

INSTRUCTIONAL PRACTICES FOR TEACHING MATHEMATICS

MATH 325 | FALL QUARTER 2017

INSTRUCTOR:

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COURSE DESCRIPTION AND RATIONALE:

Prospective teachers will learn and use the methods and materials needed to teach secondary school students mathematics with emphasis on use of mathematical modeling and technology and positively participate in a professional learning community of mathematics educators. The rubrics for these pedagogy activities are aligned with the Washington State TPA for secondary mathematics, National Educational Technology Standards (NETS), and EFC 416 livetext assessments. This course can be used as substitution for EFC 416 for students who are in the Teaching Secondary Mathematics Program.

To meet the expectations of national stakeholders, pre-service candidates must develop knowledge, skills, and dispositions that enable the best K-12 teaching and learning possible. Since many teachers will teach as they were taught, it is crucial that pre-service training include both elements. In particular, effective learning will take place when student(s) (a) preconceptions are engaged, (b) they do activities consistent with professionals in the field, and (c) they are aware of how (and what) they learn. Therefore, the training of future mathematics educators will emphasize these elements in a field-based teaching context.

COURSE GOALS:

- Teacher candidates will complete and submit a Learning Segment that meets all the requirements of the TPA for secondary mathematics on Livetext. CWU math faculty trained in TPA assessment protocol will evaluate the Learning Segment as a benchmark assessment of their teaching preparation.
- Teacher candidates will identify and adapt the curriculum and teaching methods to meet the needs of students in a diverse society.
- Teacher candidates will discuss and demonstrate their ability to positively participate in the profession of mathematics teachers.
- Teacher candidates will appropriately and effectively use technology as a productivity tool and to teach their students mathematics (NETS) that is aligned to the CCSS Math.

COURSE RESOURCES:

- Canvas account with enrollment in MATH 325
- LiveText account
- Handouts provided by the instructors
- CCSS Math – internet access
- Video camera (can be checked out)
- Field Experience Placement made by Dr. Oursland
- Finger Print clearance
- Liability Insurance

ASSIGNMENTS AND EVALUATION GUIDELINES:

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

Assignment	Points
Field Teaching Blog and Time Log	30
Planning for formative assessment process	45
Building Digital Learning Environment	95
Using Technology to Teach Math	55
Professional Development Plan	30
Field Observations (self, peer, instructor) completed and attached on Livetext Portfolio	30
Practice edTPA formatively assessed	95
Designing Illustrative Mathematics Assessment Item	40
Livetext Portfolio	135
Total Points	555

Candidates will be assigned tutoring/teaching positions after the first week. Candidates can expect to observe at the beginning, then support instruction of the cooperating teacher, and finally teach of at least one lessons. Expect to spend at least 20 hours working in 6 – 12 classrooms and at least 10 math service hours for a total of 30 math teaching hours. Because of the field experience the classroom time has been reduced by 10 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 in the Assignments menu of Canvas. All outcomes for the class will be assessed formatively and summatively (Livetext) and your mastery progress for each outcome can be monitored in Canvas.

COURSE POLICIES:**Instructor Feedback/Communication**

The instructor will read and reply to all e-mails promptly. You will receive specific feedback in the form of electronic comments appended to your electronic submission. I will use the Announcements tool in CANVAS 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:**AMERICANS WITH DISABILITIES ACT (ADA).**

Students with disabilities who require academic adjustments in this class should have documentation of their "Confirmation of Eligibility for Academic Adjustments" from the Disability Support Services Office. Students with disabilities without this form should contact the Disability Support Services Office, Bouillon 205 or dssreceipt@cwu.edu or 963-2171 immediately. This should be provided to the instructor as soon as possible so we can meet to discuss how the approved adjustments will be implemented in this class.

ACADEMIC HONESTY

Academic dishonesty is defined in the CWU Student Conduct Code (11.B). If academic dishonesty is confirmed, the instructor may issue a failing grade for the specific assignment and/or for the course. Withdrawing from a course does not excuse academic dishonesty. In circumstances when academic dishonesty is confirmed, a W can be replaced by a letter grade.

Collaboration is encouraged for developing your knowledge and skill, BUT

- The final product must be your original work. Your thoughts are considered original if you connect your interpretation of the reading with your personal experience and values, and you openly acknowledge where you got information.
- Sometimes it is inappropriate to consult others at all. For instance, the two written examinations are structured as take-home exercises requiring a professional integrity to work independently.

ACADEMIC MATURITY

In this class we emphasize a disposition toward working independently because teachers function autonomously without the frequent feedback students enjoy. In this course, you are expected to read the written word carefully for its intended meaning and purpose. Unfortunately, many students are accustomed to a much more passive role. Worse, some students cannot make a decision without the personal attention of the instructor. Strategies for being independent will be shared in this class and your sincere effort to develop independence will be readily observed. If you have difficulty reading, you must take the initiative to seek help but in a timely manner, that is, well in advance of any target dates.

Calendar

The calendar with all dates class will meet, major due dates for assessments can be found in CANVAS.