

Math 132-H – Honors Calculus II – Syllabus

Fall 2020

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What we'll cover

- Techniques of integration, and applications to the computation of areas and volumes.
- Convergence and divergence of infinite series.
- Calculus in parametric and polar coordinates.

Course plan

Here's what we'll do in the course each week.

1. **Video lectures** will be uploaded each week to the Moodle, on Monday, Wednesday and Friday mornings. You can watch these at whatever time is convenient for you, but I suggest making a schedule and sticking to it, to avoid falling behind with the lectures.
2. **Online meetings.** These will take place through Zoom twice a week, on Monday and Friday, at the following times:
 - **Section 02:** 10:10AM–11:00AM, Zoom ID: 955 3960 0562 (password on Moodle)
 - **Section 03:** 12:20AM–1:10PM, Zoom ID: 955 3960 0562 (password on Moodle)

I strongly encourage you attend the **problem-solving session** on Monday each week, where we will work together on examples. Every other week this will be devoted to discussing the honors homework. If you have a question about the lectures or the online homework you can also dial in on Friday for a **Q&A session**.

3. **Discussion section** with Bartu. This will take place through Zoom on Thursday at the following times:
 - **Section 02:** 11:30AM–12:20PM, Zoom ID: 918 6665 9162 (password on Moodle)
 - **Section 03:** 4:00PM–4:50PM, Zoom ID: 981 8334 7825 (password on Moodle)

You will work on worksheets in small groups with assistance from the TA. Your grade will be based on participation in the discussion.

4. There are online homework assignments through **WebAssign** each week, due every Friday. These will mainly be fill-in-the-blank style problems and numerical calculations. You can access WebAssign by clicking the link at the top of the Moodle course page, and signing in: this will add you to the correct WebAssign class.

5. Every other week you will also have an **honors homework** assignment (6 in total). These are designed to be more challenging and open-ended problems that test your understanding of the course material. They will be due on Wednesdays. The Monday before they are due, we will spend the class period talking about the problems, and how to approach them.

You will write out your solutions to the homework on paper, and upload a scan or photograph. Please submit your solutions as a pdf. If you have access to a smartphone, I recommend either the app Adobe Scan or the app CamScanner, both available for free for both Android and iPhone through the app store. These use your phone to scan your solutions, and automatically converts them to a pdf for you.

You can then upload your solutions to **Gradescope**. You'll need the course access code **MNBB58** to join the section.

6. There will be three short **mid-terms** and a **final**:

- **Midterm 1:** September 18 (covers sections 5.3–5, 6.1–2, 7.1)
- **Midterm 2:** October 9 (covers sections 7.2–5, 7.8)
- **Midterm 3:** November 6 (covers sections 11.1–8)
- **Final:** week of November 30 (cumulative, but with an emphasis on sections 11.9–10 and 10.1–4)

These will all be take home exams: you should write them on paper and upload a scan using a scanner or smartphone camera, like the homeworks. Submissions will again be through Gradescope. You will have a 12 hour window to complete each exam. The midterms should take you 1–2 hours, and the final should take you 2–3 hours.

Academic Honesty, Homework and Exam Rules

Now that the course has gone online, I'm putting a lot of trust in your honesty. It is important that all of your work is your own. Copying someone else's work, and the use of online "homework help" sites like Chegg, are absolutely not permitted. Here is some more clarification on what is and isn't allowed.

- Honors homework: you are allowed to use your books and notes for the honors homework, you may also use a calculator. You are encouraged to talk to one another about the problems, and to ask for help from me or the TA. However, you may not copy someone else's solution. When you write up your answers you shouldn't have anyone's work in front of you but your own. Do not post the homework problems anywhere online.
- Exams: you are allowed to use your books and notes during the take home exams. You may also use a calculator. However, you may not use any other resources during the exam, including the internet! All work must be your own, and unlike the homework you are not allowed to ask anyone else for help with the exam problems. Once the exam is posted, you may not discuss it with anyone until it is over. Do not post the exam problems anywhere online, and do not share them with anyone outside the class until after the exam is over.

