MATH-271 – Mathematics for the Elementary School I Spring 2022 (3 credits)

Section 004 MW 12:00 – 1:15 (21974)
Section 001 TR 9:00 – 10:15 (16965)

Instructors: & Learning Assistants:	Primary instructors: **Mrs. Pam Yusko** pyusko@gmu.edu she/her/hers Learning assistants: **Amelia Eggerton, Cassie Thomas, Madison Trimble** Office hours with the instructor and learning assistants will be posted on Blackboard. Virtual hours will have a Zoom link.
Required Materials:	1. **Textbook:** Mathematics for Elementary Teachers: A conceptual Approach; 9th edition (Information coming) 2. **Three Ring Binder and Loose-Leaf Paper:** Use for the reading prep work assignments, worksheets, homework assignments, and class notes. 3. **Everyday Materials:** colored pencils or pens, blank paper, lined paper, and graph paper. 4. **Special Occasion Materials:** a bunch of coins (approximately 20 pennies, 10 nickels, 12 dimes and 10 quarters); a set of at least 50 pencils, and at least 10 rubber bands or small pony-tail holders; printable manipulatives (best if printed on cardstock). 5. **Foam Base Ten Blocks (Set of 161)**: (ones, tens, hundreds and thousands foam blocks can be found as a set online. See Blackboard "Course Materials and Manipulative" tab for helpful links to purchase.) 6. **Technology:** High Speed reliable internet and a computer capable of watching numerous prerecorded videos as well as online office hours. 7. **Scanning Device** 8. 9. **Face Masks**
Course Description:	Concepts and theories underlying elementary school mathematics, including sets, logic, systems of numeration, whole numbers, integers, fractions, decimals, measurement, operations with real numbers, equations, and inequalities. Intended for school educators; does not count toward a major in mathematics. All students will be required to do basic computations without the use of any calculator. **THIS IS NOT A TEACHING METHODS COURSE!!! This is a MATH CONTENT course.**
Preparedness / Collaboration:	During class, we will spend most of our time exploring mathematical ideas in groups. In order to make this course function, I need everyone to come prepared for class and to think carefully about how to make your group a great place to work and learn. Being prepared means: • Doing all assigned readings & watching all videos before class and bringing notes to class • Asking questions about homework and concepts before coming to class / on the discussion board • Bringing all necessary materials to class, as instructed Collaborating in class means: • Making thoughtful contributions to the group discussions and activities • Staying on task • Being an active listener • Being on time and staying engaged for the entire class period
Reading Prep Work and Quizzes	Reading your textbook will be vital in this course. It is required and graded. Some tips and things to be aware of: • You are expected to read each assigned section PRIOR to attending the class. • **Reading comprehension will be evaluated as a quiz at the beginning of each class.** • Reading should be active – read with a pencil, take notes for you binder, and answer the questions asked in the text.

	• Mark anything you have questions about with a sticky note and then come ask one of us about them. Be sure to write yourself notes about what we find together.
Worksheets	In class we will discuss and start working on worksheets. All students must submit these worksheets, either collaboratively or individually. **Collaboration is strongly encouraged.** • Every problem is graded for completeness. • Some problems will be graded based on correctness, clarity, and process (show your work). • These will be submitted on Gradescope. • Late submissions will have a 30% deduction for each 24 hours it is late.
Homework Sheets and Textbook Homework	Homework sheets will be assigned as well as problems from the textbook to help reinforce what is learned from the textbook, worksheets, and class work. • These will be submitted on Gradescope. • Late submissions will have a 30% deduction for each 24 hours it is late.
Mastery Problems	There will be short mastery assignments in this course called Mastery Problems, each with only 1-3 problems, ensuring your understanding of a fundamental concept or methodology. • Mastery Problems will be assigned most weeks. • Mastery Problems are evaluated on a pass/fail basis. To pass, the student must demonstrate complete mastery of the concept tested. • Students have a total of three attempts at a Mastery Problem set to pass. If they do not pass the Mastery Problem set on the first attempt, they have two remaining attempts. • The Mastery Problems average incorporated into the final grade is the percentage of Mastery Problems passed out of the total number of Mastery Problems. Mastery Problems are a substantial part of the final grade. These are opportunities to solidify understanding before the exams and to support students' completion of the course with the essential foundations. **To pass this course, students must demonstrate mastery of the fundamentals.**
Exams & Final:	There are 3 exams in this course, and one comprehensive final exam. Each will contain an oral component and a written component. The exam problems can be more challenging than Mastery Problems. Exam problems will be evaluating a deeper conceptual understanding. • The final exam written component is due by 11:59 pm **Thursday 5/16**.
Extra Credit	There will be opportunities for extra credit.

Grading Scale

Requirements and Grading:	3 Unit Exams	15% EACH, so 45% total
	Final	15%
	Reading Prep Work and Quiz Average	5%
	Worksheet Average	5%
	Homework Average	10%
	Mastery Average	20%
Scale:	100-90%	A
	89.9-80%	B
	79.9-70%	C

	69.9-60%	D
	59.9-0%	F
		+/- will be based on grade distribution

George Mason Information

Academic dishonesty and the GMU Honor Code:	You are expected to follow the GMU Honor Code: https://oai.gmu.edu/mason-honor-code/ No collaboration is allowed on master problems or tests. Any indication that you have worked together, used someone else's ideas, copied, or allowed fellow student to copy your work is a violation of the GMU Honor Code. Please make sure you are clear on which assignments can be done collaboratively. If it is not stated specifically, then collaboration is not allowed. **Some** of the behaviors that will be considered cheating are: • Communicating with another person during an assessment • Copying material from another person for any assignment being graded • Allowing another person to copy from any assignment being graded • Use of unauthorized assistance on any assignment being graded • Use of unauthorized notes, books, calculators or cellphones during an assessment • Providing or receiving a copy of a quiz or exam used in the course
Learning Differences & Special Needs	*If you have a learning or physical difference that may affect your academic work, please see me and contact the Office of Disability Services (ODS) at 993-2474,* http://ods.gmu.edu *. All academic accommodations must be arranged through the ODS.*
Counseling and Psychological Services	Counseling and Psychological Services are available for GMU students. http://caps.gmu.edu 703-993-2380
Equity and Inclusion:	George Mason University is an intentionally inclusive community that promotes and maintains an equitable and just work and learning environment. We welcome and value individuals and their differences including race, economic status, gender expression and identity, sex, sexual orientation, ethnicity, national origin, first language, religion, age, and disability. Please email me if you have any concerns about any feeling of inequity in this course.
University Policies	The University Catalog, http://catalog.gmu.edu, is the central resource for university policies affecting students, faculty and staff conduct in university academic affairs. Other policies are available at http://universitypolicy.gmu.edu/. All members of the university community are responsible for knowing and following established policies.

Withdraw Dates

Dates	Last Day to Add	Last Day to Drop with 100% Refund	Final Drop Deadline (50% Refund)	Unrestricted Withdraw Period (Full Tuition Liability)	Selective Withdraw Period (Full Tuition Liability)
8/23 - 12/15	8/30	2/7	2/14	2/15 – 3/1	3/2 – 4/11

In our class, we are tolerant of all people and the differences that make us all unique.

ACCEPTANCE

TOLERANCE