Course Outline
Faculty of Science
Department of Mathematics and Statistics

Course: MATH 1013: Applied Calculus I
Term: Winter 2020
Section: M (MWF 9:30 - 10:20; Accolade Building East 102)
Prerequisite / Co-requisite: MATH 1520, or 12U Calculus and Vectors (MCV4U) or equivalent

SECTION DIRECTORS

Aram Dermenjian & Mike Zabrocki
Dahdaleh (Tel) 2028 & 2026
Email: aram.dermenjian@gmail.com
Office Hours:

- Monday: 10:30 - 13:00

- Wednesday: 10:30 - 12:00

- Friday: 10:30 - 13:00

- By appointment

COURSE INFORMATION

Course Calendar Description: Introduction to the theory and applications of both differential and integral calculus. Limits. Derivatives of algebraic and trigonometric functions. Riemann sums, definite integrals and the fundamental theorem of calculus. Logarithms and exponentials, extreme value problems, related rates, areas and volumes.

List of Topics: This course will cover much of Chapters 1–5 of the course textbook, including:

- Pre-Calculus (functions, exponentials, inequalities, absolute value, logarithms)

- Limits (limit properties, formal definition of a limit, continuity, limits at infinity)

- Differentiation (rules, implicit and logarithmic differentiation, related rates)

- Applications (optimization, curve sketching, l'Hôpital's rule)

- Integration (antiderivatives, Fundamental theorem of Calculus, Substitution rule)

Course Materials:
Required textbook: Class notes
"Official" textbook: Calculus: Early Transcendentals by James Stewart, 8th edition.

Course Evaluation: The final grade for the course will be weighted as indicated below:

Quizzes:	Each Monday	**10%**
Midterm 1:	3 Feb (in class)	**30%**
Midterm 2:	23 Mar (in class)	**30%**
Final Exam:	TBA	**30%**

COURSE POLICIES

Language: All assignments may be completed in either English or French.

Calculators: Non-programming calculators are permitted on midterms and quizzes. The use of calculators on the final exam will be decided two weeks before the final.

Grading: The grading scheme for the course conforms to the 9-point grading system used in the undergraduate programs at York:

Grade	Grade Point	Percent Range
A+	9	90–100
A	8	80–89
B+	7	75–79
B	6	70–74
C+	5	65–69
C	4	60–64
D+	3	55–59
D	2	50–54
E	1	45 – 49
F	0	0 – 44

Quizzes: Quizzes are cumulative; meaning that a quiz might contain material from any class prior to the quiz. In other words, a week 1 question could appear on a week 10 quiz.

There are 9 quizzes in total. Only the 7 highest marks on quizzes will be counted towards the quiz grade. Missed quizzes count for 0 points. There are no make-up quizzes given.

Exams: Exams can be a stressful time. Therefore, there will be a second-chance exam for each midterm. Second-chance exams will be held at the same time as make-up exams (see below for dates). There is a penalty of 20% for second-chance exams (which means the max grade is 80%). The average of the two grades will be used as your final grade.

So if you got 50% on the midterm and you get 70% on the second-chance exam, then your midterm grade will be 60%.

For both midterms and the final, for each question asked about what material will be on the exam, I will increase the difficulty of the exam. It is to be assumed that any and all material covered in class can and will be on any exam. This means that material from midterm 1 might appear on midterm 2.

Missed Tests:
Midterms: Students who miss a midterm for any reason must email me with:

1. a brief explanation of their absence

2. appropriate supporting documentation (e.g. doctor's note; police report; lawyer's note)

3. available dates and times for retaking the exam.

A make-up exam will be given, for those with appropriate reasons, at the same time as the second-chance exam. The 20% penalty will not apply to make-up exams. Note that since the make-up exam is given at the same time as a second-chance exam, students who missed their exam are not eligible for a second-chance exam.

Dates:

- Midterm 1: 14 February (Tentatively: 11:30 am)

- Midterm 2: 3 April (Tentatively: 11:30 am)

Final: Students must formally request deferred stnading by submitting the final exam/assignment deferred standing agreement form to their section directo. The deadling to submit this form is no later than one week after the missed exam. Detailed information (and the form itself) can be found at: `https://myacademicrecord.students.yorku.ca/deferred-standing`.

Course Announcements and Resources: Moodle will be the primary website used for the online course website. Weekly practice problems, test information (including solutions), announcements, grades, etc. will be posted on Moodle. Please check the Moodle site regularly throughout the term. If Moodle is not available for whatever reason, my personal website will also contain all course contents:
`http://dermenjian.com`

Email: I will not respond to emails after 17:00 or before 9:00. I will try and respond to all emails within 24 hours of receiving the email.

CAMPUS RESOURCES

A full list of campus resources available with detailed information can be found at:
`https://mathstats.info.yorku.ca/our-programs/need-help/`

Math and Stats Lab: Tutorial help for MATH 1013 (and other courses). They are available from 10:30-15:30 Monday to Friday in ROSS S525.

Peer Tutoring at Bethune College provides free drop-in tutoring services for MATH 1013 (and other courses).
`https://bethune.yorku.ca/sos/tutoring/`

Peer Assisted Study Sessions (PASS) are facilitated study groups at Bethune College.
`https://bethune.yorku.ca/sos/pass/`

Learning Commons has support for helping students academically:
`http://learningcommons.yorku.ca/`

Student Accessibility Services (SAS): The SAS provides accademic accommodation and support to students with disabilities. Registration is confidential.
`https://accessibility.students.yorku.ca/`

Student Counselling and Development (SCD): The SCD provides pyschological services to the York University Community. Registration is confidential.
`https://counselling.students.yorku.ca/`

IMPORTANT INFORMATION FOR STUDENTS

Academic Integrity: Acts of academic dishonesty in this course are treated very seriously. Don't cheat, don't pay someone to do your work for you, etc. `https://spark.library.yorku.ca/academic-integrity-what-is-academic-integrity/`

English version: `https://secretariat-policies.info.yorku.ca/policies/academic-honesty-senate-policy-on/`
Version française: `https://secretariat-policies.info.yorku.ca/policies/honnetete-intellectuelle-politique/`

Dates and Deadlines: University-wide dates and deadlines can be found at: `https://registrar.yorku.ca/enrol/dates`

Key Dates:

- Classes Start – 6 Jan

- Last day to add a class – 19 Jan

- Last day to add a class (requires permission) – 3 Feb

- Reading Week – 15-21 Feb

- Family Day - University closed – 17 Feb

- Last day to drop w/o grade – 13 Mar

- Last day to withdraw (Receive "W" on transcript) – 5 Apr

- Classes End – 5 Apr

- Good Friday - University closed – 10 April

- Winter Exams – 7-21 April