



**Mathematics Education 335  
(Section 1)**  
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**Course description and content:**

**M ED 335. Techniques in Secondary Education.** 4 cr. Aims, methods, materials, techniques, planning, organization, assessment, and field experience. Prerequisite: Junior status and admission to Professional Education Program. [UWSP Course Catalog]

**Class hours:** Class sessions will be on campus and at SPASH. 1<sup>st</sup> period at SPASH is scheduled for 7:35 – 8:27. When we meet on campus we will meet in SCI A213 on Mondays, Wednesdays and Thursdays and in SCI A212 on Tuesdays. You will meet in an assigned classroom when at SPASH and this will vary. There will be a weekly schedule provided for meeting times and places.

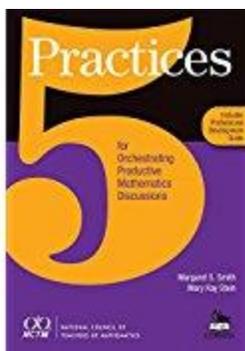
**Final Exam:** Wednesday, December 19, 8:00 - 10:00AM

**Office hours:** Mondays Noon – 2:00PM; Wednesdays 9:00 – 10:00AM; Thursdays 1:00 – 2:00PM. Other times available upon request.

**Required Textbooks:**



PRINCIPLES TO ACTIONS: Ensuring  
Mathematical Success for All  
(National Council of Teachers of  
Mathematics, 2014);  
ISBN: 978-0-87353-774-2



5 Practices for Orchestrating  
Productive Mathematics Discussions  
(Margaret Schwan Smith & Mary Kay  
Stein, 2011)

ISBN: 978-0-87353-677-6

**Other required materials:** Scientific calculator, journal, Stiki-notes, ruler, colored pencils or markers. It is highly encouraged to have a 3-ring binder to organize class handouts and assignments. [Note: using cell phones, tablets, or other electronic devices on tests will not be allowed. I will occasionally use a TI-83 or TI-84 for presentations, this is a preferable calculator.]

**Course goals:**

- The overall goal of this course is to prepare students for Teacher Candidate status.
- Students will examine and reflect on their beliefs relative to the teaching and learning of mathematics and develop a personal philosophy of teaching mathematics.
- Gain a deeper knowledge of the k – 12 mathematics curriculum.
- Students will explore and reflect on issues of learning environment and develop a working perspective on how to create a learning environment that enhances instruction.
- Students will practice writing about the 3 phases of teaching mathematics: planning, instruction and assessment using the edTPA process as a model.
- Begin developing the professional habits of successful educators.

**Outcomes/requirements:**

- Complete 40 hours of practicum experience that includes time in classrooms at both the high school and middle school/junior high levels.
- Plan, instruct, and assess a minimum of 2 lessons (at least one at the high school level and one at the middle school/junior high level).
- Participate in discussion forums that demonstrate a thoughtful approach to issues and challenges of teaching mathematics at the secondary level.
- Use technology to complete a presentation summarizing a selected book and its connection to teaching and learning.
- Demonstrate deep understanding of content, learning environment, and motivational issues through the completion of final paper.
- Attend class regularly and participate in a mode appropriate for a pre-service teacher.

**Class structure:** My teaching metaphor is that teaching mathematics and helping prospective teachers of mathematics is like being the guide of a mountain expedition. As a class we are scaling a steep peak and I must lead the way. This requires all of us to stick together, each of us to expend effort and keep our eyes on the goal (reaching the peak). Yet, I must lead. This role requires that I sense when to push upward, when to rest, when to look back at what we've accomplished, when to re-fuel/replenish...and to make sure we are all prepared and motivated for the next "adventure." To this end, many class sessions call for an interactive examination of the mathematics which I will lead with discussion/lecture. However, mathematics is not a spectator "sport" which means that since all of us must climb the mountain, we will all be doing mathematics in a manner that emphasizes understanding WHY? Much of our work will emphasize analyzing important mathematical concepts and sharing explanations in order to dig deep into our understanding. I hope that some lessons will include a vision of what the focus of the lesson might look like in an actual classroom. Finally, many of our class periods will have us scattered about in different classrooms. You must take responsibility for your growth and development.

### **Policies & Expectations for Students:**

1) Participation is a critical aspect of this class and constitutes 20% of your final grade.

Participation will include three components (attendance, engagement, and effort) that will be monitored and assessed on a weekly basis.

