

Department of Mathematics
Faculty of Science and Technology

Course Title: Calculus II

Course Number: 201 - NYB - 05

Section: 00006

Semester: Winter 2021

Instructor: I.T. Ivanov

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Course Description:

Upon successful completion of the course students should be able to determine the indefinite integral of a function, calculate the definite and improper integral of a function, solve separable first order differential equations, calculate areas, volumes, arc lengths, and surface areas of various 2 and 3 dimensional shapes represented by functions, and to analyse convergence (or divergence) of series.

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

Prerequisites: See the master course schedule.

Teaching Methods:

Numerous techniques will be used in synchronous classes in the delivery of the course material. These methods will include lectures, classes involving problem solving and the use of WeBWorK when applicable. A combination of lectures and class exercises, along with homework will prepare the students for two tests and a final examination.

Textbook:

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

Additional Expenses: Scientific calculator.

Office Hours: Thursdays 14:30 - 16:00 or by appointment

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

Evaluation: Your final mark will be computed as follows:

Option A:

30% Term Test1 and Term test 2

* Weeks of February, 22nd and April 19th. Each Test is 15%.

50% Final exam.

* To be scheduled in the Final Exam Period.

20% Problem Solving

* Weekly assignments on paper and in Webwork.

Option B:

Final exam.

* To be scheduled in the Final Exam Period.

20% Problem Solving

* Weekly assignments (paper and/or Webwork) and in-class exercises.

The Term Tests will written in the college if college exams are possible. If not, the Term Tests will be online.

If no final exam is written at the College, then there will be only one grading option, Option A. If the final exam is written at the College during the final exam period, students' grades will be calculated using Option A and Option B. The highest grade of the two options, will result in the student's final grade.

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.

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.

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.