MATH /MATH ED 228 (Section 2)
Spring 1017

Monday 10:00-10:50am (Sci A 213); Tues 9:00- 10:50am (Sci A 212); Thursday 10:00-10:50am (Sci A 212).

Instructor: Dr. Sinan Kanbir
Office: D357 Science Building
Office Phone: (715) 346-2621
Email: skanbir@uwsp.edu
Office Hours: Monday: 9:00am to 9:50am & Wednesday: 3:00pm – 4:00 pm or by appointment

Course Description:

MATH 228. Fundamental Mathematical Concepts for Elementary Teachers. 3 cr. Basic concepts and properties of set, number systems, and function for elementary school mathematics. Prereq: MATH 100 or placement above MATH 100. GEP: QL*
MATH ED 228. Teaching Elementary School Mathematics. 1 cr. Principles, goals, methods, study of curricular content and assessment techniques; includes field experience.

**This course will fulfill the Quantitative Literacy(QL) requirement as part of the General Education Program(GEP) for education majors only. Because this course is identified as a QL course in the GEP, assignments and assessments may be collected and copied for use of in GEP assessment. Names or identifying marks will be removed from copies of collected artifacts.*

Course Purpose and Goals:

Too often our previous experiences with mathematics have caused us to focus on memorization and finding correct answers. Consequently, our understanding of what mathematics is and what it means to do mathematics is shaped by these experiences and is rather limited and narrow. However, this course is designed to develop your understanding of mathematics by providing opportunities for you to experience what it means to problem solve and reason about mathematics. Emphasis is on problem solving (investigating, conjecturing, and justifying), on understanding of concepts, on connections among concepts, and on written and verbal communication of strategies and reasoning.**Therefore, you will be expected to provide complete explanations and justifications of the reasoning you used to solve problems.** This requires practice and commitment to sense making on the part of the student. You must participate mentally in the learning process. This participation includes studying the material; working with others; struggling with non-routine problems; reasoning and solving problems; symbolically representing mathematical thinking and reasoning; listening to others; reflecting about what you are doing; as well as the more typical tasks of taking examinations and doing homework.

Required Textbook/Resources:

Van de Walle, J. A., Karp, K. S., & Bay-Williams, J. M. *Elementary and middle school mathematics: Teaching developmentally* (8th ed.). Boston, MA: Pearson. **(Text Rental)**

Bassarear, T. (2012). *Mathematics for Elementary School Teachers.* (5th ed.). Cengage Learning **(Text Rental)**

Other Resources (see Library Reserve section or online journal):

Carpenter T. P., Fennema, E., Franke, M. L., Levi, L., & Empson, S. . (1999). Children's Mathemat ics: Cognitively Guided Instruction, Second Edition Portsmouth, NH: Heinemann.

McCoy,A.,Barnett, J., & Combs, E. (2013). *High--yield routines: Grades K–8.* Reston, VA: National Council of Teachers of Mathematics.

Thomas P. Carpenter, Megan Loef Franke and Linda Levi (2003). *Thinking mathematically: Integrating arithmetic and algebra in the elementary school.* Portsmouth, NH: Heinemann. ISBN 0-325-00565-6.

Common Core State Standards for Mathematics**:** Download from website: http://www.corestandards.org/assets/CCSSI_Math%20Standards.pdf (can be found at your D2L/resources)

https://www.illustrativemathematics.org/content-standards/1

Additional Readings will be available on D2L.

Course Structure and Tentative Requirements

Attendance: (25 points) Because we will be seeking a way to teach children mathematics in way that we were not taught, attendance and participation are crucial elements in this course to envision how it would be studied and/or practiced in classroom. You are expected to attend every class meeting. If you are absent more than **3 times** without any special circumstances, it will be considered unprofessional, and it will result in a disposition concern form. If you are absent 6 **classes** or more, your course grade will be "F". There will be no penalty for 2 absences (2 periods) during the whole semester (Tuesday classes count as two periods). After the second absence, 5 points per absence will be subtracted from your total attendance points (**25 points**).

