

APSC 171 – Calculus I

Fall 2013

Instructors

Alan Ableson (coordinator)	apsc171@mast.queensu.ca	JEFF 505
Federico (Fred) Galetto	galetto@mast.queensu.ca	JEFF 506
Michael Korenberg	korenber@queensu.ca	WLH 426

Course Web Site. All in-term information will be posted on the course's **Moodle** site, <https://moodle.queensu.ca/>

Textbook. *Calculus: Early Transcendentals* by James Stewart. Either the 6th or 7th edition is acceptable.

Calculator. From September 2012 onwards there will be no sticker system for approved calculators. The inexpensive Casio 991 will be the only calculator approved for engineering exams. (Calculators from previous years with the gold coloured sticker will still be allowed.)

Calculation of the Final Mark

If you obtain **at least 40%** on the Final Examination, then your final mark will be calculated as follows:

Final Exam (3 hours)	50%
Two 2-hour mid-terms,	20% each, 40% total
Online homework, together	5%
Class Participation (clickers)	5%
Challenge Problems (2 x 1%)	2% (bonus)

If you obtain **less than 40%** on the Final Examination, your final mark will be computed as:

25% for each term test (50% total), and 50% final exam.

Letter Grade

Your final letter grade will be assigned using the table in Appendix A of this document.

Tests and Exams. There will be two mid-term tests, and one final exam.

- Midterm 1: Thursday October 10, 6:30 – 8:30 PM. Covering Weeks 1-4 inclusive.
- Midterm 2: Thursday November 14, 6:30 – 8:30 PM. Covering Weeks 5-9 inclusive.
- Final Exam: TBA, 3 hours long. Covering all material.

Format. Exams will require answers written out in full with all the steps explained. We are more interested in seeing the reasons for your answers and whether you understand the concepts involved than in the numerical answer. Also, if you explain your solutions in full sentences we can give part marks where appropriate.

We allow exams to be written in either **pencil** or **pen**. No resources are allowed during exams other than your calculator (i.e., no notes, formulas, textbooks, etc.). Bringing resources into an exam will result in a mark of zero on the test/exam and notification filed with the Faculty office.

Difficulty. The test and exam questions will be as hard as some of the harder homework problems. On the test, there will not be many marks for merely being able to do routine calculations and procedures - we will take it for granted that you can do those.

Previous Exams. Looking at APSC 171 examinations from past years will help you to be prepared for the style of the questions we will ask. See <http://library.queensu.ca/examsearch> and the course Moodle site for old exams.

Online Homework

There will be weekly assignments to be submitted on-line using Webwork. A link to Webwork can be found from the course Moodle page. Each assignment will be due just before midnight Thursday, every week.

Each student will get the same style of questions, but parts of each question will be randomized. The software marks your submissions right away and you may repeatedly attempt the same question until you get it correct. You will not be able to access the assignment after the deadline has passed.

Class Participation

We will be using "**clickers**" (or "response cards") during the lectures, with 30-40 questions posed over the term. We will give a full 5% participation mark to students answering more than 25 questions, so students are not penalized for legitimate absences or technical difficulties; students with fewer than 25 answers will be given a representative proportion of the 5% grade.

Please make sure that you buy a **Turning Point clicker**, and not another brand. Your clicker needs to be **registered in Moodle** for your participation marks to be collected.

MATLAB/MuPad

We will occasionally be using **MuPAD**, a computer algebra software package that forms part of MATLAB. You will be taught how to use this software in APSC 100. We will not test you on it.

Our main uses of MuPAD will be to illustrate examples and to double check our results. Sample MuPAD code appears in these notes, and a link to a tutorial can be found on the course Moodle site.

Challenge Problems

Two challenge problems will be posted and announced at intervals during the term. These problems are graded for **bonus marks**. The problems will go well beyond what is normally expected in the course, and are intended for those who would like to be stretched by somewhat more interesting (and difficult) mathematics.

Illness and Family Emergencies

All tests are mandatory, and can only be missed through pre-arrangement, or due to illness/family emergency. Notification by email is required within 7 days of the missed test in the case of illness/family emergency. If you need to contact someone on the day of a test/exam, please call Prof. Ableson's office (613 533 2414).

