

MATH 338- SPRING 2022 (3 credits)

FUNDAMENTAL MATHEMATICAL CONCEPTS FOR ELEMENTARY TEACHERS II

Sec. M01 (Marshfield) and Sec. W01 (Wausau) MW 3:30-4:45 p.m.

Sec. M01F and Sec. W01F- FLEX

INSTRUCTOR: Dee Ann Dewitt

OFFICE: Marshfield Room 207A

PHONE: Office 715-389-6549

E-MAIL: ddewitt@uwsp.edu

OFFICE HOURS: MW 2:15-3:00 and by appointment for virtual office hours

MATERIALS:

Text: *Mathematics for Elementary Teachers with Activities 5th edition* by Sybilla Beckman

Materials: required: 3-ring binder with loose-leaf paper, calculator (suggested TI-30X), compass, protractor, ruler, colored pencils, scissors, access to a printer

optional and useful: hole punch, dividers for folder, unlined paper

OBJECTIVES:

This class will ask you to think mathematically and master concepts which will allow you to become effective teachers. Students will explore, examine, discuss, and strengthen their understanding of geometry, measurement, algebra, and logic.

Topics covered will include the following: inductive and deductive reasoning, problem-solving, geometric properties, constructions, polygons, polyhedrons, congruence, similarity, symmetry, transformations, perimeter, surface area, volume, Pythagorean Theorem, systems of measurement and conversions, functions, and slope.

You will need to go beyond basic concepts; you must be willing to understand the underlying concepts of mathematics so that you are able to communicate mathematics well, both in oral and written form.

GRADING:	Exams	200	2 exams- Midterm and Final-100 points each
	Homework Quizzes	100	4 quizzes- 25 points each
	Homework Projects	50	varied assignments
	<u>Participation/Attendance</u>	<u>50</u>	
	Total	400	

CLASS GRADE: Your final class grade will be determined based on the following percentages.

93 – 100 %	A	83 – 86 %	B	73 – 76 %	C	63 – 66 %	D
90 – 92 %	A–	80 – 82 %	B–	70 – 72 %	C–	60 – 62 %	D–
87 – 89 %	B+	77 – 79 %	C+	67 – 69 %	D+	below 60%	F

o Important Dates for Spring Semester

- o Last day to add or drop a 16-week course without a grade – Feb 2
- o Spring break begins 6 p.m. – March 18
- o Classes resume – March 28
- o Last day to drop a 16 wk course – April 8
- o Last day of classes – May 13

EXAMS:

There will be two exams: a midterm and a final exam.

- **Midterm Exam:** during week 8
- **Final Exam:** comprehensive exam- Monday, May 16 2:45-4:45 pm

Missing an exam will result in a 0 unless arrangements have been made **in advance** or a **verifiable emergency** develops just prior to class time (in which case you should contact me as soon as possible). In general, approved make-up tests **MUST** be taken **PRIOR** to the next class meeting.

HOMEWORK:

- **Homework quizzes:** You will be expected to do specific problems from the text or from a handout. These problems will be done on loose- leaf paper and organized in your binder. Random problems will be selected and graded at various times during the semester. There will also be questions based on class notes and discussions. You will be able to use only your notes/problems in your binder. There will be four homework quizzes worth 25 pts. each.
- **Homework projects:** These will also be given throughout the semester. For example, you could be asked to read an article on a pertinent topic, search for further resources/examples of a concept, or present an example/idea to the class. The point totals on these will be varied and will be announced at the time of the assignment.
- You won't understand every topic immediately; in some cases, you will need to ask questions, seek help from others, and spend more time on the topic. Don't wait to ask for assistance.

ATTENDANCE/PARTICIPATION:

Since a significant amount of material is covered during each class period, it is to your advantage to attend each class. It is important that you participate in solving problems and contributing to the class discussion. (FLEX students will need to watch every class video and use the discussion board to communicate with other students. Your instructor will have a zoom call with you to talk specifically about participation.) Attendance/participation points will determine **12.5%** of your final grade in this class.

TECHNOLOGY:

Laptop computers and cell phones may not be used in the classroom without the prior consent of the instructor. This class requires a level of focus and an amount of participation 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). **The use of a cell phone (which includes texting), reading other materials, and other unproductive and disruptive behaviors (during our meetings) are considered unprofessional. Please note that unprofessional behaviors have significant negative affect on you and your class members.** Activities such as talking or leaving the classroom while class is in session should be avoided.

COURSE INTRODUCTION ON CANVAS:

In your **Math 338 Canvas site**, you will find a **Start Here section** with this syllabus and tentative schedule posted as well as a "meet your instructor" post.

There is also a **Student Resources section** which will explain student support on campus, library resources, virtual office hours, and canvas assistance.

Please be sure to read through this material.

COVID-19 CAMPUS PROTOCOL:

FACE MASKS:

- At all UW-Stevens Point campus locations, the wearing of face coverings is mandatory in all buildings, including classrooms, laboratories, studios, and other instructional spaces.
 - Any student with a condition that impacts their use of a face covering should contact the Disability and Assistive Technology Center to discuss accommodations in classes.
 - Please note that unless everyone is wearing a face covering, in-person classes cannot take place. This is university policy and not up to the discretion of individual instructors.
 - Failure to adhere to this requirement could result in formal withdrawal from the course.

