This course covers the following topics

- Propositions, predicates, logic, and proofs
- Sets, functions, and operations on sets and functions
- Proof techniques
- Sequences and strings
- Intro to combinatorics

- Relations, classification of relations
- Complexity of algorithms (asymptotic notation)
- Intro to recursive algorithms
- Graphs
- Trees

## **Class Meetings:**

348-01: 14-246 - MTWR 8:10 - 9:00 348-02: 14-252 - MTWR 9:10 - 10:00 348-03: 14-246 - MTWR 10:10 - 11:00

Instructor: Dr. Theresa Migler, tmigler@calpoly.edu, 14-226

Office Hours: TR 11:00-11:30, M 1-2, W 11-12

# Teaching Assistant:

Nicole Hill - nmhill@calpoly.edu

Textbook: Discrete Mathematics and its Applications, (7th Edition), Kenneth Rosen, McGraw Hill, 2012

#### **Grade Policy:**

Homework Quizzes 50% Midterm 20% Final 30%

**Homework Quizzes**: You will be given weekly homework assignments "due" each Thursday. There will be quiz given at the beginning of class each Thursday with problems taken directly from the homework. Your actual homework will not be collected. **There will be no make-up quizzes.** Your lowest quiz score will be dropped.

Course Website: You will find all course information on PolyLearn.

Who/How to Contact: Contact your fellow students if you have missed class and want to know what was covered. Lab/office hours are a great time to receive clarification on course topics.

**Note about e-mail**: All course related questions should be discussed during class or in office hours. I do not respond to e-mail on evenings or weekends. When you communicate online with your classmates or instructor, good manners are expected.

Students with Disabilities: If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both your instructor and the Disability Resource Center, Building 124, Room 119, at (805) 756-1395, as early as possible in the term.

Classroom Etiquette: Out of respect for your classmates, there will be no computers allowed in the classroom and no texting.

http://www.sciencedirect.com/science/article/pii/S0360131512002254

http://www.cbc.ca/news/technology/laptop-use-lowers-student-grades-experiment-shows-1.1401860

Inclusion and Respect: Cal Poly considers the diversity of its students, faculty, and staff to be a strength and critical to its educational mission. Cal Poly expects every member of the university community to contribute to an inclusive and respectful culture for all in its classrooms, work environments, and at campus events. For more information on resources related to diversity and inclusion, please visit the Office of University Diversity & Inclusion website at diversity.calpoly.edu.

Basic Needs: 27% of Cal Poly students experience food insecurity, or inadequate access to food. 12% experience homelessness. These challenges are common among college students and they lead to severe consequences for mental, physical, and academic wellbeing. If you or someone you know is having difficulty accessing basic needs like enough food or stable housing, please know that our campus offers a number of free and effective resources. Visit basicneeds.calpoly.edu for more information or come speak with me and I will gladly help you access resources.

**Academic Integrity**: The University does not condone academic cheating or plagiarism in any form. Students are expected to behave in accordance with the University expectations. I encourage you to collaborate on your homework assignments and for your design of programming assignments. Coding, quizzes, and the final exam must be solitary efforts.

### **Important Dates:**

## • No Class

- No Class Monday, January 20th
- No Class Monday, February 17th
- No Class Monday, March 9th Thursday, March 12th

#### • Midterm Exam:

- In class, Thursday, February 13th

#### • Final Exam:

- 348-01: Monday, March 16th **8am**-10am

- 348-02: Wednesday, March 18th **8am**-10am

- 348-03: Wednesday, March 18th 10am-**noon**