# MATH 338: Fundamental Mathematical Concepts for Elementary Teachers II

# Spring 2021

## Syllabus

### Instructor: Terry Rood

Email: trood@uwsp.edu – Please include MATH 338 in the subject line of all communication

Meeting Times: Tuesday, Thursday, Friday - 10:00 am - 10:50 am

All class sessions will be held over Zoom. Class meetings will involve active problem solving in both individual and group settings. Be prepared to turn on your camera and microphone during class. Recordings of class sessions will be posted on Canvas.

Office hours (virtual): Tues/Thurs – 11:00 am – 2:00 pm (or by appointment)

Prerequisite: MATH 228

Textbook: Mathematics for Elementary Teachers with Activities, Beckmann, 5th edition

Additional readings will be posted on Canvas.

**Materials**: Scientific calculator, compass, protractor, ruler, tape ruler, colored pencils, or crayons or markers. Other items:

- A computer
- A scanner, or a camera, or a smartphone
- Printer (or have access to a printer)
- Stable internet connection (don't rely on cellular if possible)
- Webcam
- Microphone

Assignments: Exercises from the textbook, in-class activities, other problem-solving activities

\*Use the "Assignments" link on the course Canvas page, to access all class work\*

\*All work will be collected on Canvas\*

Course Grade:	Assignments	30%	
	Quizzes (3)	15%	
	Lessons	10%	
	Exams (3)	45%	

## **Grading Scale:**

А	A-	B+	В	B-	C+	С	C-	D	F
93-100	90-92	87-89	83-86	80-82	77-79	73-76	70-72	60-69	0-60

## Academic Integrity:

You are encouraged to work together with others in the class, but all work that you submit must be substantially your own. Your work on group assignments should be an equal share to others in the group. While it is fine to get assistance, you must personally understand whatever you submit for credit. Quizzes and exams must be completed by you alone.

#### **Course Content:**

Content for this course includes basic geometric properties, constructions, angles, circles, quadrilaterals, triangles, other polygons, transformations and tessellations, area, volume, surface area, spatial visualization, coordinate geometry, Pythagorean theorem, inductive and deductive reasoning, informal proof, metric and standard measurement and problem solving.

#### **Student Learning Outcomes:**

Students will be able to ...

- examine, explore, discuss, and strengthen their understanding of geometry, measurement, and other related topics so that the content can be taught knowledgeably and confidently.
  - [This requires content to be stretched beyond the level typically taught in k 8 settings.]
- explore teaching skills of geometry and measurement.
- prepare, conduct, and reflect upon their teaching through practicums.

#### **Course Requirements:**

- Assignments will include in-class activities as well as homework.
- Quizzes will be given as "take home" work on February 12, March 19, and April 28.
- Exams will be given "in class" on February 26, April 9, and May 18 (Final Exam).
- Lessons: Each student will prepare and present a 20-minute lesson to the class on a topic to be determined later. Each student will write a brief critique of their classmates' lessons and an in-depth reflection on their own.

Late work will only be accepted in extreme cases. Please contact me as soon as you know there is a problem.

#### Accommodations:

<u>Disability Accommodations</u>: The Americans with Disabilities Act (ADA) is a federal law requiring educational institutions to provide reasonable accommodations for students with disabilities. Check here for more information:

## http://www.uwsp.edu/ stuaffairs/Documents/RightsRespons/ADA/rightsADAPolicyInfo.pdf

If you have a disability and require classroom and/or exam accommodations, please register with the Disability and Assistive Technology Center and then contact me at the beginning of the course. I am happy to help in any way that I can. For more information, please visit the Disability and Assistive Technology Center, located on the 6th floor of the Learning Resource Center (the Library). You can also find more information here:

## http://www4.uwsp. edu/special/disability/

<u>Religious Beliefs:</u> Students' sincerely held religious beliefs will be reasonably accommodated with respect to all examinations and other academic requirements. According to UWS 22.03, you must notify the instructor within the first three weeks of classes about specific dates which require accommodation.

<u>Policies:</u> UW-Stevens Point values a safe, honest, respectful, and inviting learning environment. In order to ensure that each student has the opportunity to succeed, a set of expectations for all students and instructors have been developed. This set of expectations is known as the Rights and Responsibilities document, and it is intended to help establish a positive living and learning environment at UWSP. Check here for more information: http://www.uwsp.edu/dos/Documents/CommunityRights.pdf

**Other resources:** (The following information was provided by the Tutoring-Learning Center.) The Tutoring-Learning Center (TLC) offers free group, drop-in, and individual tutoring to support you in your math classes. The tutors are UWSP students who have done well in their classes and who are here to share their successful study habits and math content knowledge to help others succeed. Discussing mathematical concepts and practicing problems together clarifies and solidifies knowledge, and the tutors are eager to study with you. If you have questions about the schedules or would like to make an appointment, please contact the TLC via email (tlctutor@uwsp.edu) or phone (715-346-3568) for information.

What	Details	Schedule	Cost
Drop-In Tutoring	Via Zoom	https://www.uwsp.edu/tlc/Pages/dropInTutoring.aspx	Free
Group Tutoring	Via Zoom, based on course section	https://www.uwsp.edu/tlc/Pages/schedules.aspx	Free
One-on-One Tutoring	By appointment, via GoBoard. Weekly attendance required.	Complete online request form here: https://www.uwsp.edu/tlc/Pages/request-math-science- tutoring.aspx	Free

\*All dates, topics, and assignments in this syllabus are tentative.