



MATH 1110.009  
Calculus I  
Fall 2018  
MWF 2:30-3:20 pm, Malott 224

**Instructor**

Yuwen Wang  
yw657@cornell.edu  
Office Hours: See course website

**Course Description:** 4 credits. Topics include functions and graphs, limits and continuity, differentiation and integration of algebraic, trigonometric, inverse trig, logarithmic, and exponential functions; applications of differentiation, including graphing, max-min problems, tangent line approximation, implicit differentiation, and applications to the sciences; the mean value theorem; and antiderivatives, definite and indefinite integrals, the fundamental theorem of calculus.

**Prerequisite:** three years of high school mathematics (including trigonometry and logarithms) or a precalculus course (e.g., MATH 1101). MATH 1110 can serve as a one-semester introduction to calculus or as part of a two-semester sequence in which it is followed by MATH 1120 or MATH 1220.

**Forbidden Overlap:** Due to an overlap in content, students will not receive credit for both MATH 1110 and MATH 1106.

**Other Math Courses:** For students looking to fill a general mathematics requirement, there are other courses that may also satisfy this requirement that you might want to consider. For example:

- Math 1105 – Finite Math for the Life and Social Sciences, (Fall) 3 credits
- Math 1106 – Calculus for the Life and Social Sciences, (Spring) 3 credits
- Math 1300 – Mathematical Explorations, (Fall) 3 credits
- Math 1340 – Mathematics & Politics, (Spring) 3 credits
- Math 1710 – Statistical Theory & Application, (Fall & Spring) 4 credits

**Textbook:** Hass, Heil, and Weir, Thomas' Calculus: Early Transcendentals, Single Variable (Fourteenth edition)

**Course Webpage:** <http://pi.math.cornell.edu/~ywang/2018fa-math1110/>.

**Format and Procedure:** In order to create an active learning environment, there will be pre-class exercises to complete at home. Classes will consist of completing worksheets, with instructors lecturing for short periods only when necessary.

## Grade Distribution:

- Prelim 1: 15%
- Prelim 2: 25%
- Final exam: 35%
- Online Homework: 5%
- Written Homework: 10%
- Surveys: 4%
- Quizzes: 6%.

## Exams

- Both prelims and the final will be outside of class time, see schedule for more details. All exams for this course are closed books. No calculators are allowed (they would actually not be useful). You can take one 4x6 in index card (it will be given to you in class by your instructor). You can put whatever you want on it (on both sides). The only limitations are that it must be handwritten and you must be able to read it by yourself.
- **Take your student ID with you** as we will be verifying them.
- **Sickness on the day of a prelim/final exam:** if you are very ill or have a serious emergency on the day of a prelim or the final exam, you should contact your instructor and put in copy the course assistant Maru Sarazola (mes462@cornell.edu) as soon as possible. (You risk getting an 'F' on a prelim (or the exam) if you miss the prelim for any reason and then try to explain later.)
- **Final exam:** pursuant to Cornell's policy, students who have 3 exams which all start and end in a 24 hour period (in other words, you must have exams in 3 consecutive exam periods) may request a make-up exam at another time. For example: having exams at 9AM, 2PM and 7PM the same day qualify, or having exams at 2PM, 7PM and one at 9AM the next day qualifies. However, having exams at 9AM, one at 2PM and one at 9AM the next day does not qualify for this accommodation.

## Online Homework

- There are weekly WeBWorK homework to be completed by Tuesday 10:00pm (see schedule for exceptions).
- During the first few days of the semester verify that you can log in to WeBWorK using the Blackboard link, if you have any issues contact the course assistant Maru Sarazola (mes462@cornell.edu).
- Your two worst WeBWorK grades will be ignored when calculating final grades.

## Written Homework

- Weekly written homework will be posted on Blackboard, these must be uploaded to Gradescope by Tuesday 10:00pm (see schedule for exceptions).
- Written homework is designed to make you think more deeply about the material and learn to properly present math work. A part of the written homework will be for the quality of the presentation of your answers.
- During the first few days of the semester verify that you can log in to Gradescope using the Blackboard link, if you have any issues contact the course assistant Maru Sarazola (mes462@cornell.edu).
- Your two worst written homework grades will be ignored when calculating final grades.

## Surveys

- You will have to complete two pre- and post- surveys (the Precalculus Concept Inventory and the Mathematics Attitudes and Perceptions Survey), through Blackboard.
- Your instructor might ask you to complete the **Nuts & Bolts questionnaire** which will be given on Blackboard after a few weeks of the semester. This survey is designed to give your instructor early feedback on teaching and to help us identify problems and make improvements at an early stage.
- There will be exam wrappers surveys after both prelims.

## Quizzes

- There will be three short in-class quizzes to be administered before the prelims and finals (see schedule), you will be updated in class about the exact day of the quizzes.

## Important Dates:

|                |   |
|----------------|---|
| September 3    | Labor Day, no classes.  |
| September 6    | Last day to add a course.   |
| September 25   | Prelim I, 7:30-9:00pm.  |
| October 8 & 9  | Fall break, no classes.   |
| October 18     | Last day to drop a course or change grading option.                                     |
| October 29     | Prelim II, 7:30-9:00pm.   |
| November 21-23 | Thanksgiving break, no classes.   |
| November 16    | Last day to withdraw from the class by petition (a "W" will appear on your transcript). |
| December 4     | Last day of class.  |
| TBA            | Final exam.   |

## University Policies:

### Accessibility Services

- Cornell University is committed to ensuring access to learning opportunities for all students. Student Disability Services (SDS) is the campus office that collaborates with students who have disabilities to provide and/or arrange reasonable accommodations.
- If you are registered with SDS and have a faculty notification letter dated for this semester, please contact me early in the semester to review how the accommodations will be applied in the course. If you have an immediate access need, please see me after class.
- If you have, or think you have, a disability in any area such as, mental health, attention, learning, chronic health, sensory, or physical, please contact the SDS office to arrange a confidential discussion regarding equitable access and reasonable accommodations.
- Students with short-term disabilities, such as a broken arm, can often work with instructors to minimize classroom barriers. In situations where additional assistance is needed, students should contact the SDS as noted above.
- If you are registered with SDS and have questions or concerns about your accommodations please contact your SDS Counselor.

### Academic Integrity

- [Cornell's code of academic integrity](#) applies to this and all other courses. In particular, academic misconduct of any kind may result in a grade penalty or the assignment of a failing grade.
- You may collaborate with other students on homework, indeed you are encouraged to do so. However, for maximum benefit, you should try hard to do all the problems yourself before consulting others. What you turn in should be your own account expressed in your own words. Copying someone else's homework and presenting it as your own will be treated as a violation of Cornell's Academic Integrity Code, as will copying solutions that you might find on the internet or elsewhere.
- Students agree that by taking this course all required papers may be subject to submission for textual similarity review to [Turnitin.com](#) for the detection of plagiarism. All submitted papers will be included as source documents in the [Turnitin.com](#) reference database solely for the purpose of detecting plagiarism of such papers. Use of the [Turnitin.com](#) service is subject to the Usage Policy posted on the [Turnitin.com](#) site.

### Inclusivity Statement

- We understand that our members represent a rich variety of backgrounds and perspectives. The mathematics department is committed to providing an atmosphere for learning that respects diversity.