MATH 101 Calculus I
Spring 2020, Bryn Mawr College
Monday, Wednesday, Friday 1:10-2:00 pm

Faculty Information

Lecturer: Isaac Sundberg

Pronouns: he/him/his

Email: icraig@brynmawr.edu

Office: Park 360

Office hours: Tuesday, Thursday 1:00-3:00pm
   or by appointment

Course Description

This is the first in a sequence of two courses that covers single-variable calculus. Topics include functions, limits, continuity, derivatives, differentiation formulas, applications of derivatives, integrals, and the fundamental theorem of calculus.

Prerequisite

Students should have a reasonable command of high-school mathematics (including algebra, geometry, and trigonometry).

Course Materials

Textbook: Calculus: Single and Multivariable, 6th Edition, by Hughes-Hallett, et al.
   It is extremely important to obtain a copy of the textbook. Three physical copies are available in Collier Library for your use. Note that this is also the required text for Math 102, the next course in the calculus sequence. I am able to assist you in obtaining a textbook upon request.

Writing utensil: Paper, pencil, and eraser.
   Note taking is an extremely important part of the learning process, so a regular notebook is highly encouraged. Moreover, all assignments will be submitted in paper, as a physical copy of your work. I recommend writing homework in pencil; exams **will be** written in pencil. I am able to provide writing utensils upon request.

Course Strategy

Students should expect to spend 1-2.5 hours **per class meeting** on homework with additional time spent reading the section and reviewing as needed to understand the material. The total time spent on the course outside of class is expected to be around 10 hours per week. More time may be needed if a student is uncertain of some background material.

Evaluation Methods

Grades will be determined based on the following components:

(1) Homework assignments (20%)
   There will be homework assignments handed in before each class. These are a key component of the course, as they are a first chance to practice and receive feedback before the midterms. Each assignment will be announced in class, on Moodle, and on the course webpage. In order for an assignment to be accepted it must:

- be an acceptable size (e.g. notebook or A4 paper),
- include your name,
- be neat (e.g. legible writing, no notebook fringes, stapled when necessary).

   Each student is allowed two short-term extensions (less than a week) throughout the semester, which must be granted **before** the assigned due date. Additional extensions may be granted, but they are not guaranteed.

(2) Quizzes and Reading Assignments(15%)

There will be weekly in-class quizzes each Friday. Make-up quizzes will only be administered if arrangements are made **in advance**. The lowest quiz score will be dropped at the end of the semester. To be prepared for these quizzes, it is essential to stay up-to-date with the reading and homework. It will also be helpful to review your notes from class and work additional practice problems as needed.

There will be four reading assignments throughout the semester. These assignments are meant to give you the opportunity to sit down and think about calculus without worrying about numbers, formulas, computations, etc. Reading assignments will be assigned on certain Mondays and will be due the following Monday.

(3) Midterms (45%)

There will be three in-class midterms administered throughout the semester, each accounting for 15% of your grade (a total of 45%). Makeup midterms will only be given for unforeseen absences and must be taken within one week of the originally scheduled date.

(4) Final Exam (20%)

The Final exam will be cumulative and cover all topics; it will be longer than the midterms. The exam date and time will be self-scheduled between May 4 – May 15.

Throughout the semester, you may check your grade by scheduling an appointment.

Honor Code

From the Bryn Mawr College Honor Code: "Our intellectual and social development requires freedom born from trust. For growth requires more than blind adherence to a code of conduct, it requires reflection-reflection upon our actions and how our actions affect those with whom we share the community. Such reflection is only possible when one's judgment is trusted."

As an enrollee in this course, you will adhere to the academic resolutions outlined in the BMC Honor Code, as it applies to ALL work you complete for this course. You may read the full Code by clicking the following link: http://sga.blogs.brynmawr.edu/honor-board/honor-code/.

Attendance & Participation

Regular participation is required and expected of all students in an effort to create a classroom conducive to learning. Attendance to all class meetings is highly recommended in order to be successful in the class.

Extra Help

If you are not able to attend the set times, please make use of my office hours or make an appointment. You may also email me and I will respond as quickly as I can, but keep in mind that the average turn around response is 24 hours.

Peer tutoring services are available through the Dean's Office. As an undergraduate student enrolled in Math B101, you are eligible to receive peer tutoring from undergraduate student tutors at no expense. This is another great way to get help. Please see http://www.brynmawr.edu/deans/acad_support/tutoring2.shtml for details.

Accommodations

Bryn Mawr College is committed to providing equal access to students with a documented disability. Students needing academic accommodations for a disability must first register with Access Services. Students can call 610-526-7516 to make an appointment with the Director of Access Services, Deb Alder, or email her at dalder@brynmawr.edu to begin this confidential process. Once registered, students should schedule an appointment with the professor as early in the semester as possible to share the verification form and make appropriate arrangements. Please note that

accommodations are not retroactive and require advance notice to implement. More information can be obtained at the Access Services website (http://www.brynmawr.edu/access-services/).

Any student who has a disability-related need to record this class first must speak with the Director of Access Services and to me, the instructor. Class members need to be aware that this class may be recorded.

Axioms (from Federico Ardila's webpage)

- Axiom 1. Mathematical potential is distributed equally among different groups, irrespective of geographic, demographic, and economic boundaries.

- Axiom 2. Everyone can have joyful, meaningful, and empowering mathematical experiences.

- Axiom 3. Mathematics is a powerful, malleable tool that can be shaped and used differently by various communities to serve their needs.

- Axiom 4. Every student deserves to be treated with dignity and respect.

The following calendar is a tentative schedule and is subject to change based on class pacing.

Week	Dates	Schedule
1	Jan 20 - Jan 24	Syllabus; Introduction to Calculus; Sections 1.1 and 1.3
2	Jan 27 - Jan 31	Sections 1.2, 1.4, and 1.5
3	Feb 3 - Feb 7	Sections 1.6 - 1.7, Reading Assignment 1
4	Feb 10 - Feb 14	Section 1.8; Review
5	Feb 17 - Feb 21	Midterm 1 (2/17); Sections 2.2 - 2.3
6	Feb 24 - Feb 28	Sections 2.3 - 2.5; Reading Assignment 2
7	Mar 2 - Mar 6	Sections 3.1 - 3.3
8	Mar 9 - Mar 13	Spring Break
9	Mar 16 - Mar 20	Section 3.4; Review
10	Mar 23 - Mar 27	Midterm 2 (3/23); Sections 3.5, 3.6, and 3.10
11	Mar 30 - Apr 3	Sections 4.1, 4.2, 4.6, and 4.7; Reading Assignment 3
12	Apr 6 - Apr 10	Sections 5.1 and 5.2; Review
13	Apr 13 - Apr 17	Midterm 3 (4/13); Sections 5.3 and 5.4
14	Apr 20 - Apr 24	Sections 6.1, 6.2, and 6.4; Reading Assignment 4
15	Apr 27 - May 1	Review
16	May 4 - May 8	Final Exam Period; Last Senior Final 5/9 at 9pm
17	May 11 - May 15	Final Exam Period; Last final 5/15 at 12:30pm