Math 3342: Theory of Computation
Spring 2026
TF 12:30-1:20, W 1:00-1:50 Bannow 341

Instructor Chris Staecker
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Office Hours: TF 11-12:30, 1:30-2, W 12-1, 2-3 or by appointment
Office hours are in my office or by Zoom: `https://fairfield.zoom.us/j/5514910533`

Final Exam Friday May 8, 11:30–2:30

Course Website `https://faculty.fairfield.edu/cstaecker/courses/2026s3342/`

Textbook Formal Language: A Practical Introduction by Webber

Course Description

This course explores what computers can and can't do by examining simple mathematical models of computation. Topics include finite state machines, regular expressions, non-determinism, pushdown automata, context-free grammars, and Turing machines. We will see that there are limits to what computers can do, and in doing so, we will learn about what a computer really is; you may be surprised.

Homework

Homework will be assigned each week. Assignments will be excerpts from the textbook exercises, and will be posted at the course website. Students are encouraged to work together on assignments, but each must hand in their own papers.

Homework will be due each Wednesday night at 11:59PM, with assignments covering the material from the previous week. All assignments will be handed in electronically at Gradescope.

Late homeworks without excuse will lose 1/3 credit for each calendar day.

Quizzes

At the beginning of each class on Friday, a short quiz will be given, covering that week's material. Quiz questions are meant to be similar to the easier textbook questions. Missed quizzes will only be excused with good reasons.

Students will not use calculators or any other electronic gadgetry during quizzes.

Exams

There will be 2 midterm exams, during regularly scheduled class time on February 20 and April 10. Exam makeups or rescheduling will be permitted only in extreme circumstances.

Students will not use calculators or any other electronic gadgetry during exams.

The two midterm exams will be weighted equally in your course grade, with the final exam weighted double. The final exam will be cumulative, but the midterm exams will not be.

Grading: Choose your own ratios

Your course grade will be inspired by an average, with the lowest quiz and homework scores dropped. The grading is in three categories, and each student will choose their own ratios for the grades.

Homework	??%
Quizzes	??%
Exams	??%

Sometime on or before February 7, each student must email the professor with their preferred grade ratios. Choose a percentage for each category. The rules are:

- Homework must be no more than 30%

- Quizzes & Exams must each be no less than 20%

- You can't change your mind later!

Online submission

No assignments, quizzes, or tests will be submitted on paper. All work will be submitted online at Gradescope.com. Students will take phone pictures of their work and submit it to Gradescope.

Office hours

The Professor regards visits to office hours as part of the instruction for this course. Responsible students in this course are expected to visit the Professor occasionally for help with homework and other class material. Class assignments are meant to stretch the abilities of the students, and the Professor expects even the best students to benefit from individual discussion. Students are encouraged to come in small groups if they don't want to come alone.

Counseling services

Fairfield University provides mental health services to support the academic and personal success and well-being of students. Counseling & Psychological Services offers confidential psychological services to help students manage personal challenges that may interfere with your well-being. Counseling & Psychological Services is free for full-time undergraduate students.

For help, contact Counseling and Psychological Services at (203) 254-4000 ext 2146.