Mathematics / Mathematics Education 338 Section 1 and 2
Tentative Syllabus, Fall Semester 2019

Place and Time:

Section 1
M W R 9:00-9:50 am, Sci. A213
T 9:00-9:50 am, Sci. A212

Section 2
M W R 2:00-2:50 pm, Sci. A213
T 2:00-2:50 pm, Sci. A212

Instructor and Office Hours:

Dr. Senfeng Liang
Office: D329 Science
Email: sliang@uwsp.edu
M, 3-3:50pm, T, W, 12:30-1:20pm (A 24-hour notice is needed) or by appointment. Time may vary; use the Google link (click here) to make an appointment)

If you want to contact me via email, please write **math338_section number _ student's full official name** in the subject line of the email. For example, it should look like math338_1_Full name. Use **full official name** in all communications and WebAssign registration (e.g., at the end of an email). **No nick name** please!

Texts: Bassarear, T. (2012). *Mathematics for Elementary School Teachers* (5th ed.). Belmont, CA: Brooks/Cole. (**TEXT RENTAL**)

Van de Walle, J.A., Karp, K.S., & Bay-Williams, J. M. (2010). *Elementary and Middle School Mathematics: Teaching Developmentally* (7th ed.). Boston, MA: Pearson. (**TEXT RENTAL**)

National Council of Teachers of Mathematics. (2000). *Principles and Standards for School Mathematics*.

National Governors Association Center for Best Practices, & Council of Chief State School Officers. (2010). *Common Core State Standards for mathematics: Kindergarten introduction*. Retrieved from http://www.corestandards.org/Math/Content/K/introduction

Additional Readings: will be provided as handouts (in paper or electronic version).

Materials: Scientific calculator, compass, protractor, ruler, colored pencils or crayons or markers.

Prerequisite: Math/MEd 228 or MED 229

Student Learning Outcomes:

Students will be able to …

1. examine, explore, discuss, and strengthen their understanding of geometry, measurement, and other related topics so that the content can be taught knowledgeably and confidently. [Note: This requires content to be stretched **beyond** the level typically taught in k – 8 settings.]
2. explore teaching skills of geometry and measurement.
3. prepare, conduct, and reflection their teaching through practicums.
4. get familiar with National Council of Teachers of Mathematics' (NCTM) standards and the Common Core State Standards for Mathematics.

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.

Math education content includes the NCTM process standards, geometry and measurement content standards, the NCTM principles and Common Core standards relating to geometry and measurement.
There will be three practicum experiences and you must participate in all three. Making up a missed practicum is your responsibility and could prove quite difficult.

Tentative Course Requirements:

1 Test/Final:
There will be a midterm and a final. The test and final dates are provided in the schedule. You should avoid making travel plan on these days. For a test, you will need to let me know at least two business days in advance (barring medical emergency) that you will miss the test.

2 Homework (see class responsibility #5 for more information):
There will be multiple homework assignments.

3 *Teaching Practicums*
During the course, you will conduct three teaching practicums (to be assigned), including one assessment and two lessons. The lesson plans should demonstrate creativity, knowledge of mathematics, knowledge of mathematics pedagogy, and knowledge of generally accepted pedagogical practices. The lessons plans can be related but should be essentially different. After you finish the teaching, you will write a reflection of each practicum. More specifics about this activity will be distributed later.

4 Reading comments:
You will be required to read several chapters from the book of Van De Walle et al. and other materials. For each chapter/article your read, you need to write at least five comments, questions or reflections (but not summaries) and review at least three other people's comments (be specific). This activity will enrich discussions of these chapters. Peer reviews like this won't count: "I agree with what you said."

5 Course reflection:
You will be required to write a reflection about what you have learned from this course by the end this semester.

Note1: Peer-review of writings. For all of your writings (except #6 course reflection), for some assignments you will need to review 1-3 papers. The reviews will help the authors to write a stronger report. The comments should be encouraging, supportive and constructive. Revised writings based on peer-reviews tend to received higher points than those submitted without any insights from others. We will use google documents. Thus, you need to create a google account. **Fail to complete peer-review will result in losing your points substantially.**

Class Responsibilities

1 Attendance and participation:
Attendance and full participation are very important for this course. Absences must be documented either medically or justified by other reasons considered valid by the University. If you have evidences for medical reasons please contact **Disability and Assistive Technology Center** (DATC) (609 Albertson Hall, 715-346-3365) and ask them to notify me the reason of absence.

Every time your absence is unexcused, you miss 2 points up to 3 absences. If you miss 4 or more classes without a valid excuse, you will not earn any credit for attendance and participation. If you miss 8 or more classes without a valid excuse, you will automatically receive a letter grade F for this course. You are responsible for all announcements and assignments made in your absence. Practicum experiences are required for this class. If you miss a practicum experience due to extenuating circumstances, you must make arrangements to make up a missed practicum on your own. Major emergencies will be handled on an individual basis. **Media phone devices are not to be turned on or used during class time.** Activities such as texting messages will results in lose your participation points.

2 Conduct:
I will treat you as professionals and I expect the same in return.

3 Late Homework and make-ups:
No late homework will be accepted unless you have a reason that the university deems sufficiently compelling. (The same is true for tests.) Even if your homework is accepted, you may lose points for being late. All written assignments must be submitted on or before the time/date indicated.

