

**DEPARTMENT OF MATHEMATICS
COLLEGE OF SCIENCES
CENTRAL WASHINGTON UNIVERSITY
COURSE SYLLABUS SPRING 2017**

1.	MATH 486			
	<u>Course Number</u>	<u>TIME/DAY</u>	<u>BLDG/ ROOM</u>	<u>INSTRUCTOR</u>
	34600	9:00 – 9:50 MTH	Hertz 120	Dr. Janet Shiver

2. **Office Hours and Phone Numbers:**

Office: Bouillon 115

Phone: 963-2834

Email: shiverj@cwu.edu

Office hours: 11:00 – 12:00 MTHF and 8:00 – 9:00 W

3. **Course Description:** Middle level teacher candidates will use research-based practices aligned with the Common Core State Standards in mathematics to plan and implement conceptual, procedural and application lesson plans. This course will expose students to ideas regarding the teaching of mathematics for understanding and assessment.

4. **Important Prerequisites:**

- **Admission to and continuation in the *Middle Level Math Program* requires that you purchase LiveText. You must present “proof of purchase” to the Certification Office, Black 228.**
- **You must have your background check, insurance and fingerprinting done before you can work in classrooms! You MUST work in a classroom this quarter. If you have done this in the past, check that your materials are current/not expired.**
- **You are required to spend time in classrooms outside of the meeting time of the class. Please be prepared to organize your schedule accordingly. Schools we will work at meet between 7:30 am and 4 pm. This is mandatory. Failure to complete the practicum portion of this course will result in an F and you will have to repeat the class.**

Failure to meet any of these important prerequisites will cause you to be withdrawn from the course with either a grade of W or F depending on the circumstances.

5. **Prerequisites:** Prerequisites: admission to the middle-level math major Teacher Certification Program, current WSP/FBI fingerprint clearance and completion of the majority of your mathematics courses.

6. **Course 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. 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.
7. **Course Materials:**
- 1) *Teaching Student-Centered Mathematics, Grades 6 – 8, Volume 3, Second Edition.* Van de Walle.
 - 2) 3–ring binder (1.5 to 2 inches) – bring to every class meeting. It should contain handouts we will be referring to, for example the edTPA Handbook with tabs to separate sections.
 - 3) Create a student Canvas account so that you may access information for this course.
 - 4) Purchase a LiveText account for creating your Middle Level Math Portfolio. (<http://livetext.com>)
 - 5) Print out and place the Common Core Standards for mathematics for 6th, 7th and 8th grade at <http://www.corestandards.org/math>. For this course you need the probability and Statistics and the algebra and function standards.
 - 6) Supplies – a graphing calculator, paper, graph paper, binder, some dividers, paper portfolios (folders) for turning in course assignments
8. **Learner Outcomes and Assessment Strategies:** You will demonstrate your ability to perform the following outcomes through the assigned assessments. You will:

Outcomes	Assessment/Artifact	Standards
Explain what effective mathematics teaching is and how students learn mathematics.	lesson plans, mini lessons, practice edTPA, field experience, class discussions, portfolio	CTL 1
Plan for instruction. Demonstrate this by describing your plans for the learning segment and by explaining how your instruction is appropriate for the students you are teaching.	lesson plans, practice edTPA, field experience, class activities, mini lessons	CTL 1 WAC V
Develop effective lessons to instruct and engage students in learning aligned to the CCSS Mathematics Standards. Demonstrate this by reflecting on your	lesson plans, learning progression, practice edTPA, field experience, class	CTL 1 WAC V

instruction and by the assessments made by their field supervisor.	activities, portfolio	
Identify the language demands required by the mathematics lessons you plan. Directly teach both language function and vocabulary in a manner that develops mathematical understanding.	lesson plans, practice edTPA, field experience, class activities, portfolio	CTL 1 WAC V
Develop a unit plan that uses multiple instructional methods aligned to the CCSS Mathematics Standards.	lesson plans, practice edTPA, field experience, class activities, portfolio	CTL 1 WAC V
Demonstrate knowledge of Common Core mathematics standards and Washington mathematics standards.	lesson plans, practice edTPA, field experience, class activities, portfolio	CTL 1 WAC V

9. Assessment and Evaluation Guidelines:

The instructional and assessment strategies for this course are designed to inform you of your progress in achieving the performance outcomes.

