

# SENIOR SEMINAR: SECONDARY MATHEMATICS

MATH 499E | WINTER QUARTER 2017

## **INSTRUCTOR:**

Dr. Mark Oursland  
Office: Science 2 301D

Phone Number: (509) 963-2100  
Email address: Oursland@cwu.edu

## **COURSE DESCRIPTION:**

In this course mathematics teaching candidates learn and improve their ability to teach mathematics and conduct themselves as a professional educator. The candidates and instructor have self, cooperating teacher, and supervising teacher evaluations for personal conduct, professionalism, and teaching ability and practice edTPA scores from the previous quarter. The candidate and instructor will use this information to discuss an individual professional growth plan for the quarter. Candidates will research and discuss teaching issue related to classroom management, equity, academic language, student voice, CCSS-Math based assessment, and technology. Candidates will also design and teach learning progressions aligned with the CCSS-Math.

## **COURSE RATIONALE:**

The structure of this course will be similar to a mathematics teacher professional development course. Each candidate will have a field experience placement where they are expected to work with a cooperating teacher for at least 30 hours. The teacher candidates will also be expected to do individual research and creations related to their own teaching situation. They will share with their peers their ideas and creations both in class and outside of class using technology and small peer work groups. This course will give teaching candidates both theory and practical classroom expertise in designing curriculum that is aligned and assess with the CCSS-Math. This course is the capstone course for the Teaching Secondary Mathematics at CWU and is aligned with State Endorsement, CTL, and state WAC 18A-270 standards.

## **COURSE GOALS:**

- Teacher candidates will plan and use a standards-based assessment system to analyze student work, make inference on what students know and can do, and evaluate what feedback and further instruction student need to meet the learning targets.
- Teacher candidates will plan and use multiple formative and summative strategies to systematically analyze, make inferences, and evaluate instructional practices to guide further instruction and suggest changes to improve teaching effectiveness.
- Teachers will be able to plan and teach a learning segment aligned to the CCSSM that uses knowledge of student's needs and interests.
- Teacher candidates will read and discuss math teaching research and conduct their own research to address math education issues. After reflecting and discussing principles from this research the candidates will apply these principles to their own teaching and assess its impact on student learning.
- Complete a complete practice edTPA.

## **COURSE RESOURCES:**

### **Canvas**

- Canvas account with enrollment in MATH 499E. You can login to Canvas with the same username and your password as your Novell/Safari account.

### **Software and Hardware**

- Livetext account and created Teaching Secondary Mathematics Portfolio.
- Documents in this course will be presented in .pdf. You will need Adobe Reader which you can obtain for free at <http://get.adobe.com/reader/>. Written assignments may be presented as a Microsoft Word document (.doc). If you do not have Microsoft Word, you can use Open Office Writer (free at <http://www.openoffice.org/>)

**COURSE OBJECTIVES:**

By the end of the course, teacher candidates will be able to:

<b>Outcomes</b>	<b>Assessment</b>
construct, implement, and assess a curriculum that is coherent and aligned with CCSS-Math.	(a) Learning progressions and lessons aligned with CCSS-Math (Livetext Portfolio). (b) WA TPA Assessment Component - Rubric 1-15 of WA TPA-SM (Livetext Portfolio)
make appropriate instructional choices from a broad spectrum of techniques in order to maximize the student learning.	(a) self, cooperating teacher, and supervising teacher evaluation of candidates lesson design and instruction (Livetext Portfolio). (b) WA TPA Assessment Component - Rubric 2 and 3 of WA TPA-SM (Livetext Portfolio)
plan and implement instruction based on learning characteristics and the context of the school and community.	(a) self, cooperating teacher, and supervising teacher evaluation of candidates lesson design and instruction (Livetext Portfolio). (b) WA TPA Assessment Component - Rubric 2, 3, and 6 of WA TPA-SM (Livetext Portfolio)
understand teaching as a profession and conduct themselves appropriately.	(a) self, cooperating teacher, and supervising teacher evaluation of candidates lesson design and instruction (Livetext Portfolio). (b) individual growth plan and assessment for the field experience teaching (Livetext Portfolio)
investigate, synthesize, and apply information regarding current issues in educational practice	(a) Reflection on the implementation and assessment of application of research and best practices principles in teaching math (Livetext Portfolio). (b) individual growth plan and assessment for the field experience teaching (Livetext Portfolio)

**ASSIGNMENTS AND EVALUATION GUIDELINES:**

The instructional and assessment strategies for this course are designed to enable your achievement of the course performance outcomes. The instructors will give you feedback to support progress in meeting performance outcomes.

