

# SYLLABUS

## MATH/MATH ED 338 – FALL 2016

### Fundamental Mathematical Concepts for Elementary Teachers II

Math 338: He is unworthy of the name of man who is ignorant of the fact that the diagonal of a square is incommensurable with its side. Plato

MathEd 338: There is little we do in America that is more important than teaching.  
National Research Council, *Everybody Counts*

#### INSTRUCTOR

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#### TIMES

Class: M, T, R at 9:00 to 9:50 in Sci A213; W at 9:00 to 9:50 in Sci A212

Office Hours: Feel free to stop by anytime that I am not in class. Other times by appointment - just ask.

#### TEXTBOOKS

1. Mathematics for Elementary School Teachers, Bassarear, 5<sup>th</sup> edition
2. Elementary and Middle School Mathematics Teaching Developmentally, Van De Walle, 8<sup>th</sup> edition

#### EXAM GROUP

Wednesday, December 21st 10:15-12:15

#### GOALS OF THE COURSE

1. Broaden your personal understanding of geometry.
2. Become excited about teaching mathematics, and specifically geometry, to children.
3. Become confident in your ability to teach geometry ideas to children.
4. Become familiar with the elementary school geometry curriculum along with state and national standards.

#### COURSE REQUIREMENTS

A separate grade is given for the mathematics and mathematics education components of this course. Your grade for the course will be based on the following distribution of points:

1. Exams: 40% of the grade. Three exams. At least 75% of each exam will be very similar to the homework exercises. For each exam, you are allowed a 3x5 note card.
2. Homework: 20% of the grade. Each exam will have a list of assigned homework problems. A passing score is defined on the *Homework Information* handout. **To receive a score of either 4 or 5 on the homework, you must score at least 70% on the corresponding exam (otherwise the homework score is prorated according to the exam score).**

HW score ( $H$ )	Exam score ( $E$ )	Adjusted HW score
$H \geq 4$	$E \geq 70$	No change
$H \geq 4$	$60 \leq E < 70$	$H \leftarrow H - 1$
$H \geq 4$	$50 \leq E < 60$	$H \leftarrow H - 2$
$H \geq 4$	$40 \leq E < 50$	$H \leftarrow H - 3$
$H \geq 4$	$E < 40$	$H \leftarrow 0$
$2 \leq H < 3$	$E \geq 50$	No change
$2 \leq H < 3$	$40 \leq E < 50$	$H \leftarrow H - 1$
$2 \leq H < 3$	$E < 40$	$H \leftarrow 0$

3. Practicum category: 5% of the grade. Complete an in-class practicum with elementary school children. See the *Practicum* handout (to be distributed at a later date).

- Project category: 20% of the grade. (e.g., curriculum, manipulatives, geometry, algebra, etc.). See the *Outline* handout for due dates.
- Attendance: 10% of the grade. Students are expected to attend all class periods. Much of the learning in this class will occur either during class, or as a result of attending class. You are allowed four absences during the semester (one week); plan your schedule accordingly (e.g., days before break, etc.). **Athletics and school events are not excused absences – be sure to see me in advance.** Of course there are exceptions for military service obligations. Absences that are beyond your control will be handled on an individual basis.

The attendance portion of your grade will be computed according to the following schedule:

Absences:	0-4	5	6	7 or more
Percentage Points:	10%	8%	5%	0%

It is YOUR responsibility to insure that your name is on the attendance sheet each day that you are in class. **Note: At the discretion of the instructor, up to ten additional percentage points may be deducted for excessive absences (more than 7).**

- Subjectivity category: 5% of the grade. Given at the discretion of the instructor and based on the completion of above-and-beyond work and/or personal growth, but along with such things as attendance, class participation, level of preparation for class periods, work completed in a timely manner, overall performance in the course, etc. **To get a value of 5 means that you performed extraordinary in this course.**

#### GRADING POLICY

Final letter grades will be assigned as follows:

A, A-, or B+ refer to subjectivity category above  
 B [90% - 80%]; C (79% - 70%]; D (69% - 60%] F (60% - 0%]

Appropriate + and - scores will be added at the discretion of the instructor. An incomplete will not be given for this course, unless you provide evidence of a situation beyond your control that prevents you from doing your work for a substantial time. A heavy course load is not sufficient reason for an incomplete. Note: Since records for this course are stored on a computer, please keep all materials until final grades have been posted.

