# SYLLABUS

# **MATH/MED 340 - SPRING 2019** College Geometry with Teaching Methods

Math 340: 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 340: 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 at 2:00 to 2:50 in Sci A212 and R at 2:00 to 2:50 in Sci A213 Office Hours: Feel free to stop by anytime that I am not in class. Other times by appointment - just ask.

### **BOOK**

Elementary Geometry for College Students (6th edition)

### **GOALS OF THE COURSE**

- 1. Increase your knowledge of the geometry curriculum.
- Prepare you to teach high school and middle school geometry.
- 3. Understand theoretical/practical issues related to the teaching and the learning geometry.

### **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. Assignment category: 60% of the grade.
  - Review of Euclidean Geometry (15%)
  - Non-Euclidean Geometry (15%)
  - Geometry Manipulatives (15%)
  - Problem solving with Geometer's Sketchpad (15%)
- 2. Project category: 20% of the grade. (e.g., curriculum, manipulatives, geometry, algebra, etc.). See the Outline handout for due dates. Note: No more than 4 projects can be submitted for the first-time in any given week.
- 3. 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; 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 are handled on an individual basis. The attendance portion of your grade will be computed according to the following schedule:

0-4 5 6 Absences:

10% 8% 5% 0% Percentage Points:

It is YOUR responsibility to ensure 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).

7 or more

4. Subjectivity category: 10% 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 10% 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 are posted.

# Necessary conditions for an A or A-

- Submit a written proposal justifying such a grade
- Subjectivity must be at least 80%
- · No late submissions
- No more than 4 absences
- At least 90% in the Review of Euclidean Geometry category
- A: At least 100% in the project category;
  A-: At least 90% in the project category

# Necessary conditions for a B+

- Submit a written proposal justifying such a grade
- Subjectivity must be at least 70%
- No more than 6 absences
- At least 70% in the Review of Euclidean Geometry category
- At least 80% in the project category

# Necessary conditions for a B

- At least 60% in the Review of Euclidean Geometry category
- At least 70% in the project category

## **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.

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%3 A%2F%2Fwww.uwsp.edu%2Fdos%2FDocuments%2FUWS%252014.docx&ei=v2zzU4XdH9jgoAS0pYKQBw&usg=AFQjCNE3yU8CJfs0O4CXRnkUIT-aZkSPrA

## STUDENT RIGHTS AND RESPONSILITIES

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%20Responsabilities%20book.pdf

### **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.

### **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.