Math 1121: Applied Calculus I
Spring 2024
Section 03: TF 11:00–12:15 Bannow 138
Section 04: TF 2:00–3:15 Bannow 138

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Office Hours: TF 10–11, W 9–11 or by appointment
Office hours are in my office or by Zoom: `https://fairfield.zoom.us/j/5514910533`

Course Website `http://faculty.fairfield.edu/cstaecker/courses/2024s1121/`

Textbook Lial, Greenwell, Ritchey, *Calculus with Applications*, twelfth or eleventh edition

Final Exam Section 03: Tuesday May 7, 11:30 AM
Section 04: Tuesday May 7, 3:00 PM

Course Content

Topics in this course include: foundations of the calculus; differentiation of algebraic, exponential, and logarithmic functions; extrema and curve sketching; applications of derivatives; antiderivatives; the Fundamental Theorem of Calculus; and integration of algebraic functions.

Mastery-based assessment

This course is graded based on *topic mastery*. The course material has been broken down into about 30 different specific objectives to master. Each student's progress on each objective will be tracked in a checklist.

Students demonstrate their mastery of each objective by correctly answering exam questions, each of which is clearly labeled as assessing one specific objective. If a student answers an exam question correctly, this objective will be marked as "mastered". Once an objective is mastered, the student does not need to answer any more questions addressing that objective.

There is no penalty if a student answers a question incorrectly, but this objective will remain unmastered. The student can master that objective by correctly answering questions on later exams. Each exam will include questions addressing *all* objectives covered so far, but students only need to answer questions covering objectives that they have not yet mastered.

Homework

Homework is due every Tuesday evening. The homework does not need to be submitted during the class meeting, any time before midnight on the due date is acceptable. Assignments are posted at the class website.

The homework will be graded in the traditional way (not "mastery-based"). Students will get a grade on each assignment based on completeness and correctness of the answers, with partial credit given for wrong answers.

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

Exams

There will be 3 in-class exams, completed during regularly scheduled class time on February 16, March 22, and April 26. Exam makeups or rescheduling will be permitted only in extreme circumstances.

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

Students do not receive a "grade" for a completed exam, they simply are awarded mastery points on some of their objectives. Because of this, there is no traditional partial-credit for incorrect answers on exams.

After finishing the fourth exam, on the last day of class, students will have already mastered most of the course objectives. There will be no new topics on the final exam, but this is the last chance for students to finish their unmastered objectives. Students who have already mastered all objectives before the final exam do not need to take it.

Online submission

No assignments 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.

Grading

Your course grade will be inspired by an average, with the lowest homework score dropped. The grading is in two categories:

Mastery	75%
Homework	25%

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.