Class Materials and Help

- We'll use the textbook **Calculus: Early Transcendentals** by James Stewart. We'll cover most but not all of the material from Sections 5,6,7, 10 and 11 in this class.
- You'll need to purchase access to the Enhanced WebAssign system. This includes an electronic copy of the textbook. To purchase access to the WebAssign, go to <https://umass.ecampus.com/course-list?s=140733&p=&c=|3513443&c1=MATH&c2=132H>. If you're planning on continuing on to take Math 233 in a future semester, I recommend you purchase multi-term access, since this course uses the same textbook and webassign.
- If you want to buy a physical copy of the textbook, you can do that from the same link: there's a loose leaf option, and a hardcover textbook is also available. If you choose to buy the hardcover version of the textbook, make sure to purchase WebAssign access as well.

- Another resource that you can take advantage of is the **Moodle discussion forum**. I will create a thread for questions and comments about each video lecture, so please post your questions there. You will receive 1% bonus towards your score for each post you make on the forum (up to 3% total).
- Bartu will be available for regularly scheduled office hours on Monday and Wednesday 2–3pm and Thursday 10–11am.. The Zoom ID is 922 0317 8462, and the password is available on Moodle.
- If you have any further questions at any time, about any of the material, please feel free to e-mail me or Bartu. We will be happy to communicate by e-mail or to set up a Zoom meeting to talk over the course material or the homework problems.

Assessment Structure

- **WebAssign homework (15%)**: To be completed online. Due every Friday.
- **Honors homework (10%)**: There are six honors homeworks in total. Due on Wednesday.
- **Worksheets (10%)**: Grade based on participation.
- **Discussion forum posts (up to 3% bonus)**: Up to three bonus points for questions and comments on the Moodle discussion forum.
- **Midterm exams (x3) (15% each)**: Please inform me of any conflicts with the exam date by e-mail *as soon as possible*. The exams are take home, you may use your textbook and notes but *not* the internet.
- **Final exam (20%)**: Again, please inform me of any documented conflicts with the exam date by e-mail *as soon as possible*. The exams are take home, you may use your textbook and notes but *not* the internet.

The grade boundaries are as follows. Note that there is no rounding, so e.g. a score of 89.9 is an A-.

A	A-	B+	B	B-	C+	C	C-	D+	D	F
≥ 90	87–90	83–87	79–83	75–79	71–75	67–71	63–67	59–63	55–59	< 55

Accommodations

The University of Massachusetts Amherst is committed to making reasonable, effective and appropriate accommodations to meet the needs of students with disabilities and help create a barrier-free campus. If you are in need of accommodation for a documented disability, register with Disability Services to have an accommodation letter sent to your faculty. It is your responsibility to initiate these services and to communicate with faculty ahead of time to manage accommodations in a timely manner. For more information, consult the Disability Services website at <http://www.umass.edu/disability/>.

Official Academic Honesty Statement

Since the integrity of the academic enterprise of any institution of higher education requires honesty in scholarship and research, academic honesty is required of all students at the University of Massachusetts Amherst. Academic dishonesty is prohibited in all programs of the University. Academic dishonesty includes but is not limited to: cheating, fabrication, plagiarism, and facilitating dishonesty. Appropriate sanctions may be imposed on any student who has committed an act of academic dishonesty. Instructors should take reasonable steps to address academic misconduct. Any person who has reason to believe that a student has committed academic dishonesty should bring such information to the attention of the appropriate course instructor as soon as possible. Instances of academic dishonesty not related to a specific course should be brought to the attention of the appropriate department Head or Chair. The procedures outlined below are intended to provide an efficient and orderly process by which action may be taken if it appears that academic dishonesty has occurred and by which students may appeal such actions. Since students are expected to be familiar with this policy and the commonly accepted standards of academic integrity, ignorance of such standards is not normally sufficient evidence of lack of intent. For more information about what constitutes academic dishonesty, please see the Dean of Students website: http://umass.edu/dean_students/codeofconduct/acadhonesty/.