<p><b>Necessary conditions for an A- or A</b></p> <ul style="list-style-type: none"> <li>Submit a written proposal justifying such a grade</li> <li>A: Subjectivity must be 5; A-: Subjectivity must be <math>\geq 4</math></li> <li>No late submissions</li> <li>At least 80% in the exam category</li> <li>At least 20% in the project category</li> <li>At least full credit on the homework category</li> <li>No more than 4 absences</li> <li>No more than two missed "reading note" quizzes</li> </ul>	<p><b>Necessary conditions for a B+</b></p> <ul style="list-style-type: none"> <li>Submit a written proposal justifying such a grade</li> <li>No late submissions</li> <li>At least 70% in the exam category</li> <li>At least 15% in the project category</li> <li>no more than three missed "reading note" quizzes (for an B+)</li> </ul>
<p><b>Necessary conditions for a B</b></p> <ul style="list-style-type: none"> <li>At least 15% in the project category</li> <li>no more than three missed "reading note" quizzes (for an B+)</li> </ul>	
<p><b>Necessary conditions for an A-, A, B+, or B</b></p> <ul style="list-style-type: none"> <li>Complete (with a passing score) a report over the readings in this class (see the Outline handout for the list and dates for readings). Limited to no more than three pages (perhaps two full pages, double-spaced with 1 inch margins; include a separate reference sheet).</li> </ul> <p>Discuss what you feel are the five most important/practical ideas from the readings that will help you teach geometry while student teaching. Be sure to explain why you chose these five ideas and how you plan to incorporate them into your teaching/classroom. Due: Finals week, or before.</p>	

## **ACADEMIC MISCONDUCT POLICY**

You are encouraged to work with others in the class (also with friends or tutors), but all of the work that you submit must be substantially your own. It is perfectly fine to get help, but you must personally understand whatever you submit for credit.

Academic misconduct is an act in which a student:

- Seeks to claim credit for the work or efforts of another without authorization or citation;
- Uses unauthorized materials or fabricated data in any academic exercise;
- Forges or falsifies academic documents or records; or
- Assists other students in any of these acts.

Examples of academic misconduct include, but are not limited to: cheating on an examination; submitting a paper or assignment as one's own work when a part or all of the paper or assignment is the work of another; submitting a paper or assignment that contains ideas or research of others without appropriately identifying the sources of those ideas; stealing examinations or course materials; submitting, if contrary to the rules of a course, work previously presented in another course; knowingly and intentionally assisting another student in any of the above, including assistance in an arrangement whereby any work, classroom performance, examination or other activity is submitted or performed by a person other than the student under whose name the work is submitted or performed.

For a full discussion of the academic misconduct rules on the UWSP campus see Chapter 14 of the Rules of the Board of Regents, Wisconsin Administrative Code:

<http://www.google.com/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=1&ved=0CB0QFJAA&url=http%3A%2F%2Fwww.uwsp.edu%2Fdos%2FDocuments%2FUWS%252014.docx&ei=v2zzU4XdH9jgoAS0pYKQBw&usq=AFQjCNE3yU8CJfs0O4CXRnkUIT-aZkSPrA>

## **WORK LOAD**

University guidelines suggest that to do well in a course, students may need to spend 2-3 hours outside of class for each hour in class. Since this class meets four hours a week, you should expect to spend 8-12 hours a week in preparation for this course.

## **STUDENT RIGHTS AND RESPONSIBILITIES**

You should be fully aware of your rights and responsibilities as a UWSP student. These are detailed in the *UWSP Community Bill of Rights and Responsibilities*:

<http://www.uwsp.edu/dos/Documents/Community%20Rights%20and%20Responsibilities%20book.pdf>

## **FINAL NOTE**

I invite and appreciate your comments and suggestions for the course as it unfolds. Please share with me in person or in writing your reactions and perceptions. Your contributions will serve to enhance the course for you, your classmates, and future students