OTHER INFORMATION:

- Please monitor your own health each day using this screening tool. If you are not feeling well or believe you have been exposed to COVID-19, do not come to class; email your instructor and contact Student Health Service (715-346-4646).
- As with any type of absence, students are expected to communicate their need to be absent and complete the course requirements as outlined in the syllabus.
- Maintain a minimum of 6 feet of physical distance from others whenever possible.
- Do not congregate in groups before or after class; stagger your arrival and departure from the classroom, lab, or meeting room.
- Wash your hands or use appropriate hand sanitizer regularly and avoid touching your face.

ACCOMMODATIONS:

Inform Your Instructor of Any Accommodations Needed

If you have a documented disability and verification from the [Disability and Assistive Technology Center](#) and wish to discuss academic accommodations, please contact your instructor as soon as possible. It is the student's responsibility to provide documentation of a disability to Disability Services and meet with a Disability Services counselor to request special accommodation *before* classes start.

The Disability and Assistive Technology Center is located in 609 Albertson Hall and can be contacted by phone at (715) 346-3365 (Voice) (715) 346-3362 (TDD only) or via email at datctr@uwsp.edu

Statement of Policy

UW-Stevens Point will modify academic program requirements as necessary to ensure that they do not discriminate against qualified applicants or students with disabilities. The modifications should not affect the substance of educational programs or compromise academic standards; nor should they intrude upon academic freedom. Examinations or other procedures used for evaluating students' academic achievements may be adapted. The results of such evaluation must demonstrate the student's achievement in the academic activity, rather than describe his/her disability.

If modifications are required due to a disability, please inform the instructor and contact the Disability and Assistive Technology Center in 609 ALB, or (715) 346-3365.

ACADEMIC MISCONDUCT:

As a student in this course (and at this university) you are expected to maintain high degrees of professionalism, commitment to active learning and participation in this class, and integrity in your behavior in and out of the classroom.

UWSP Academic Honesty Policy & Procedures

Student Academic Disciplinary Procedures

UWSP 14.01 Statement of principles

The board of regents, administrators, faculty, academic staff and students of the university of Wisconsin system believe that academic honesty and integrity are fundamental to the mission of higher education and of the university of Wisconsin system. The university has a responsibility to promote academic honesty and integrity and to develop procedures to deal effectively with instances of academic dishonesty. 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 must be confronted and must accept the consequences of their actions.

UWSP 14.03 Academic misconduct subject to disciplinary action.

(1) Academic misconduct is an act in which a student:

- (a) Seeks to claim credit for the work or efforts of another without authorization or citation;
- (b) Uses unauthorized materials or fabricated data in any academic exercise;
- (c) Forges or falsifies academic documents or records;
- (d) Intentionally impedes or damages the academic work of others;
- (e) Engages in conduct aimed at making false representation of a student's academic performance; or
- (f) Assists other students in any of these acts.

(2) Examples of academic misconduct include, but are not limited to: cheating on an examination; collaborating with others in work to be presented, contrary to the stated rules of the course; 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; tampering with the laboratory experiment or computer program of another student; 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.

All suspected incidents of academic misconduct shall be handled using the UW System rules, Chapter 14. "Academic misconduct" includes, but is not limited to, the following examples: "cheating on an examination, collaborating with others in work to be presented, contrary to the stated rules of the course; 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; tampering with the laboratory experiment or computer program of another student. (UWS 14.03)" Further definition of "academic misconduct" can be found in UWS 14.03. UWS 14 is available to all students in the library; additionally, all students received a copy of this policy during their orientation.

RELIGIOUS BELIEFS

Relief from any academic requirement due to religious beliefs will be accommodated according to UWS 22.03, with notification within the first three weeks of class.

Wk	DATES	Tentative Schedule: MATH 338 SPRING 2022 MW
Week 1	JAN 24, 26 MW	Introduction- Mathematical Mindsets; Common Core Standards; Inductive and Deductive Reasoning
Week 2	JAN 31, FEB 2 MW	Problem- Solving; Algebra- Expressions, Variables, Equations; Sequences
Week 3	FEB 7, 9 MW	Measurement; Error and Precision; Conversions with Dimensional Analysis
Week 4	FEB 14, 16 MW	Lines, Angles, Circles, Spheres Triangles, Quadrilaterals, and other Polygons
Week 5	FEB 21, 23 MW	Perimeter and Area of Polygons
Week 6	FEB 28, MAR 2 MW	Circumference and Area of Circles; Areas of Irregular Shapes
Week 7	MAR 7, 9 MW	Pythagorean Theorem
Week 8	MAR 14, 16 MW	Review and Midterm Exam
MAR 18-27		SPRING BREAK
Week 9	MAR 28, 30 MW	Polyhedra and Platonic Solids
Week 10	APR 4, 6 MW	Surface Area and Volume
Week 11	APR 11, 13 MW	Reflections, Translations, Rotations; Symmetry
Week 12	APR 18, 20 MW	Congruence, Constructions
Week 13	APR 25, 27 MW	Similarity
Week 14	MAY 2, 4 MW	Functions and Rate of Change
Week 15	MAY 9, 11 MW	Extra topics and Review
FINAL		FINAL EXAM - Monday, May 16 2:45-4:45 pm

As your instructor, I reserve the right to make changes to the course schedule based on the learning pace of the class or other unanticipated circumstances. I will communicate any changes to you as soon as they are made.