

# Honors Integral Calculus - Math 121

## Section 201, Spring 2010

- **Instructor:** *Malabika Pramanik*
- **Office:** *Mathematics Building, Room 214*
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- **Office hours:** *To be announced.*

- **Lectures:**

- Monday, Wednesday, Friday: 2-3 pm, Mathematics Building, Room 104.
- Tuesday: 2-3 pm, Mathematics Building, Room 105.

- **Text:** *Calculus, Single Variable* 7th edition by Robert Adams and Christopher Essex.

- **Course description:** The primary focus of this course is to study the topic of integration in the one-variable setting. The syllabus includes definite integrals and the fundamental theorem of calculus, techniques and applications of integration, and infinite series. This is essentially the same syllabus as Math 101, but being the honors version, the topics are covered in greater foundational depth with emphasis on solving conceptual problems rather than routine exercises. We will cover material from Chapters 5 - 9 of the text. A tentative schedule is as follows:

- Chapter 5: Integration (2 weeks)
- Chapter 6: Techniques of integration (2 weeks)
- Chapter 7: Applications of integration (3 weeks)
- Chapter 8: Conics, parametric curves and polar curves (1.5 weeks)
- Chapter 9: Infinite series (4 weeks)

- **Web page:** All important announcements, handouts, homework assignments, solutions and additional information about the course will be posted on the course website:

<http://www.math.ubc.ca/~malabika/teaching/ubc/spring10/math121/index.html>

- **Other resources:**

- In addition to the instructor's office hours, solutions to the homework assignments and practice exams will be posted on the course website. Past exams from the math department's archives as well as from the AMS exam database will also appear here.
- There is a TA for this course who is in charge of grading the homework assignments. The TA's contact info and office hours will be posted on the course website once they are available.

- Please take advantage of the *drop-in math tutorials* in the southeast corner of the Qualicum Room in the Irving K. Barber Learning Centre. This is the large room just up the central staircase on level 3 in the new part of the Barber Learning Centre. Look for the signs and portable white boards. Drop-in Tutoring will be available from 9 a.m. to 4 p.m. Mondays to Thursdays and 9 a.m. to 3 p.m. of Fridays. Look for updates on

<http://www.math.ubc.ca/Ugrad/ugradTutorials.shtml>

- The Math Club (<http://www.ubcmathclub.org/>) sells packages of old exams with solutions. They do not do this for Math 121 (last time I checked), but for Math 101, which has a large overlap with our syllabus. Keep in mind however that some topics are covered more in-depth in our course than in Math 101.

- **Homework:** Homework will be collected at the beginning of lecture every Friday starting January 15. A problem set containing a list of problems to practise and a list of problems to hand in will be posted on the course website every week. Stay tuned.

- **Grading:**

Homework	10%
Midterm 1	20%
Midterm 2	20%
Final exam	50%

- **Exams:** There will be two midterms and a final exam in this course.

- The midterms will be held during class hours on **Friday February 12 and March 26**.
- The date of the final exam is yet to be declared. *Do not make any travel plans until the exam schedule has been announced.*
- *Students will be required to bring ID to all tests and exams.*
- No calculators, formula sheets or aids of any kind will be allowed in midterms or in the final.

- **Things to know:**

- Missing a midterm normally results in a mark of 0. Exceptions may be granted only with prior consent of the instructor, and with official documentation supporting the student's reason for missing the exam. In case of a medical emergency, the instructor must be notified within 48 hours of the missed test, and presented with a doctor's note immediately upon the student's return to UBC. A physician's note should specifically state that the student was medically unfit to write the missed exam on that day.
- No late homework will be accepted after the homework solutions have been posted on the course website. If you are unable to attend lecture on a certain Friday, please talk to the instructor regarding arrangements for submitting your homework. A missed homework will result in a mark of 0.