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#### COURSE DESCRIPTION AND RATIONALE:

To meet the expectations for mathematics teachers, a shift in content, instructional and assessment practices is crucial. The *Curriculum and Evaluation Standards for School Mathematics* (NCTM, 2000) outlines the specific changes needed in pre-service mathematics education. “The experiences that mathematics teachers have while learning mathematics have a powerful impact on the education they provide their students.” (NCTM) To become an effective mathematics teacher, you must learn a variety of teaching strategies including discovery, experiments, cooperative learning, and technology, in addition to direct instruction. Therefore, you as students need to experience mathematics instruction in a way that will influence you positively as a teacher. This course employs the constructivist model of learning in which you will, with your interactions with your physical and social environments, individually construct and socially co-construct knowledge.

PREREQUISITES: Admission to the middle-level mathematics major Teacher Certification program and current WSP/FBI fingerprint clearance.

REQUIRED MATERIALS: *Teaching Student-Centered Mathematics, Grades 6-8, Volume 3, Second Edition*, Vandewalle; Handouts from the instructor; access to Canvas & Washington State Academic Learning Requirements (<http://www.k12.wa.us/CurriculumInstruct/default.aspx>)

#### LEARNER OUTCOMES AND ASSESSMENT STRATEGIES:

OUTCOMES	ASSESSMENT/ARTIFACT
Explain effective mathematics teaching and how students learn mathematics.	Lesson plans, learning progression, practice planning commentary for edTPA, field experience, class activities
Develop effective lessons to instruct and engage students in learning aligned to the CCSS mathematics standards	Lesson plans, learning progression, practice planning commentary for edTPA, field experience, class activities, Desmos presentation
Identify the language demands required by the mathematics lessons you plan. Plan to teach both language function and vocabulary in a manner that develops mathematical understanding	Lesson plans, learning progression, practice planning commentary for edTPA, field experience, class activities
Develop a unit plan that uses multiple instructional methods aligned to the CCSS Mathematics Standards	Lesson plans, learning progression, practice planning commentary for edTPA, field experience, class activities, Desmos presentation
Demonstrate knowledge of Common Core mathematics standards and Washington State mathematics standards.	Lesson plans, learning progression, practice planning commentary for edTPA, field experience, class activities

ASSESSMENT AND EVALUATION GUIDELINES:

The course's instructional and assessment strategies are designed to inform the students of their progress in achieving the performance outcomes. The electronic portfolio, journals, lesson plans, teaching experiences, and reflection on teaching experiences give multiple assessments of achievement in meeting the performance outcomes.

ASSIGNMENT	POINTS
Field Experience: weekly blog entries/reflections (10 of these)	50
One-pagers (3 of these)	60
Professional Growth Plan	25
Professionalism	25
Quizzes (6 of these)	60
Writing Workshops (4 of these)	20
edTPA Context for Learning: Draft	5
edTPA Context for Learning: Final	10
edTPA Planning Commentary: Draft	5
edTPA Planning Commentary: Final	30
Lesson Plan: Draft (3 of these)	15
Lesson Plans: Final (3 of these)	75
Desmos Presentation	20
Misc. Assignments (TBA)	0-30
Total Points:	400-430

**Field Experience Blog:** You will set up a blog and link it to Canvas. Each week, you will be given a topic to discuss in your blog entry based on your classroom activities and readings and your observations in the classroom. We will be using Weebly to host the blog, which is a publicly available tool that is outside of the CWU system. You need to be careful about maintaining confidentiality of your school, your cooperating teacher, and your students. You are encouraged to use a pseudonym yourself for the blog.

**One-pagers:** You will create three documents that focus on teaching to the Common Core Standards of Mathematical Practice, Number and Operation at grades 6-8, and Ratio and Proportional Reasoning in Grades 6-8.

**Professional Growth Plan:** You will create a professional development plan to set goals for yourself and analyze your progress against prior and current goals.

**Professionalism:** Students in the teacher preparation programs have one foot in the world of students and the other foot in the world of professional teachers. Professionalism includes your behavior in your field placement as well as your behavior within the CWU classroom relating to time management, responsibility, attention to detail, engagement, attendance, and treating fellow students and the professor with respect.

**Quizzes:** There will be 6 quizzes based on the readings in the textbook. These 10-point quizzes are multiple choice and will be announced in advance.

