic Engagement and Service Learning Director		
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Signature

Date

Curriculum Chair		
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Signature

Date

AVP		
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Signature

Date