4 Academic Integrity:
"Students are responsible for the honest completion and representation of their work, for the appropriate citation of sources, and for respect of others' academic endeavors. Students who violate these standards will be confronted and must accept the consequences of their actions." A description of your rights and responsibilities as a member of the UW-SP community can be found at http://www.uwsp.edu/dos/Pages/Academic-Misconduct.aspx

Individual assessments, such as individual assignments and exams, must be completed by you alone. Work completed collaboratively must clearly identify all contributors. *When utilizing outside references, all sources must be fully and accurately cited* (use *APA format*). All essays should be typed, single-spaced with 1" margins on all sides. You must use 12 pt. Times New Roman font. You should learn the APA format at: https://owl.english.purdue.edu/owl/section/2/10/

5 More information of assignments:
All essays should be typed, single-spaced with 1" margins on all sides. **You must use 12 pt. Times New Roman font.** You should learn the APA format at: https://owl.english.purdue.edu/owl/section/2/10/
Problems from WebAssign tend to emphasize and reward simply by getting the right answer. The written assignments measure your understanding of the methods and other mathematical aspects of the course. Correct answers are, of course, crucial, but correct answers without supporting work won't count for much here! You need to write clearly! Legible handwritten solutions are critical. Also remember to circle your final answer.

6 Disability Accommodations:
The Americans with Disabilities Act (ADA) is a federal law requiring educational institutions to provide reasonable accommodations for students with dis- abilities. For more information about UWSPs policies, check here:
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 Re- source Center (the Library). You can also find more information here:
http://www4.uwsp. edu/special/disability/

7 Religious Beliefs:
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.

8 Policies:
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

9 Extra credits: You may earn extra credits in several ways, such as (other opportunities may be possible):

a. If you volunteered to show your work on board you earn 0.5 point for each class. **Even if you volunteered twice or more than twice, you earn 0.5 point for each class.**
b. No cell phone use in classroom. You earn **FIVE EXTRA POINTS** if you **NEVER** display a cell phone, other mobile devices, or a laptop, in the classroom (unless with a permission from me). You can keep your devices in your bag but you cannot take them out for any reason. You should follow the requirement starting at the moment you enter the room until you left the classroom when class formally ends.

ASSESSMENT INDICATORS (tentative):

Tasks	*counts*	*points*	*notes*
Attendance and Participation	N/A	30	individually
Midterm	1*10	100	individually
Final	1*15	150	individually
Homework	varies	varies	Usually individually (groups are possible)
Reading comments	3*5	15	2 points for each reading' comments; 1 point for peer-review
Practicum 1 (Assessment)	1*5	5	in pairs
Practicum 1 (Assessment reflection)	1*5	5	in pairs
Practicum 2 &3 (lesson) plans	2*15	30	in pairs
Practicum 2 &3 (lesson) reflections	2*15	30	in pairs
Course reflection	1*10	10	individually

Letter Grade	*Percentage*	*Letter Grade*	*Percentage*
A	94-100%	C	73-76.99%
A-	90-93.99%	C-	70-72.99%
B+	87-89.99%	D+	67-69.99%
B	83-86.99%	D	60-66.99%
B-	80-82.99%	F	0-59.99%
C+	77-79.99%		

GRADE NOTE:

1. **If you miss 8 or more classes without a valid excuse, you will automatically receive a letter grade F for this course.**
2. **If you missed all three practicums your course letter grade will be F (no matter what grades you get for other parts).**
3. **The same grade will be assigned for both MATH 338 and MED 338.**

Estimated time needed for this course

University guidelines suggest that students may need to spend 2-3 hours of preparation outside of class for every hour spent in class. MATH 338/ M ED 338 is essentially a four-credit class, so YOU should expect to spend 8-12 hours each week devoted to studying and preparing assignments for this class. If you experience difficulty in meeting or understanding course expectations, please come in during office hours, or make an appointment to discuss this with me immediately.

Other resources

WRITING ASSISTANCE: Drop-in help and by appointment; TLC; Free!

Math and Science Tutoring – Fall 2019

What	Details	Schedule	Cost
Drop-In Tutoring Center	DUC 205	https://www.uwsp.edu/tlc/Pages/dropInTutoring.aspx	Free
Group Tutoring	Based on course section	https://www.uwsp.edu/tlc/Pages/schedules.aspx	Free
One-on-One Tutoring	By appointment	Visit ALB 018 (library basement) to make a request. https://www.uwsp.edu/tlc/Pages/CA-tutoring.aspx	$9.00/session* *Fee waived for students listed as low-income
Math Room	SCI A113A	https://www.uwsp.edu/mathsci/Pages/tutoring.aspx	Free
MathPad *Math 90, 95, 107 only*	CCC 302	https://www.uwsp.edu/mathsci/Pages/tutoring.aspx	Free
Physics Room	SCI A105	https://www.uwsp.edu/physastr/Pages/Tutoring.aspx	Free

IMPORTANT NOTES:

1. **Except chapters from the Van De Walle textbook, all other reading materials (NCTM and CCSS, etc.) on available on Canvas.**
2. **All reading comments are on Canvas.**
3. **Practicum assessment, lesson plans, and reflections need to be submitted on Google AND Canvas.**
4. **Assignments on Canvas/Google are always due 11:59pm on that day.**
5. **Grades given during the semester may not be disputed after one week of receiving the grade.**
6. **MARK ALL DUE DATES ON YOUR CALENDAR (PLEASE DO NOT EXPECT ME TO REMIND YOU THESE DUE DATES).**
7. **CALCULATORS MAY OR MAY NOT BE USED, DEPENDING ON THE TASKS.**
8. **If you missed all three practicums your course letter grade will be F (no matter what grades you get for other parts).**
9. **The syllabus is tentative, and I reserve the right to interpret and revise it.**
10. **If you find any errors or have any questions, please contact me.**