



MATH 384 Supervised College Teaching

FALL 2023; AUGUST 21-DECEMBER 8

MATH 384.01: Thursday 9:00AM-9:50AM
Engineering E205

MATH 384.02: Thursday 4:00PM-4:50PM
Weber 202

INSTRUCTOR INFORMATION

Instructor: Anita Pattison

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Instructor: Janet Oien

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Instructor: Will Bromley

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COURSE DESCRIPTION

Introduces math tutors to learning theory and conceptual development. Focuses on teaching practices that encourage a collaborative environment and student engagement. Teaching practices explored include questioning techniques, eliciting student thinking, cooperative learning, facilitating group discussions, growth mindset, productive struggle, etc. This course helps tutors and peer educators understand how people learn and supports them in applying evidence-informed pedagogical techniques.

COURSE PREREQUISITES AND CO-REQUISITES

Prerequisites: None

Co-requisites: Currently employed as a tutor for the Precalculus or Calculus Center at CSU

COURSE GOALS

Upon the completion of this course, you will be able to:

- Demonstrate understanding of the components of an effective learning environment
- Identify strategies for effectively facilitating small group collaboration
- Build knowledge about how people learn
- Differentiate between types of questions (assessing, advancing, funneling, open-ended, close-ended, probing, etc.) and understand when to use the different types
- Demonstrate understanding of Bloom's Taxonomy and utilize this information to increase student's use of higher order thinking
- Assess other students' learning needs and apply strategies grounded in learning theory to facilitate greater understanding of complex concepts

- Assess gaps in understanding and apply differentiated instruction to assist with closing the gaps
- Build knowledge and strategies for equitable and effective learning contexts that value all students
- Evaluate your own teaching and design an action plan to ensure continued growth in your teaching practice

REQUIRED TEXTS AND MATERIALS

Readings and videos are posted on Canvas

GRADING

Assignment	Grade Points	Grade Percentage
In-class Participation <i>(15 classes X 5 points each)</i>	75	37.5%
Readings and assignments for class <i>(11 readings or assignments X 5 points each)</i>	55	27.5%
Self-Observations <i>(2 observations X 10 points each)</i>	20	10%
Practice Goal and Practice Goal Reflection	50	25%
	200	100%

Grade SCALE

90-100%	A
80-89%	B
70-79%	C
60-69%	D
0-59%	F

COURSE CALENDAR

Week	Topic	Readings/Videos/Assignments
1	Course Overview; Creating a positive learning environment	
2	Effectively communicating with students	Use and Connect Mathematical Representations
3	Establishing Math Goals to Focus Learning	Facilitate Meaningful Math Discourse
4	Promoting Reasoning and Sense Making	
5	Promoting a Growth Mindset, Productive Disposition	
6	Questioning Strategies, Listening and Wait Time	
7	Pose Purposeful Questions, Using Bloom's Taxonomy to Form Questions	
8	Metacognition	
9	Giving Effective Feedback	
10	Goal Setting and Action Plan	
11	Motivating Students for Success	
12	Facilitating Student Interactions in Group Work	

13	Elicit and Use Evidence of Student Thinking	
14	Support Productive Struggle in Learning Mathematics	
15	Access and Equity	

PRINCIPLES OF COMMUNITY

Purpose: The Principles of Community support the Colorado State University mission and vision of access, research, teaching, service and engagement. A collaborative, and vibrant community is a foundation for learning, critical inquiry, and discovery. Therefore, each member of the CSU community has a responsibility to uphold these principles when engaging with one another and acting on behalf of the University

Inclusion: We create and nurture inclusive environments and welcome, value and affirm all members of our community, including their various identities, skills, ideas, talents and contributions.

Integrity: We are accountable for our actions and will act ethically and honestly in all our interactions.

Respect: We honor the inherent dignity of all people within an environment where we are committed to freedom of expression, critical discourse, and the advancement of knowledge.

Service: We are responsible, individually and collectively, to give of our time, talents, and resources to promote the well-being of each other and the development of our local, regional, and global communities.

Social Justice: We have the right to be treated and the responsibility to treat others with fairness and equity, the duty to challenge prejudice, and to uphold the laws, policies and procedures that promote justice in all respects.

ACADEMIC INTEGRITY POLICY

Academic integrity is conceptualized as doing and taking credit for one's own work. Violations of the university's academic integrity standards include, but are not limited to:

- Cheating – includes using unauthorized sources of information and providing or receiving unauthorized assistance on any form of academic work or engaging in any behavior specifically prohibited by the faculty member.
- Plagiarism – includes the copying of language, structure, ideas, or thoughts of another, and representing them as one's own without proper acknowledgment.
- Unauthorized Possessions or Disposition of Academic Materials – includes the unauthorized selling or purchasing of examinations or other academic work; stealing another student's work; unauthorized entry to or use of material in a computer file; and using information from or possessing exams that an instructor did not authorize for release to students.
- Falsification – includes any untruth, either verbal or written, in one's academic work.
- Facilitation – includes knowingly assisting another to commit an act of academic misconduct.

At a minimum, violations will result in a grading penalty in this course and a report to the Office of Conflict Resolution and Student Conduct Services.

CSU HONOR PLEDGE

Academic integrity lies at the core of our common goal: to create an intellectually honest and rigorous community. Because academic integrity, and the personal and social integrity of which academic integrity is an integral part, is so central to our mission as students, teachers, scholars, and citizens, I will ask that you uphold the CSU HONOR PLEDGE as part of completing your work in this course.

"I have not given, received, or used any unauthorized assistance."

UNIVERSAL DESIGN FOR LEARNING

I am committed to the principle of universal learning. This means that our classroom, our virtual spaces, our practices, and our interactions be as inclusive as possible. Mutual respect, civility, and the ability to listen and observe others carefully are crucial to universal learning.

If you are a student who will need accommodations in this class, please contact me to discuss your individual needs. Any accommodations must be discussed in a timely manner prior to implementation. A verifying memo from Student Disability Center may be required before any accommodation is provided.