

MATH 121: CALCULUS 1, PART 1, Fall 2017

Section 2: MW 1:20 PM - 2:40 PM, Exley 121

Section 3: TR 1:20 PM - 2:40 PM, Exley 109

Instructor: Prof. Alyson Hildum

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Office hours: Wednesday 3:30 PM - 4:20 PM,
Thursday 3:30 PM - 4:20 PM,
and by appointment

Teaching Assistant(s).

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Text. *Essential Calculus*, James Stewart, 2nd edition.

Prerequisites. There are no official course prerequisites for Math 121, however you should be proficient in high school algebra and precalculus. For a refresher, see Appendix A1 in your textbook.

Syllabus. The course will cover Chapters 1 through 4 of the text. At the end of the semester, you should have a broad understanding of the behavior of functions, limits, derivatives and what they really represent, why graphs of functions look the way they do, basic applications of derivatives, integrals as represented by areas, and the relationship between derivatives and integrals (i.e. the *FUNDAMENTAL THEOREM OF CALCULUS!*)

A *tentative* weekly breakdown is as follows:

	Week of	Sections	Topics
1	Sep 4	1.1, 1.2	Functions!
2	Sep 11	1.3, 1.4	Limits
3	Sep 18	1.5, 1.6	Continuity, Infinite and End behavior
4	Sep 25	2.1, 2.2, 2.3	Derivatives and Basic Formulas
5	Oct 2	2.4, 2.5	The Product, Quotient, Chain Rules MIDTERM 1 on October 5
6	Oct 9	2.6, 2.7	Implicit Differentiation; Related Rates
7	Oct 16	2.8, 3.1	Linear Approximations, Differentials, Maxima and Minima
8	Oct 23	3.2, 3.3	FALL BREAK, The Mean Value Theorem,
9	Oct 30	3.3, 3.4	Interpreting Derivatives and the Shapes of Graphs; Curve Sketching
10	Nov 6	3.5, 3.6	Optimization, Newton's Method MIDTERM 2 on November 9
11	Nov 13	3.7, 4.1	Antiderivatives, Areas and Distance;
12	Nov 20	4.1, 4.2	Areas, continued; The Definite Integral
13	Nov 27	4.3, 4.4	Evaluating Definite Integrals; The Fundamental Theorem of Calculus
14	Dec 4	4.5	The Substitution Rule, Review and Spillover

Classroom expectations. In order to ensure that we cover all planned material and our course runs smoothly, please abide by these expectations:

- Attend every class. If you will be absent due to illness or scheduled conflict, please notify me in advance.
- Arrive for class a few minutes early so that we may all start on time.
- Participate in group work, when applicable.
- ASK QUESTIONS!
- Please keep your cell phones on silent and put away unless I tell you otherwise.
- Food is permitted as long as it will not disrupt others.

Disability Resources. Wesleyan University is committed to providing reasonable accommodations to students with documented disabilities. Students, however, are responsible for registering with Disabilities Services, in addition to making requests known to me in a timely manner. Note that accommodations are not provided retroactively.

If you believe that you need accommodations for a disability, please contact Dean Patey in Disability Resources, located in North College, Room 021, or call (860) 685-5581 for an appointment. See <http://www.wesleyan.edu/studentaffairs/disabilities/Student/index.html> for more information.

If you require accommodations in this class, please **make an appointment** with me as soon as possible, so that appropriate arrangements can be made.

Office hours. You are encouraged to use my office hours whenever you have questions about the course material. Sometimes one-on-one conversations with me can save you hours of study time on your own! If you can't attend office hours, don't hesitate to email me at ahildum@wesleyan.edu to ask for an appointment for another time.

Recitation sessions. There will be optional recitation sessions held by our course assistants, Maddy and Owen, on Sundays from 2:00 – 3:00 PM and Wednesdays from 7:30 – 8:30 PM in Judd Hall 116. Avi Balay-Wilson will hold a weekly office hour on Thursdays from 10:00 – 11:00 AM in Exley 632.