**Writing Workshops:** Teaching is a collaborative profession. We will devote quite a bit of in-class time to collaborating on the large assignments of the course: the Learning Progression, Lesson Plans, and Planning Commentary. The goal of the workshops is to strengthen everyone's ability to write the required documents for the course and for the edTPA. You are expected to have a rough draft ready to share and to analyze and critique your colleagues' work during these workshops.

**edTPA Context for Learning, Draft & Final:** You are expected to submit a quality first attempt at the Context for Learning document, on time. I will provide feedback which you will use to revise your draft to the final Context for Learning document.

**edTPA Planning Commentary, Draft & Final:** You are expected to submit a quality first attempt at the edTPA Planning Commentary document, on time. I will provide feedback which you will use to revise your draft to the final Planning Commentary document.

**Lesson Plans, Draft & Final:** You will write & revise three Lesson Plans that comprise your edTPA learning segment. These consecutive lesson plans must include a conceptual lesson, a procedural lesson and a problem-solving lesson, that are based around the same Common Core Standard(s). You are expected to submit quality first attempts at the Lesson Plans, using the official mathematics department lesson plan format. I will provide feedback which you will use to revise your draft for the final Lesson Plans.

**Desmos Presentation:** You will create a Desmos activity that aligns with your lesson plans and present this activity to the class at the end of the quarter.

**Misc. Assignments:** There may (or may not) be other small assignments that arise during the quarter. If so, they will fall into this category.

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#### PROFESSIONALISM:

Remember you will be working with students at area schools. As a teaching professional you must be dressed professionally, be on time, and be well prepared. It is very important to be at your school at least 10 minutes before your scheduled class (remember you must check in at the office when entering the school). Your professionalism will be assessed by your university instructors and classroom teachers, as appropriate. Remember that your behavior is a reflection on Central Washington University. All of us in the education field depend upon area schools and teachers for support. Please make positive contributions so we can maintain a great relationship with area schools and teachers. For more information, refer to the handout with subject "Student Observations in the Field" and to guideline sheets (if any) given by your school. When you finish your field experience, write a thank-you card/note to your cooperating teacher and the school principal. Building bridges and strengthening networks in the field of education is important to your future.

Professionalism also includes your attendance in the course, participation in discussion and activities, and engagement with your classmates. You are expected to attend class prepared, alert and attentive.

#### SUGGESTIONS FOR SUCCESS:

Take the responsibility for your own achievement of these performance objectives. If at any time you have trouble using Canvas or another online platform, or do not understand the directions to a task, make sure to contact the professor. Use the activities, assignments, assessments and people in the class (both the professor and fellow students) to ensure that you master the performance objectives of the course. Be organized and complete all assignments early. Prepare a schedule for yourself for completing the course requirements. The requirements for this class demand hard work, critical thinking, and efficient use of your time.

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#### SCHEDULE:

The class calendar is subject to change, but will be our tentative guideline for the course. If you miss a class, it is **your responsibility** to find out what was covered, announced, or assigned. In case of emergencies, it is **your responsibility** to contact the professor as soon as possible. Recall also that attendance at writing workshop sessions and the final Desmos presentation is part of your grade in this course. If a course deadline is missed, assessment alternatives are left up to the discretion of the instructor.

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#### DISABILITY SERVICES:

Students with disabilities wishing to use academic adjustments in their CWU classes must be registered with Disability Services (DS). Information about the DS intake process may be obtained by emailing cds@cwu.edu or calling (509) 963-2171. Qualified students with disabilities may establish academic adjustments in this class by either sending me their official on-line accommodation request or speaking with me to establish the manner in which requested adjustments will be delivered.

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#### HONOR, RESPECT, AND ACADEMIC HONESTY:

Each of us should consider our placement at this institution to be a privilege. We need to have respect for one another, and for ourselves. In light of these facts, cheating in any form will not be tolerated. You are encouraged to discuss the concepts and topics in this course when writing your papers, however, your writing should reflect your own ideas and synthesis of the course material. The word “plagiarize” is defined by Merriam-Webster as “to steal and pass off (the ideas or words of another) as one’s own: use (another’s production) without crediting the source.” This is a very serious offense, and jeopardizes your position at the University.

*I reserve the right to make changes to this document as the quarter progresses. Students will be notified of any changes in writing.*