

**The University of Iowa**  
**The College of Liberal Arts and Sciences**  
**Spring 2024**

**Title of Course:** MATH 1860: Calculus II, Section OFFF  
<https://myui.uiowa.edu/my-ui/courses/details.page?ci=149672&id=1007687>

**Course meeting time and place:** 1:30PM - 2:20PM MWF 110 [MLH](#)

**Department of Mathematics:** <https://math.uiowa.edu>

**Course ICON site:** To access the course site, log into [Iowa Courses Online \(ICON\)](#)  
<https://icon.uiowa.edu/index.shtml> using your Hawk ID and password.

**Course Home**

The College of Liberal Arts and Sciences (CLAS) is the home of this course, and CLAS governs the add and drop deadlines, the “second-grade only” option (SGO), academic misconduct policies, and other undergraduate policies and procedures. Other UI colleges may have different policies.

**Instructor: Mohammad F. Tehrani**

Office location: B1E MLH

Student drop-in hours (tentative): M/W 12:30 AM-1:30 PM and Th 1:00-2:00 PM

*You would be able to find me in my office at other times as well; stop by or email.*

E-mail: [mohammad-tehrani@uiowa.edu](mailto:mohammad-tehrani@uiowa.edu)

DEO: Professor Ryan D. Kinser, 14A MLH ([ryan-kinser@uiowa.edu](mailto:ryan-kinser@uiowa.edu))

**Discussions: MATH 1860:0F30 and 0F32**

**TA:** Jacob Miller and Sam Holen

**Office hours and location:** To be decided in the first meeting (based on what works best for the students)

**Time and location of discussions:**

Section 0F30 - 9:30A - 10:20A T/Th 105 [MLH](#)

Section 0F32 - 8:30A - 9:20A T/Th 105 [MLH](#)

**Description of Course.** This is a continuation of MATH:1850. In this course you will learn about one-variable calculus beyond Calculus I. The subjects covered include techniques of integration, applications such as calculating area of surfaces, introduction to differential equations, and infinite sequences and series.

### Learning Objectives

By the end of this course, you should be ready to use integration techniques and differential equations in a variety of applications.

### Textbook/Materials. **Single Variable Calculus: Early Transcendentals** Required

ISBN: 9780357022269

Author: Stewart James; Clegg Daniel K.; Watson Saleem

Publisher: Cengage ©2020

Approximately \$53.12 will be billed to your U-Bill

### Grading System and the Use of +/-

I will use the plus/minus for grades. Cutoffs for letter grades, based on the overall sum of the individual grades (HW, Mid 1, Mid 2, Final) explained below, are tentatively as follows

A range	90+
B range	75-89
C range	60-74
D	50-59
F	0-49

You should not view this as a fixed predetermined grade scale, but rather as a guaranteed *minimum scale* (e.g. the cutoff line for A- may end up being 86 instead of 90 but it will not be increased).

### Course Grades

Final course grades will be assessed based on your performance in the following activities:

- (i) **Homework** 10%
- (ii) Mini Midterm **one** 18%
- (iii) Mini Midterm **two** 18%
- (iv) Mini Midterm **three** 18%
- (v) **Final** 36%

### Time and Location of the Exams

- **Mini Midterm 1:** Mon 02/19, in class (50 minutes)
- **Mini Midterm 2:** Mon 03/18, in class (50 minutes)
- **Mini Midterm 3:** Mon 04/15, in class (50 minutes)

- **Final:** (1 hour and 50 minutes) *The final examination date and time will be announced by the Registrar generally by the fifth week of classes. I will announce the final examination date and time at the course ICON site once it is known. Do not plan your end of the semester travel plans until the final exam schedule is made public. It is your responsibility to know the date, time, and place of the final exam.*

### **Course Expectations & Grading (+/- grading will be used)**

**Homework:** 13-14 assignments; due every Tuesday in the beginning of the Discussion meeting. Only the highest 10 grades will be considered towards your HW grade.

