

Department of Mathematics Faculty of Science and Technology

Course Title: Calculus I - Science Course Number: 201-NYA-05

Section: 00013

Semester: Autumn 2021

Instructor: I.T. Ivanov

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Course Description:

This course provides an understanding of the fundamental notions of differential calculus. Topics include: concepts of limit and continuity; the development of the derivative; trigonometric, exponential and logarithmic functions. Applications include graph sketching, related rates and optimization problems relevant to Science.

Ponderation: Theory 3 hours/week. Lab 2 hours/week. Homework 2 hours/week.

Prerequisites: See the master course schedule.

Teaching Methods:

A combination of lectures, class exercises, and weekly homework assignments will prepare students for one midterm and one final exam.

Textbook: Single Variable Calculus: Early Transcendentals 9th Edition, by James Stewart. Publisher: Brooks/Cole. ISBN 978-0357022269. Approximate cost: \$ 139:95. Purchase of this textbook is optional.

Additional Expenses: Scientific calculator.

Office Hours: Thursdays noon - 14:00 or by appointment

Competencies: For the course objectives and the expected learning outcomes, please consult the course content document.

Academic Resources:

The Tutoring & Academic Success Centre (TASC) provides free peer tutoring every workday in E 300. Many mathematics instructors also regularly volunteer at the TASC. See here for more information.

Approximate Dates of Evaluations:

The Midterm will be given during the 8th week of classes. The final exam is in the Final Exam Period. The two exams will be given in person. Homework assignments will be due every week.

Evaluation: Your final mark will be computed as follows:

Option A	Opton B	
25%	8%	Class exercises and WeBWorK.
35%	$\boldsymbol{12\%}$	Midterm.
40%	80%	Final Exam.

The student's final grade will be the higher of the two options.

Classroom Policies:

- 1. **Missed tests and in class assessments** will not be re-administered unless the student provides valid proof, such as a medical note, or some other compelling reason. Failure to do so will result in a grade of zero.
- 2. Attendance is highly recommended. It is the student's duty to remain informed about what takes place in class he/she misses. Absence from class does not excuse students from their responsibilities.
- 3. Students are expected to check the course Webpage on a regular basis. Course material, announcements, and important dates will be posted there.

Course Policies:

It is the student's responsibility to be familiar with and adhere to all Vanier College Policies. A summary of the course-level policies that apply in this and all other Vanier courses can be found under "Course-Level Policies" in Important Vanier Links on Omnivox, or by following this link. Complete policies can be found on the Vanier College website, under Policies.

Unless explicitly allowed by the instructor, all electronic devices including but not restricted to smart phones, smart watches, Fit Bits - all models, cameras, laser devices, MP3 players, recording and/or playback devices in any form, ear buds, any Bluetooth device are prohibited during in class examinations. A simple possession of such devices is considered cheating and will be treated as such.

Academic Complaints:

Department Coordinator: Elena Naidenova, email: naidenoe@vaniercollege.qc.ca

Faculty Dean: Haritos Kavallos, email: kavalloh@vaniercollege.qc.ca