- **Attendance:** Students are expected to attend each class session and be on time. Each day students will earn points for attendance (8 pts. – present and on time, 6 pts. – present but tardy (a tardy is at most 10 minutes late), 4 pts. – present but miss a significant portion of class). **Additionally, if student attendance becomes excessive (more than 2 absences) their grade may be dropped by up to 10%.**
- **Engagement:** Students are expected to begin upon arrival to class (this can be working on a warmup or talking with the instructor about assignments or other course considerations). During scheduled class time you should be "on task," listening for understanding and relevance, offer ideas, and ask questions that clarify or extend ideas. This includes challenging ideas in a respectful fashion. Students will earn up to 4 points per week for engagement (4 pts. – distinguished, 3 pts. – proficient, 2 pts. – basic, 1 pt. – weak, 0 pts. – unacceptable).
- **Effort & attitude:** Students are expected to consistently complete assignments, demonstrate a reasonable level of enthusiasm for the content, respect the entire cohort, be willing to work in a variety of settings (individual, pairs, small, groups, whole class), be organized in a way that shows thought and preparation, and accept feedback in a profession manner. Students will earn up to 4 points per week using the same scheme described for engagement.

2) Incomplete grades will be given only under special circumstances.

*(continued)*

- 3) Any work that is turned in should be completely your own work. Even though students will be working in groups often each individual is responsible for their own work. Cheating/Academic dishonesty can result in failing the course. Students are expected to adhere to the academic integrity guidelines as stated in the UWSP Community Rights & Responsibilities document (Student Academic Standards and Disciplinary Procedures). Complete information can found at the following location:  
<https://www.uwsp.edu/dos/Pages/StudentConduct.aspx>
- 4) Programming formulas into a calculator that is used on quizzes or tests is considered cheating.
- 5) CAS-capable calculators (such as TI-89 or TI-92), calculators with word processing capabilities, cell phones and SMART watches are not allowed on tests and quizzes.
- 6) Make-up tests/assignments will only be given under very special circumstances. Please look the course calendar and plan accordingly.
- 7) Calculators cannot be shared during quizzes and tests.
- 8) Cell phones and computers are a distraction to students and the instructor, please keep these devices silent and out of sight. If there is a situation that requires your attention to a cell phone contact, **please leave the classroom to deal with it.**
- 9) Please **prepare** for class. Reading the assigned section and completing (or at least a strong attempt with each problem) the assigned problem sets are critical components of success for most students.
- 10) Some writing assignments will be submitted to a dropbox within D2L. They will be checked for plagiarism. Using someone else's work to complete your assignment is cheating.
- 11) Assignments are due on the date given in the course calendar or daily lesson outline. These dates may be adjusted in class but only after discussion and notification in class and on D2L. Late work will only be accepted under special circumstances as determined by the instructor. Our D2L course shell and daily lesson outlines handed out at the beginning of each class session will be used often to communicate important course information, please check D2L daily.
- 12) Please communicate with the instructor regarding challenging circumstances ASAP. Email is the first way to communicate but some issues are more appropriately handled face-to-face. Please work to make all communication timely.

***An undergraduate student should expect to spend a minimum of 2 hours on this course outside the classroom for every hour in the classroom.***

**Disabilities:** If you have a disability, it is your responsibility to contact the Office of Disability Services during the first two weeks of classes and discuss accommodations with the instructor. For more information use the following link: <https://www.uwsp.edu/datc/Pages/student-accommodations.aspx>

**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.

**Grading:**

Grade Component	% of overall grade
Practicum	25
Attendance/participation	10
Discussion forums	10
Writings/reflections/daily assignments/quizzes	10
Midterm Exam	15
Book study/presentation	15
Final paper	15

The following scale will be provided to assign final grade:

94 -100% = A	90 – 93% = A-	87 – 89% = B+
83 – 86% = B	80 – 82% = B-	77 – 79% = C+
73 – 76% = C	70 – 72% = C-	67 – 69% = D+
60 – 66% = D	Less than 60% = F	

***\*There will be a tentative course calendar posted and continuously updated on D2L as an addendum to this syllabus.***

***Teaching is not filling a bucket; it is lighting a fire. Prepare to light some fires!***

***Welcome! I look forward to sharing the semester with you and wish you the best over the coming weeks.***

***– Your instructor, Brad Kahrs***