There will be no make-up exam with the possible exception of unforeseen emergencies (decided by instructor). If there is an emergency, the student must provide official written documentation and the make-up exam must be arranged within 5 calendar days. Students missing class for any reason are responsible or information and work done during the class time missed. (***ask your friend to collect class works and*** **assignments -try not to ask me to send materials-**)

WARNING: Makeup tests and quizzes may be more difficult than scheduled assessment.

Participation: (30 points) You are expected to participate in the class activities and discussions. In your actively mode of learning environment, you are not only reading what others had written(receptive) but also to write and to speak using your expressive language. Not only listen my knowledge about mathematics (receptive) but also engage in small –group discussion and make verbal reports to the whole class (**expressive**).
Your participation in class also means that you should not only share your (on---task) ideas during class discussions and in small group work, but also listen and learn from your instructor and classmates. **You will be asked to present solutions to the class, and your willingness to do so will be reflected in your grade. It is expected that you will present solutions and/or lead a discussion at least *6 times* during the semester.**

Presentation (40 points): You will present **two 15-minute long presentations**. One (Children's literature book) will be as an individual and the other (article from Teaching Children Mathematics—You will find them on D2L) will be as a pair. The focus of this assignment is on becoming acquainted with a peer-reviewed journal designed to support elementary school teachers' mathematics instruction and on critically examining articles in relation to current reforms in mathematics education as well as how they relate to state and national standards. Details will be presented later.

Read-Write/Reflection (40 points): We will read some assigned chapters of our course textbook. You will see a tentative schedule for reading assignments, but dates or even the readings themselves may change as we go along. You will be asked to submit your reflection approximately **four times** during the semester. The intent is to support you in developing a habit of reflection on your own thinking and learning; you may even find this record useful when you begin teaching. Only reflections that are typed will be accepted, unless otherwise specified. In your typing, double space paper (2 to 3 pages) and a cover page should be included with this paper and it should include;

a. Name: First, middle, Last
b. Date:
c. Course: MATH/MATH ED 228
d. Assignment Name

Lesson Plans for Practicum Experiences: (30 points) This course includes three practicum experiences. For each experience, your grade strand will write a lesson plan. Two ***hard*** copies need to be turned into me before each practicum experience—one for me and one for the classroom teacher. (More information about the content and grading will be provided.)

Practicum Experiences Summaries and Reflections: (30 points) After the practicum experiences you will write a summary and reflection of your teaching. (Information about the format and content of the summary and reflection will be provided.)

Web-Assign Assignments: (60 points): The quick start guide will be provided to help you start using *Web Assign.*

Homework assignments: (30 points) You will be asked to work on and hand in approximately five homework assignments, which will give you the opportunity to solidify and further develop your understanding of ideas we will discuss in class. More information about the assignments will be given with each assignment.

Computational Fluency Test (CFT): (45 points) You will be taken a pre- and post-version of the CFT tests. The pre-version will not be graded but the post-version will be graded and it will be around the week 13 of this semester.
Quick Evaluation Quizzes (35 points): Most Thursdays, there will be a quick weekly evaluation (10 minutes) take place based on the coverage of the weekly assignments (e.g., Web Assign, HW, and reflections).

Quizzes: (75 points) There will be 3 quizzes scheduled regularly throughout the semester. A quiz may be 35 – 45 minutes in length. Each quiz will be announced in one-week advance.

Tests: (70 points) There will be 2 tests given throughout the semester. Each will comprise one entire 50-minute class period.

Final Examination: (80 points) The final examination time will be during finals week which is 12/20/2016. (More information about the content will be provided.)