Math Workshop. The Math Workshop is located in the basement of the Science Library in Room 88. It is open Sundays-Thursdays, 7:00 PM-10:00 PM and Mondays-Thursdays, 11:45 AM-1:15 PM. It is staffed by experienced undergraduates or math graduate students. This is a drop-in tutoring service, FREELY available to all members of the Wesleyan community. Staff members provide a friendly, relaxed atmosphere while answering questions about mathematics. The workshop is a good place to go when you get stuck on your math homework. More information can be found here:

http://www.wesleyan.edu/mathcs/math/math_workshop.html

Homework Assignments. We will have weekly assignments administered through the online course software WebAssign. (Please see below for instructions regarding enrollment.) These assignments will consist of routine exercises which are similar to the exercises from the textbook, and will be **due on Thursdays at 11:59 pm** (unless there is an exam that week).

WebAssign. Part of your homework will be submitted online through WebAssign and will be automatically graded there. You must enroll in the course yourself **during the first week of class** at <http://www.webassign.net>.

1. You will need an access code. *If you already have a WebAssign access code from a previous course, you do not need another code.* There is a 14 day trial period, after which you must purchase access for the semester. The bookstore should sell online access, or you can purchase online access combined with an electronic copy of the textbook.
2. To enroll in the course you will need a class key. For Section 2, the key is **wesleyan 5203 4247**. For Section 3, the key is **wesleyan 2150 2360**. To enroll in the course, go to <http://www.webassign.net> and click on "I have a class key."
3. A guide to using WebAssign can be found here:
https://www.webassign.net/manual/student_guide/

Worksheets. In addition to the online assignments, we will have weekly worksheets. These will consist of more conceptual questions and are meant to be completed in groups. (You must submit your own worksheet individually.) I will try to reserve time each week to begin these worksheets in class, and you will have the opportunity to complete these at home. Due dates for these worksheets will vary, and will be announced in class.

Exams. There will be two midterm exams and a final exam.

- Midterm 1: Thursday, October 5
- Midterm 2: Thursday, November 9

Midterm exams will take place on **Thursday evenings** within the time block 7:00 PM - 9:00 PM, in Shanklin 109. The final exam will take place the week of December 12. The time and location is TBD, to be finalized after Fall Break.

If you have an academic or athletic conflict with a midterm exam (such as a class, lab, another exam, or a Wesleyan athletic competition), inform me **at least one week before the exam**.

Review sessions will be held before each midterm and the final exam. The times and locations will be determined as we near each particular test.

Moodle. Copies of the textbook are available on reserve at the Science Library in Exley. All other course materials for Math 121 will be available online on Moodle. This includes, but is not limited to, course announcements, reference materials, homework assignments, worksheets, and midterm exam solutions.

Calculators are **not** allowed during the midterms or the final exam. You may need a scientific calculator for some homework problems, but in most cases you should be able to do the arithmetic without one.

Grades. Your grade in the course will be based on the following:

- (1) Homework Assignments (15% of your grade).
All homework assignments are weighted equally and averaged.
- (2) Worksheets (10% of your grade).
All proof assignments are weighted equally and averaged.
- (3) Participation (5% of your grade).
- (4) Two midterm exams (each 20% of your grade).
- (5) Final exam (30% of your grade).

Academic Integrity.

I encourage you to discuss homework problems with your classmates, but **you must write up your own solutions in your own words**. If you do choose to work together, write your collaborators' names at the top of your paper.

You are expected to follow the University's policy on academic integrity. Any violation of the Student Honor Code will be referred to the Honor Board, without exception. The Honor Code can be found in the Student Handbook. Before you hand in an assignment or a test, pledge the following:

In accordance with the Honor Code, I affirm that this work has been completed without improper assistance. All content taken from other sources has been properly acknowledged.