Missed tests (with appropriate notification) will not be re-taken; the 20% for the missed test will be added to the exam weight. **Missed tests without a reason/notification will be given a grade of zero.**

Academic Integrity

We encourage collaboration and cooperation on all aspects of the course (except tests and exams). Talking with your peers is one of the most important ways to learn. However, you and your peers also need to practice mechanical techniques and problem solving; accepting too much help can stifle your learning. Feel free to discuss homework problems in general (or work through similar problems), but we require that you only submit your own work. See Appendix B in this document for more details.

In the tests and exam, no resources can be used, except those provided explicitly in the test.

- First violation on a test: zero on the test and zero participation mark, record with the Faculty.
- Second violation on a test or violation in the exam: zero for the course, record with the Faculty.

Policy on Disabilities and Accommodation

Students with diverse learning styles and needs are welcome in the Faculty of Engineering and Applied Sciences. In particular, if you have a disability or health consideration that may require accommodations, please feel free to contact the Disability Services Office (DSO) as soon as possible at (613) 5336467. For further information, visit Health, Counseling and Disability Services website at <http://www.queensu.ca/hcds>.

Students with accommodations approved through DSO are responsible for contacting the faculty member in charge of the course prior to or during the first week of the term to discuss accommodations, such as separate rooms and extension of time allotted for the midterm.

Appendix A: Grade Conversion Table

Grade	GP	Percentage Conversion
A+	4.3	90-100
A	4	85-89
A-	3.7	80-84
B+	3.3	77-79
B	3	73-76
B-	2.7	70-72
C+	2.3	67-69
C	2	63-66
C-	1.7	60-62
D+	1.3	57-59
D	1	53-56
D-	0.7	50-52
F	0	0-49

Appendix B: Policy on Academic Integrity

Engineers have a duty to:

*act at all times with devotion to the high ideals of personal honour and professional integrity
give proper credit for engineering work.*

*Professional Engineers Ontario Code of Ethics, Section 77 of the O. Reg. 941
http://www.peo.on.ca/index.php?ci_id=1815&la_id=1*

The quote above describes the standard of behaviour expected of professional engineers. As engineering students, you have made a decision to join us in the profession of engineering, a long-respected profession with high standards of behaviour.

As future engineers, we expect you to behave with integrity at all times. Our policies do not prohibit you from collaborating, even closely, with fellow students in any class. Indeed, we strongly encourage collaboration and teamwork, when conducted responsibly. We have, however, set firm guidelines on the quality of submitted work and have taken a strong stand against plagiarism and other forms of academic dishonesty. Briefly stated, we expect that submitted work bears the name of all those contributing to it, and that you do not allow others to copy your work.

Our detailed expectations related to submitted work are summarized below.

Policy on Submitted work

All submitted work is to be original (see Policy on Academic Dishonesty below) and is to be performed and submitted in a format that is representative of the engineering profession.

All submissions completed as a team must be the work of all team members, and only the team members.

All students are expected to complete their work in a timely fashion. The course instructor, teaching assistants, or project managers will provide notification (in writing or via email to your Queen's email account) of due dates and any revisions thereof. Submissions after the due date will be penalized at up to 10% per day unless suitable justification is provided.

Policy on Academic Dishonesty

Instances of academic dishonesty include, but are not limited to, the following:

- **Including information from other sources (including text, diagrams, and photos), without properly referencing it**, in any submitted work (including, but not limited to, first drafts, analysis and design assignments, projects, laboratories and oral

presentations). More information about when citation is needed, and how to cite, is available on the First Year Citation guidelines, which are listed on course homepages.

- **Copying or purchasing the work of a fellow student.**
- **Allowing your work to be copied** by another student, regardless of how the other student obtained the homework. The best way to prevent your work from being copied is not to lend it to anyone.

Students must bear the burden of proof of original work by maintaining careful records of the work, including any notes and preliminary drafts (possibly in the form of a logbook, if instructed), and must be prepared to submit these if requested.