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): OCTOBER 3, 2012; REV 11.7.12

PROGRAM AREA(S) : EDUCATION—SINGLE SUBJECT CREDENTIAL PROGRAM

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

Justification: The Common Core National Standards is the driving influence behind the revision of this document and its curricular content and objectives. This new set of documents provides a research based framework for teaching mathematics in K-12 schools that will be the driving force behind mathematical learning in the country.

2. Course Information.

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

OLD

Prefix EDSS Course# 531
Title Teaching Mathematics in Middle Schools Units (3)
3 hours lecture per week
hours blank per week

x Prerequisites: Admission into the Single Subject Credential Program
Consent of Instructor Required for Enrollment
x 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 middle school mathematics. Focuses on the state curricular mathematics frameworks appropriate for middle school classrooms. 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. Includes an emphasis on teaching in multicultural, multilingual and inclusive classrooms.

General Education Categories:
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

NEW

Prefix EDSS Course# 531
Title Teaching Mathematics in Middle Schools Units (3)
3 hours lecture per week
hours blank per week

x Prerequisites: Admission into the Single Subject Credential Program
Consent of Instructor Required for Enrollment
x 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 middle school mathematics. Focuses on the state curricular mathematics frameworks appropriate for middle school classrooms. 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 and the Common Core State Standards for Mathematics. Includes an emphasis on teaching in multicultural, multilingual and inclusive classrooms.

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:
Undergraduate

Post-Baccalaureate	x Post-Baccalaureate
Graduate	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	**3**	**1**	**20**	X		Lecture	**3**	**1**	**20**	y	
Seminar		**1**				Seminar		**1**			
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.

x 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).

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

OLD
Through this course, students will be able to
- Identify important issues of modern middle school mathematics curriculum
- Align lessons and lesson plans to the California State Academic Content Standards
- Apply effective teaching techniques to the instruction of pre-algebra, algebra and pre-calculus
- Recognize and utilize effective problem solving approaches to teaching algebra
- Discuss pedagogy and demonstrate teaching methods for various student levels and a diverse student population in middle schools
- Use modern technology and mathematics software in the classroom
- Develop a variety of means of evaluating student needs and student learning.

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

NEW
Through this course, students will be able to:
- Identify important issues of modern middle school mathematics curriculum
- Align lessons and lesson plans to the California State Academic Content Standards and the Common Core State Standards for Mathematics
- Apply effective teaching techniques to the instruction of Pre-algebra and Algebra
- Recognize and utilize effective problem solving approaches to teaching algebra
- Discuss pedagogy and demonstrate teaching methods for various student levels and a diverse student population in middle schools
- Use modern technology and mathematics software in the classroom
- Develop a variety of means of evaluating student needs and student learning.

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

OLD
Data Analysis & Statistics
Communicating mathematically, Balanced Assessment, Rubric scoring & Portfolios
Dev. Early Number Sense: Problem Types
Facts & Foundational Skills & Strategies
Fractions
Connections between Fractions, Decimals & Percents; Developing Concepts of Ratio & Proportion
Geometry
Measurement
Technology Tools for Deepening Understanding
Literacy in Mathematics; ELD Strategies – Access for All
Algebraic Reasoning
Pattern & Function Connections – Linear & Non-linear Functions

NEW
- California Mathematics Framework and Common Core State Standards for Mathematics
- Developing the Standards of Mathematical Practice
- Balanced Assessment, Rubric scoring & Portfolios
- How Children Learn Mathematics - Developing Number Sense
- Modes of Instruction: Constructivism, Problem-solving, Use of mathematical tools and models , Grouping Strategies
- Designing a Balanced Program – Adopted Materials
- Digital Tools for Developing and Deepening Understanding
- Literacy in Mathematics: Reading, Writing and Speaking the Language of Mathematics
- Access for All: ELD Strategies, Strategies for

Integers
Exponents & Exponential Functions
Probability

intervention, Students with Special Needs, Advanced Learners

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)

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

NEW

Common Core State Standards for Mathematics. http://www.cde.ca.gov/ci/cc

Garrison, L, Amaral, O., and Ponce, G. "UnLATCHing Mathematics Instruction for English Learners". *NCSM Journal.* Spring 2006.

Goldenberg, E. "Thinking (And Talking) About Technology in Math Classrooms". *Issues in Mathematics Education.* Education Development Center, Inc., 2000.

Peck, J. *Improving Adolescent Mathematics: Findings From Research.* Northwest Regional Educational Laboratory, 2005.

Smith, M. and Stein M. *5 Practices for Orchestrating Productive Mathematical Discussions.* Reston, VA: National Council of Teachers of Mathematics, 2011.

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

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

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** **(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** x
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.

Jeanne M. Grier — 10/3/2012

Proposer(s) of Course Modification — Date

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

Approval Sheet

Course:

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