

**M 234: Higher Mathematics for Elementary School Teachers  
Spring, 2019**

**Instructor:** Ke Wu  
Office: MATH 304

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Office hours: M/W 3:00-3:50PM, and by appointment

**Class time/location:** M/W/F 2:00-2:50PM. Class location: LA 235

**Prerequisites:** Open to Elementary Education or (pre-ED) majors **only**, M132.

**Text:** Mathematics for Elementary School Teachers, 5th Edition, by Sybilla Beckmann

**Supplies:** A scientific calculator is recommended

**Course Agenda:** Chapters 7-9, 15, 16

**Learning Outcomes:**

1. Apply algebra in many forms (e.g., as a symbolic language, as generalized arithmetic, as a study of functions, relations, and variation) and use algebra to model physical situations and solve problems;
2. Explain proportionality and its invariant properties;
3. Apply number theory concepts and theorems, including greatest common factors, least common divisor, properties of prime and composite numbers, and tests for divisibility;
4. Represent, analyze and interpret data;
5. Simulate random events and describe expected features of random variation;
6. Distinguish between theoretical and experimental probability and describe how to use one or both to determine a probability in a given situation.

**Course Assignments:**

- (1) *Homework* is assigned regularly and collected weekly.
- (2) *Four Tests*: Test 1 (chapter 7); Test 2 (chapter 8), Test 3 (chapter 9), Test 4 (Chapter 15)
- (3) *Final Exam* will be given on **Monday, April 29<sup>th</sup>, 3:20-5:20PM** in this classroom. It will be comprehensive over the whole semester. The final exam schedule is listed in the university schedule and the time will not be changed. Make your travel arrangement based on the scheduled final exams.

*\* Late homework will not be accepted. No makeup test/exam will be given without permission prior to the schedule test/exam.*

**Grading distribution and scale:**

The grading distribution will be approximately as follow:

Attendance/class participation-----	5%
Homework -----	20%
Tests -----	50%
Final exam -----	25%

**Grading scale:**

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

**Administrative Policies:**

**Grade:** You must earn a C- or better in this course to pass the requirement in the College of Education. You may change to CR/NC up to the last day of class and you will receive credit with a grade of D- or better. However, if you choose this option the grade can't be counted towards the College of Education requirement nor the UM graduation requirement.

**Grounds for Approving Petitions for Late Drops:** According to the University catalog, some examples of documented circumstances that may merit approval are accident or illness, family emergency, or other circumstances beyond the student's control. When filling out the Course Drop Form, students are expected to check on of the following:

- An accident/illness prevented me from meeting course requirements.
- A family/personal emergence prevented me from meeting course requirements.
- I received no evaluation of my performance before a drop deadline.
- Employment schedule changed, preventing me from meeting course requirements.
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**Attendance:** You are expected to attend ALL the classes. We will spend significant amount of in-class time on activities and these activities will be reflected on tests/final exam. You can miss two classes without penalty. Each additional class that you will miss, will take 1% off and up to 5% of your final grade.

**Cell phones:** No cell phone use is allowed in class, either sending or receiving calls or text messages, or listening to music. Anyone whose cell phone goes off in class, or who is found texting will be required to bring treats to the next class!

**Students with Disabilities:** The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructor, and Disability Service for Students. If you think you may have disability adversely affecting your

academic performance, and you have not already registered with Disability Services, please contact Disability Services in Lommoason Center 154 or 406.243.2243. I will work with you and Disability Services to provide an appropriate modification.

***Academic Honesty:*** All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University.

***Student Conduct Code:*** All students need to be familiar with the Student Conduct Code. You can find it in the “A to Z Index” on the UM home page.