
Credit Hours: 4.0
Prerequisites: Prerequisites: "B-" or better in MATH 1010 OR "C" or better in (MATH 2015 OR MATH 1050) OR Accuplacer CLM score of at least 65 OR ACT Math score of at least 24 OR SAT Math score of at least 580.
Instructor: Michael van Opstall Office: JWB 313
Email: opstall@math.utah.edu Office Hours: MW 12:15-1:15


Course Description: This course is the first in a two-semester sequence of required mathematics courses for elementary school teachers. The sequence is designed to help K-6 preservice teachers develop a conceptual framework for mathematics, especially for those aspects normally experienced in primary and elementary school. Students will spend a six hour practicum in a local school relating their course work to the classroom situation. **Students must complete the practicum in order to pass the course.** There is also a required lab component to this course, described below. Math 4010 covers addition, subtraction, multiplication, and division of real numbers, focusing on multiple representations and conceptual algorithms. The course also focuses on ratio and proportion, as well as basic number theory concepts.

Expected Learning Outcomes: An extensive list of learning outcomes may be found in a separate file under the Files tab on Canvas. The material roughly aligns with chapters 1-8 of the textbook and the OA, NBT, NS, NF, and RP domains of the Common Core State Standards.

Assessment:

- **Homework (10%):** Brief written assignments will be given roughly every day and graded promptly. Additionally, students will prepare two oral presentation problems each throughout the semester. These problems will be presented to the class and turned in on paper.
- **Quizzes (15%):** Every other week, starting from the first week, there will be a roughly 40 minute quiz at the end of class.
- **Midterms (10% each):** There will be three midterm exams, on January 21, February 28, and April 3.
- **Lab Quizzes (10%):** Class is followed on Wednesdays by a mandatory lab component. In this lab section, students will explore the ideas discussed previously in class more deeply. This will also be a time to get help on assigned homework. Lab will culminate in a short quiz.
- **Practicum (10%)**: The practicum assignment is described in a separate file under the Files tab in Canvas.
- **Final Exam (25%)**: The comprehensive final exam will be given on April 29 from 1-3 pm.

Grades will be calculated using the standard scale:

- 93-100%: A
- 90-93%: A-
- 87-90%: B+
- 83-87%: B
- 80-83%: B-
- 77-80%: C+
- 73-77%: C
- 70-73%: C-
- 67-70%: D+
- 63-67%: D
- 60-63%: D-
- 0-60%: E

**ADA Statement:**
The University of Utah seeks to provide equal access to its programs, services, and activities for people with disabilities. If you will need accommodations in this class, reasonable prior notice needs to be given to the Center for Disability and Access, 162 Olpin Union Building, 801-581-5020. CDA will work with you and the instructor to make arrangements for accommodations. All written information in this course can be made available in an alternative format with prior notification to the Center for Disability and Access.

**Addressing Sexual Misconduct:**
Title IX makes it clear that violence and harassment based on sex and gender (which includes sexual orientation and gender identity/expression) is a civil rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, color, religion, age, status as a person with a disability, veteran’s status or genetic information. If you or someone you know has been harassed or assaulted, you are encouraged to report it to the Title IX Coordinator in the Office of Equal Opportunity and Affirmative Action, 135 Park Building, 801-581-8365, or the Office of the Dean of Students, 270 Union Building, 801-581-7066. For support and confidential consultation, contact the Center for Student Wellness, 426 SSB, 801-581-7776. To report to the police, contact the Department of Public Safety, 801-585-2677(COPS).

**Policies and expectations:**
In order to ensure a vibrant learning environment in which we may discuss coursework, no late assignments or labs will be accepted. Similarly, quizzes and exams may not be made up in advance or after the fact without serious extenuating circumstances. The University of Utah student code allows for making up quizzes or exams in advance for “officially sanctioned University Activities …, or government obligations, or religious obligations”. Please contact me at least one week in advance of any such obligations to arrange accommodation.

In general, keep your devices put away during class. Take active part in class discussions and activities. Calculators, but not smart devices are allowed on quizzes and exams.
Academic misconduct will not be tolerated. The Student Code for the University of Utah can be found at: http://regulations.utah.edu/academics/6-400.php

**Official Dates:**
The last day to drop classes is January 18; the last day to withdraw from this class is March 8. Please check the academic calendar for more information pertaining to dropping and withdrawing from a course. Withdrawing from a course and other matters of registration are the student’s responsibility.

**Wellness Statement:**
Personal concerns such as stress, anxiety, relationship difficulties, depression, cross-cultural differences, etc., can interfere with a student’s ability to succeed and thrive at the University of Utah. For helpful resources contact the Center for Student Wellness at www.wellness.utah.edu or 801-581-7776.