

# SYLLABUS

## MATH/MATH ED 369 -- SPRING 2017

### Teaching Middle School Mathematics II

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, W, R at 12:00 to 12:50 in Sci A213

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

#### EXAM GROUP

Thursday, May 18th 12:30-14:30

#### INTRODUCTION

We will look at mathematics for the middle school from a general overall perspective. Thus, we consider those concepts of mathematics that bind the various strands of mathematics, especially general mathematical structures.

#### GOALS OF THE COURSE

1. Become excited about teaching grade 6-8 mathematics.
2. Become familiar with the middle school curriculum along with state and national teaching and learning standards for mathematics.
3. Become familiar with the "structure" of mathematics.
4. Develop a personal philosophy regarding teaching mathematics for understanding.

#### 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: Assignments are always due one week after completion (see the Outline handout).

1. Assignment category: 50% of the grade.
  - Middle school math and beyond (10%)
  - Arithmetic on mars (15%)
  - Real numbers (15%)
  - Teaching why (10%)
2. Project category: 20% of the grade. (e.g., curriculum, manipulatives, geometry, algebra, etc.). See the *Outline* handout for due dates.
3. Philosophy: 10% of the grade. Limited to no more than three pages (double spaced lines, standard 1" margins, no more than one line for the information portion, which could include things like name, date, & title). Discuss your personal philosophy regarding teaching not only 'what' and 'how', but also 'why'. In particular, discuss three to five strategies that you would like to utilize while student teaching to facilitate student understanding. Be sure to explain why you chose these ideas and how you plan to incorporate them into your teaching/classroom. Due: Finals week, or before.

My suggestion: The first thing is to read and/or skim the *NCTM Standards* and the *Wisconsin Common Core Standards* (paying particular attention to what these documents discuss with regard to teaching for understanding). Synthesize activities and readings throughout the semester to put together an outline of 3 to 5 thoughts.

For example, communication is one of five process standards discussed in the *NCTM Standards*. If I were completing this assignment, I would certainly include "communication" as part of my philosophy for teaching for understanding. Nearly all of my instruction incorporates student-to-student centered speaking and/or writing. This is part of who I am as an educator.

- 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.** To receive an A, A-, or B+ in this course you must submit a written proposal justifying such a grade.

### 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

Necessary conditions for an A- or A	Necessary conditions for a B+
<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 18% in the project category</li> <li>No more than 4 absences</li> <li>A: At least 12% on the Real Number unit</li> <li>Full credit on the philosophy paper</li> </ul>	<ul style="list-style-type: none"> <li>Submit a written proposal justifying such a grade</li> <li>Subjectivity must be <math>\geq 3</math></li> <li>No late submissions</li> <li>At least 15% in the project category</li> <li>Full credit on the philosophy paper</li> </ul>

## **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&usg=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.

