MATHS 100 - Differential Calculus with Applications to Physical Sciences and Engineering
MATHS 180 - Differential Calculus with Physical Applications
Session 2016W Term 1, September - December 2016

- This is the common outline for all sections of MATHS100 and MATHS180 except the Vantage College section.
- The instructor in charge is Andrew Rechnitzer.
- This document gives the common course policies and information on available resources.
- For section-specific information, please contact your instructor.

Textbooks

- This year we are using only free textbooks and resources.

Primary text

- Three UBC faculty, Joel Feldman, Andrew Rechntizer and Elyse Yeager, have produced a textbook and problem book specifically for Mathematics 100 and 180.
- The textbook and problem book can be found here.
- We recommend that you work through the representative problems in the problem book (plus more)
- In time these notes will be released under a creative commons license.

3 Supplementary texts

- Mooculus by Fowler and Snapp. Their site also has links to video lectures which you might find useful.
- APEX Calculus by Hartman et al. Note that you only require Volume 1 for this course.
- Active Calculus by Boelkins, Austin and Schlicker.

Other resources for getting help

- Be proactive! - help is not going to come to find you.
- Ask your instructor after class ask questions while the material is fresh in your mind
- Go to your instructor’s office hours
  - they are there to help you
  - before the quizzes tends to be more useful than afterwards
- Go to the Maths Learning Centre, which is located in the Leonard S. Klinck Building (LSK) Room 300
  - Tutors are available, at no charge, to answer questions on a drop-in basis.
  - The services starts in the second week of classes and continues until the final exam.
- AMS tutoring: The UBC student society provides an assortment of tutoring services.
- Mathematics Department website: There is much available under the Undergraduates tab, including recent final exams for most undergraduate mathematics courses.
- We will also run a Piazza message board for the course. See the course webpage for more details.
Maths 100 vs Maths 180

- Maths100 and 180 are very similar courses.
- They follow the same syllabus at the same level.
- Homework and quizzes will be of the same standard across 100 and 180.
- All sections of Maths100 and Maths180 have the same final exam.
- The main difference is that Maths180 has a workshop component.
  - More information here — including information about prerequisites.
  - See here for information about Maths110.

Assessment - Maths100

Your Maths100 grade will be computed based on the following formula:

- Final Exam 60%
- 5 quizzes worth a total of 25%
- Course-common WebWorK assignments 15%

Prerequisites and assessment - Maths180

Your Maths180 grade will be computed based on the following formula:

- Final Exam 50%
- 5 quizzes worth a total of 25%
- Course-common WebWorK assignments 15%
- Workshops 10%

Scaling of marks across sections of Maths100 and Maths180

- After the final exam has been marked, term marks (everything except the final exam) for each section may be scaled.
- The purpose of such scaling is to ensure fairness across sections.

WebWork link and homework problems

- Maths100 and 180 use the WebWorK online homework system.
- You access WeBWorK by following the links in the section listings.
- Each week you will be assigned about 10 to 20 WeBWorK problems which will be due the following week.
- We strongly recommend that you also work your way through the representative problem set in the CLP problem book that you can find here.
- We also recommend that you work through other problems in the CLP problem book — many are taken from old exams and tests.
- If you would like even more problems, then look at the problem set taken from the 3 supplementary texts.
Quizzes

- Quizzes will be held every second week in your normal lecture time and place — starting week 3.
- Each quiz will focus on the previous 2 weeks of material, but may contain any earlier material.
- Each quiz will be 20 minutes long and consist of
  - 2 very short answer questions
  - 2 short answer questions
  - 1 long answer question
  
  though this may change later in the term.
- The quizzes will be held on the following Thursdays and Fridays:
  1. September 22 & 23
  2. October 6 & 7
  3. October 20 & 21
  4. November 3 & 4
  5. November 17 & 18
- Note - if your class meets Thursdays then your quizzes will be on the 22, 6, 20, 3 & 17. While if your class meets Fridays then you will have quizzes on the 23, 7, 21, 4 & 18.
- See the "Missed assessment" section below about what to do if you are unable to attend a quiz.

Final Exam

- The final exam will be held during the exam period - December 6 until December 21. We do not have the precise date yet.
- It will cover the entire syllabus for the course.
- You should not plan any travel until the date of your exams are known.
- See "Missed assessment" section below about what to do if you are unable to attend the final exam.

Registration changes

- Individual Mathematics instructors do not have the authority to sign forms to change your registration (please don’t ask them).
- Instead, the Mathematics Department handles all requests for registration changes centrally.
- See [http://www.math.ubc.ca/Ugrad/ugradRegistration.shtml](http://www.math.ubc.ca/Ugrad/ugradRegistration.shtml) for information on how to change your maths course registration.

Course Policies

- Missing quizzes:
  - If a student misses a quiz, that student shall provide a documented excuse otherwise a mark of zero will be entered for that quiz.
  - Examples of valid excuses are an illness which has been documented by a physician and Student Health Services, or an absence to play a varsity sport (your coach will provide you with a letter).
  - A physician’s note must specifically state that the student was medically unfit to write the missed exam on the date of the exam. Absence of this exact information will result in a mark of 0.
  - Your instructor should be notified within **48 hours** of such an absence and appropriate documentation should be produced within **7 days**. Failure to comply with these time limits will result in a mark of zero.
– It is possible that if you are ill or absent your instructor may, at their discretion, arrange for you to take a quiz in another section - if your quiz is on a Friday it may be possible to sit on a Thursday in a different section (and vice versa).

– Otherwise there will be no make-up quizzes, and the weight of the missed quiz will be transferred to the final examination.

– Finally - Please note that a student may NOT have 100% of their assessment based on the final examination. A student who has not completed a substantial portion of the term work normally shall not be admitted to the final examination.

• Missing the Final Exam:

  – You will need to present your situation to your faculty’s Advising Office to be considered for a deferred exam.

  – See the Calendar for detailed regulations

  – Your performance in a course up to the exam is taken into consideration in granting a deferred exam status (for instance, failing badly normally means you will not be granted a deferred exam).

  – For deferred exams in mathematics, students generally sit the next available exam for the course they are taking, which could be several months after the original exam was scheduled.

Cheating

• UBC takes cheating incidents very seriously.

• After due investigation, students found guilty of cheating on tests and exams are usually given a final grade of 0 in the course, suspended from UBC for one year, and a notation made on their Transcript of Academic Record.

• More information