

MATH 2661C - Mathematics for Elementary and Middle School Teachers I with Co-Requisite Support

Fall 2026 Syllabus, Section 02, CRN 42061,

Credit hours: 6

Instructor

Michele Fredrick-Jacobson

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Public Instructor Information

Instructor Title: Mrs. Fredrick-Jacobson M.S.

Instructor Professional Qualifications: Masters in Mathematics with a minor in computer Science

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Course Description

2661C. Mathematics for Elementary and Middle School Teachers I with Co-Requisite Support. A conceptual development of mathematics topics underlying today's elementary and middle school curriculum. The topics include number theory, operations, functions, and algebraic thinking. Emphasis on multiple approaches and representations, problem solving, and communication of mathematical reasoning. Includes inquiry-based experiences with manipulatives and computing technology. Classroom activities developmentally appropriate for elementary and middle school children. This course includes corequisite support for students requiring remediation in mathematics. Emphasis will be placed on prerequisite skills needed for Algebra, Number and Operations, and Quantity topics as well as just in time review. Prereq.: Math Placement Level 10 or higher on the Mathematics Placement Test. 6 s.h.

Course Readings

Group	Title	Author	ISBN
Required	Problem Solving Approach to Mathematics for Elementary and Middle School Teachers - MyLab Access	Billstein, Rick	8220145718536

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning

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Schedule of Topics and Assignments

Week of	Reading(s)	Proposed Topic	Due/To Prepare for Class
8/24	Chapters 1,2,3 and 8.1	Problem solving, Growth Patterns and Sequences, Logic, Numeration systems, Set theory, and Operations of Whole Numbers and Whole numbers in different bases.	MathLab, Reading Questions, Problem sets, Quiz or Project
8/31	Continue Chapters 1,2,3 and 8.1	Problem solving, Growth Patterns and Sequences, Logic, Numeration systems, Set theory, and Operations of Whole Numbers and Whole numbers in different bases.	MathLab, Reading Questions, Problem sets, Quiz or Project

9/7	Continue Chapters 1,2,3 and 8.1	Problem solving, Growth Patterns and Sequences, Logic, Numeration systems, Set theory, and Operations of Whole Numbers and Whole numbers in different bases.	MathLab, Reading Questions, Problem sets, Quiz or Project
9/14	Continue Chapters 1,2,3 and 8.1	Problem solving, Growth Patterns and Sequences, Logic, Numeration systems, Set theory, and Operations of Whole Numbers and Whole numbers in different bases.	MathLab, Reading Questions, Problem sets, Quiz or Project
9/21	Review Chapters 1,2,3 and 8.1	Review Problem solving, Growth Patterns and Sequences, Logic, Numeration systems, Set theory, and Operations of Whole Numbers and Whole numbers in different bases.	Exam 1
9/28	Chapters 4,5,6 and 8.2	2 (Weeks 6-10) Number Theory, Sets and Operations of Integers, Introduction to Rational Numbers, and Solving Linear Equations.	MathLab, Reading Questions, Problem sets, Quiz or Project
10/5	Continue Chapters 4,5,6 and 8.2	2 (Weeks 6-10) Number Theory, Sets and Operations of Integers, Introduction to Rational Numbers, and Solving Linear Equations.	MathLab, Reading Questions, Problem sets, Quiz or Project
10/12	Continue Chapters 4,5,6 and 8.2	2 (Weeks 6-10) Number Theory, Sets and Operations of Integers, Introduction to Rational Numbers, and Solving Linear Equations.	MathLab, Reading Questions, Problem sets, Quiz or Project
10/19	Continue Chapters 4,5,6 and 8.2	2 (Weeks 6-10) Number Theory, Sets and Operations of Integers, Introduction to Rational Numbers, and Solving Linear Equations.	MathLab, Reading Questions, Problem sets, Quiz or Project
10/26	Review Chapters 4,5,6 and 8.2	Review Number Theory, Sets and Operations of Integers, Introduction to Rational Numbers, and Solving Linear Equations.	Exam 2
11/2	Chapters 6,7 and 8.3-8.4	Sets of Real Numbers, Fractions, Decimals, Percentages, Ratio and Proportional Reasoning, and Functions.	MathLab, Reading Questions, Problem sets, Quiz or Project
11/9	Continue Chapters 6,7 and 8.3-8.4	Sets of Real Numbers, Fractions, Decimals, Percentages, Ratio and Proportional Reasoning, and Functions.	MathLab, Reading Questions, Problem sets, Quiz or Project
11/16	Continue Chapters 6,7 and 8.3-8.4	Sets of Real Numbers, Fractions, Decimals, Percentages, Ratio and Proportional Reasoning, and Functions.	MathLab, Reading Questions, Problem sets, Quiz or Project
11/23	Continue Chapters 6,7 and 8.3-8.4	Sets of Real Numbers, Fractions, Decimals, Percentages, Ratio and Proportional Reasoning, and Functions.	MathLab, Reading Questions, Problem sets, Quiz or Project
11/30	Review Chapters 6,7 and 8.3-8.4	Review Sets of Real Numbers, Fractions, Decimals, Percentages, Ratio and Proportional Reasoning, and Functions.	Exam 3
12/7	Review for the Final		

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