Assessment*

Assignments	Due Dates	Possible Points
1. Attendance in the CWU classroom; ONE free day ONLY allowed, (30) x 2 = 60	Every class meeting date	60
2. Daily Grades – quizzes (10 points each x 7), mini lesson (10 points), class discussion leader (10 points), other assignments. If an unannounced activity is given in class and you are absent, there are no make-ups allowed for any reason. ONE low grade will be dropped before the end-of-quarter points are assigned.	Day of class	140 This will change based on the number of in class assignments
3. Math Game – You will design and construct a math game that effectively teaches a middle level mathematical concept. This game will be used at tutoring or a math night.	April 6th	50
3. Lesson Plans (50 points each) – During this quarter, you will write a conceptual lesson plan and a procedural lesson plan over either a topic in algebra or one in probability or statistics.	April 18 th May 9th	100
4. Context for Learning (25 points) – Rubrics 1,2,and 5 will be used to grade this section while 10 points will be graded on following directions, answering prompts thoroughly, neatness, appearance, completion, etc.	April 9th	25
5. Practice edTPA – Completion of practice edTPA Planning Commentary; Rubrics 1 – 5 will be used to score; based upon your lesson plans and responses to each prompt. Late/unprofessional work will result in deduction from final grade. Rubrics 1-5 will account for 25 points while 25 points	May 16th	50

will be graded on following directions, answering prompts thoroughly, neatness, appearance, completion, etc.		
6. Field Experience – Middle school classroom observation, tutoring, teaching a lesson – 20 hours minimum at your assigned school (50 minute class = 1 hour) and 5 additional hours either at the school or in an approved alternative such as on campus visits by middle school students or math nights at public schools. If you are short in your time, points will be deducted proportionally. This will be documented both on paper and electronically. If you fail to complete your classroom obligations or if you must be pulled from your placement then you will receive an F in the course and must repeat it at a later time.	See calendar.	100
7. Portfolio – Completion of LiveText Math Portfolio entries – on time for full credit, after deadline = 0 points <i>(This portfolio must be completed by June 5th to pass the course but may be turned in early.)</i>	June 5 th Midnight	50
8. Professional Growth Plan – Thorough and thoughtful reflections must be written to receive full points. Brief or incomplete answers will result in reduced points.	May 23	25
9. Professionalism and participation – discretion of instructor, classroom teachers and principal. This will include being at your placement as scheduled, turning in assignments on time, dressing professionally when in the schools, etc.	Due every day!	50
Total Points		700 +

* Complete descriptions of the assignments and/or rubrics for grading the assignments will be handed out at appropriate times.

10. Grading: Grades will be determined by the following percents:

93- 100%	90- 92%	87- 89%	83- 86%	80- 82%	77- 79%	73- 76%	70- 72%	67- 69%	63- 66%	60- 62%	<60%
A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F

11. 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 a school before classes start. Your professionalism will be assessed by your university instructors and classroom teachers. Remember that your behavior is a reflection on Central Washington University, as well as, you – a future teacher. 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 given by each school.

When you finish your field experience, write a thank-you card/note or email to your cooperating teacher and the school principal. Building bridges and strengthening networks in the field of education is important to your future.

12. **Schedule/Rules:** 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 from a fellow student. In case of emergencies, it is **your responsibility** to contact the instructor and your classroom teacher as soon as possible. Recall that attendance is part of your grade in this course.

13. **How to succeed:** Take responsibility for your own achievement. If you have questions regarding any of the assignments, clarify with the instructor days before it is due. Be organized and complete all assignments early. Prepare a schedule for yourself in completing the course requirements. The requirements for this class demand hard work, critical thinking, and efficient use of your time. **If you fall behind, your grade will suffer and you may not be able to keep up and complete the course.**

14. **ADA Statement:**
Students with disabilities who wish to set up academic adjustments in this class should give me a copy of their “Confirmation of Eligibility for Academic Adjustments” from the Disability Support Services Office as soon as possible so we can meet to discuss how the approved adjustments will be implemented in this class. Students with disabilities without this form should contact the Disability Support Services Office, Bouillon 205 or dssrecept@cwu.edu