**Mini Midterms 1-3:** Only covers the chapters preceding that midterm (will be specified closer to each exam). The exam will happen during the class time and would contain only 3,4 questions.

**Final Exam:** Comprehensive (6-8 questions).

*Exam questions will be chosen from the weekly HW questions or a collection that will be provided before each exam (so no surprises).*

### **Tentative Schedule**

**Review of Calc I.** (1 week)

**Chapter 7.** Integration by parts, Trigonometric Integrals and Substitution; Integrations of Rational Functions and Strategy for Integration; Numerical Integration and Improper Integrals. (3 weeks)

**Chapter 8.** Arc Length and Surface Area; Application to Physics, Engineering, Economics, Biology and Statistics. (3 weeks)

**Chapter 9.** Solving Differential Equations; Applications. (2 weeks)

**Chapter 10.** Parametric curves; Polar Coordinates. (3 weeks)

**Chapter 11.** Sequences and Series; Integral and Comparison Tests; Alternating Series, Convergence, Ratio and Root Tests; Strategy for Testing Series and Power Series; Power Series, Taylor Series, and Applications. (3 weeks)

### **Academic Honesty and Misconduct**

All students in CLAS courses are expected to abide by the CLAS Code of Academic Honesty. Undergraduate academic misconduct must be reported by instructors to CLAS according to these procedures. Graduate academic misconduct must be reported to the Graduate College according to Section F of the Graduate College Manual.

You are encouraged to collaborate with other classmates on homework assignments but you are required to present your own conclusions/writing.

### **Student Complaints**

Students with a complaint about a grade or a related matter should first discuss the situation with the instructor and/or the course supervisor (if applicable), and finally with the Director or Chair of the school, department, or program offering the course.

Undergraduate students should contact [CLAS Undergraduate Programs](#) for support when the matter is not resolved at the previous level. Graduate students should contact the [CLAS Associate Dean for Graduate Education and Outreach and Engagement](#) when additional support is needed.

### **Drop Deadline for this Course**

You may drop an individual course before the deadline; after this deadline you will need collegiate approval. You can look up the [drop deadline for this course](#) here. When you drop a course, a “W” will appear on your transcript. The mark of “W” is a neutral mark that does not affect your GPA. Directions for adding or dropping a course and other registration changes can be found on the [Registrar’s website](#). Undergraduate students can find policies on dropping and withdrawing [here](#). Graduate students should adhere to the [academic deadlines](#) and policies set by the Graduate College.

### **Date and Time of the Final Exam**

The final examination date and time will be announced by the Registrar generally by the fifth week of classes and it will be announced on the course ICON site once it is known. **Do not plan your end of the semester travel plans until the final exam schedule is made public. It is your responsibility to know the date, time, and place of the final exam.** According to Registrar's final exam policy, students **have a maximum of two weeks after the announced final exam schedule** to request a change if an exam conflict exists or if a student has more than two exams in one day (see the [policy](#) here).

### **Calendar of Course Assignments and Exams**

Homework assignments will be uploaded to ICON as a PDF file.

### **College of Liberal Arts and Sciences (CLAS) Course Policies**

#### **Attendance and Absences**

You are required to attend the class regularly.

#### **Exam Policies**

#### **Communication: UI Email**

Students are responsible for all official correspondences sent to their UI email address (uiowa.edu) and must use this address for any communication with instructors or staff in the UI community.

#### **Where to Get Help**

You are encouraged to talk to me, Director of Undergraduate Study, or your mentor if you need help with anything.

**University Policies**

**Accommodations for Students with Disabilities**

**Basic Needs and Support for Students**

**Classroom Expectations**

**Exam Make-up Owing to Absence**

**Free Speech and Expression**

**Mental Health**

**Military Service Obligations**

**Non-discrimination**

**Religious Holy Days**

**Sexual Harassment/Misconduct and Supportive Measures**

**Sharing of Class Recordings**