<b>Assignment</b>	<b>Points</b>
Research Reading and Reflections (discussions/assignments)	78
CCSS Math Learning Progressions (learning progression, lesson plans, tests, worksheets, etc) 50 points each	120
Professionalism (must attend classroom and field experience sessions)	10
Professional Growth Plan (research, documentation, reflection, and evaluation)	30
Teaching Evaluation (self, peer, and instructor)	30
Practice edTPA	95
MATH 499E and Math Content portion of Teaching Mathematics Portfolio (Livetext)	110
<b>Total Points</b>	<b>473</b>

Candidates will be assigned tutoring/teaching positions after the first week. Candidates can expect to participate in the classroom with a cooperating teacher for 30 hours.

**Grading Scale**

80-100% = A, 75-80% = A-, 75-70% = B+, 70-65% = B, 65-60% = B-, 60-55% = C+, 55-50% = C, 50-45% = C-, 45-40% = D+, 40-35% = D, 35-30% = D-, 30-0% = F Please see the CWU Catalog for the eligibility requirements for an incomplete (I).

**Performance Expectations**

All of the assignments and directions can be found on Canvas. If a course deadline was missed, assessment alternatives are left up to the discretion of the instructors.

**COURSE POLICIES:****Instructor Feedback/Communication**

I will be reading the Discussion Boards and replying to messages occasionally. You will receive specific feedback on your Syllabus Draft and your Course Syllabus in the form of electronic comments appended to your electronic submission. I will use the Announcements tool in Blackboard to communicate changes to the course and other course information.

**Suggestions for Success**

Take the responsibility for your own achievement of these performance objectives. You can get individual help by e-mail or in person in my office. If at any time you have trouble-using Blackboard or do not understand an assignment make sure to contact the instructor. Use the activities, assignments, assessments and people such as the instructor to insure that you understand the mathematical teaching concepts and can demonstrated this understanding in the form of the performance objectives.

**Student Feedback/Communication**

I welcome all feedback on the course. My preferred method of communication with individual students is via email. I am also available for office hours . If you experience a legitimate emergency (according to my standards) that will prevent you from completing required coursework on time, I expect you to communicate with me at the earliest reasonable opportunity. Please state the nature of the emergency, and when you expect to turn in the coursework.

**Submitting Electronic Files**

All electronic files must be submitted in .doc or .pdf format. If you do not have Microsoft Word, you can download Open Office Writer for free at <http://www.openoffice.org/>. This will allow you to open the instruction files, make changes and save in .doc or .pdf.

**Late and Uncompleted Work**

- If extenuating circumstances exist, contact instructor.
- All course assignments must be completed to pass the course.

**UNIVERSITY POLICIES:****Academic Integrity**

Academic Integrity is a standard set for this course. Students are expected to complete all of their coursework and assignments using their original words and ideas and will properly cite the words and ideas of others. Students are also expected to be honest in their interactions with the instructor. A student found to have not upheld these expectations is subject to failing this course and shall be subject to disciplinary action or sanction. The University catalog defines the term "academic dishonesty" in all its forms including, but not limited to:

- cheating on tests;
- copying from another student's test paper;
- using materials during a test not authorized by the person giving the test;
- collaboration with any other person during a test without authority;
- knowingly obtaining, using, buying, selling, transporting, or soliciting in whole or in part the contents of an unadministered test or information about an unadministered test;
- bribing any other person to obtain an unadministered test or information about an unadministered test; substitution for another student or permitting any other person to substitute for oneself to take a test;
- "plagiarism" which shall mean the appropriation of any other person's work and the unacknowledged incorporation of that work in one's own work offered for credit;
- "collusion" which shall mean the unauthorized collaboration with any other person in preparing work offered for credit.

Documented incidences of Academic Dishonesty will be referred to Office of the Vice President of Student Affairs.

**Special Needs**

If you have a disability that may prevent you from meeting course requirements, contact the instructor immediately to file a Student Disability Statement and to develop an Accommodation Plan. Course requirements will not be waived but reasonable accommodations will be developed to help you meet the requirements. You are expected to work with the instructor and the CWU Disability Support Specialist to develop and implement a reasonable Accommodation Plan. For contact information at Center for Disability Services (CDS) please visit <http://www.cwu.edu/~dss/cms/>.