E. Grading

This is a 4---credit hour class that requires 6–8 hours of outside---of---class study per week. Make sure that you schedule and put in those hours consistently throughout the semester. Your course grade will be calculated on a percentage basis (number of points earned out of number possible) and assigned a corresponding letter:

94-100% = A	90- 93 % = A-	
86-89% = B+	83-85% = B	80-82% = B-
76-79% = C+	73-75% = C	70-72% = C-
66-69% = D+	60-65% = D	
Less than 60% = F		

MATH/MATH 228 Point Distribution (Dr. Kanbir)

Evaluation Item	Counts	Points (Max)	Note
Attendance	1*25	25	Minus 5 for each (Starting with 3rd absence)from the max (25)
Participations	6*5	30	6 times solutions presentations.
Presentation	2*20	40	Children Books and Articles from TCM
Read/Write- Reflection	4*10	40	
Lesson Plans	3*10	30	
Practicum Summary/Reflections	3*10	30	
Web Assign	6*10	60	
Homework (Problem Solving)	3*10	30	
Computational Fluency Test (CFT)	1*45	45	
Quick Evaluation Quizzes	7*5	35	
Quizzes	3*25	75	
Tests	2*35	70	
Final	1*80	80	
Total		**600**	

All of this requires a level of focus that cannot be obtained while you are using your cell phone (including texting, social networking, playing games or browsing the internet) or Reading other material (including preparing for other classes). With both in class and in the School doing practicum work, it is extremely important that you interact with your colleagues, instructor, school personnel, and children in a respectful manner. **The use of a cell phone (which includes texting), reading other materials, and other unproductive and disruptive behaviors (during class or at the practicum location) are considered unprofessional. Please note that unprofessional behaviors have significant negative affect on you and your group and may result in a disposition concerns form.**

Activities such as talking or leaving the classroom while class is in session should be avoided. **Cell phones must be out of sight.**

Disposition Concerns: The Mathematical Sciences Department takes the preparation of teachers seriously. As such, we expect pre-service teachers to treat their preparation with the same level of seriousness. As you may know, the College of Education evaluates teacher candidates based on certain disposition indicators:

- Collaboration Issues: The ability to work together, especially in a joint intellectual effort.
- Honesty/Integrity: The ability to demonstrate truthfulness to oneself and to others; demonstrate moral excellence and trustworthiness.
- Respect: The ability to honor, value, and demonstrate consideration and regard for oneself and others.
- Reverence for Learning: Respect and seriousness of intent to acquire knowledge.
- Emotional Maturity: The ability to adjust one's emotional state to suitable level of intensity in order to remain engaged with one's surroundings.
- Reflection: The ability to review, analyze, and evaluate the success of past decisions in an effort to make better decisions in the future.
- Flexibility: The willingness to accept and adapt to change.
- Responsibility: The ability to act independently, demonstrating accountability, reliability and sound judgment.

We expect these teaching values to be reflected in your classroom behavior and are obligated to report anyone engaged in behaviors that suggest a negative disposition. While there are many behaviors that may result in the issuance of a disposition concern form, some of the most frequent causes are *poor attendance, consistently being late for class, and not completing assigned tasks.* We view each of these as an indication of lack of Reverence for Learning and lack of Responsibility, and any of these will result in the filing of a disposition concerns form.

Any student needing to arrange a reasonable accommodation for a documented disability should contact Disability Concerns at 715-346-3365 or emailing datctr@uwsp.edu and/or by completing the http://www.uwsp.edu/disability/Documents/Request%20for%20Services.pdf

For more information, check out the Assistive Technology website.
http://www.uwsp.edu/assistive/Pages/default.aspx

Student's Record/Track Table			
MATH/MATH ED 228 Point Distributions (Dr. Kanbir)			
Evaluation Item		**Points (Max)**	**Note**
Attendance		25	Minus from the max (30)
Participations (6*5)		30	10 times solution presentations.
Presentation 1		20	Children's Book Talk
Presentation 2		20	TMC article
Read/Write- Reflection 1		10	
Read/Write- Reflection 2		10	
Read/Write- Reflection 3		10	
Read/Write- Reflection 4		10	
Lesson Plan 1		10	Practicum lessons
Lesson Plan 2		10	
Lesson Plan 3		10	
Practicum Summary 1		10	
Practicum Summary 2		10	
Practicum Summary 3		10	
Web Assign		60	Bassarear_ Web
Homework		30	Class Sets
Computational Fluency Test (CFT)		45	Week 1- Pre/ Week 14 Post
Quick Evaluation Quizzes		35	
Quiz 1		25	
Quiz 2		25	
Quiz 3		25	
Test 1		35	
Test 2		35	
Final		80	
Total		**600**	