

WESTERN UNIVERSITY  
APPLIED MATHEMATICS 1413  
Applied Mathematics for Engineers I  
Course Outline  
Summer Day 2020

Instructor: Prof. K. Nguyen  
Section 001 M T W Th F 10:30AM-1:00 PM online via ZOOM

Office hour: TBA via ZOOM

Prerequisite: Ontario Secondary School MCV4U or equivalent, or  
Mathematics 0110A/B.

Texts:

- Calculus –A Complete Course, 9th edition, Adams and Essex, Pearson. (ISBN: 9780134528724 including eBooks & Access Codes) available at UWO Bookstore
- Mathematical Handbook, 2nd ed., by Spiegel & Liu, ISBN: 0-07-0382034 (Optional)

Overview of the Course:

Limits, continuity, differentiation of functions of one variable with applications, extreme values, integration, the fundamental theorem of calculus, methods and applications of integration to areas, volumes and engineering applications. Sequences and series, convergence, power series. Vector functions, partial differential calculus, gradients, directional derivatives and applications.

A list of suggested exercises will be provided; it is strongly recommended that you solve all of them.

### Method of Evaluation:

30% Assignments (approximately one every day)

35% Midterm Exam - Saturday, July 25, 2020, 2pm –5:00pm (online with Proctortrack)

35% Final Exam – August 17 or August 18. Examinations will be online via Proctortrack. No computational aids will be permitted.

There will be no 100% option for the final exam.

Assignments: With the Access Codes, student can access My Lab at <https://www.pearsonmylabandmastering.com/northamerica/> where they can access the assignments, practise and submit them online. In addition, some questions from the assignments must be submitted via OWL Drop Box for grading.

Late assignments will get a penalty.

Missing Exams: Missing an exam will result in a grade of zero for that exam, unless you have to submit the Self-Reported Absence Form and contact your instructor immediately.

Proctortrack: a remote proctoring tool that will be used in an online exam. For further information, please go to the following link

<https://www.uwo.ca/univsec/pdf/onlineproctorguidelines.pdf>

Examinations in this course will be conducted using the remote proctoring service Proctortrack. By taking this course, you are consenting to the use of this software and declaring that you have a reliable internet connection with sufficient capacity to support video proctoring. You will be required to complete a video face scan and show photo identification. You will also be monitored during tests and examinations.

The video and desktop screen are recorded and uploaded to Proctortrack servers and your instructor may review the recording. More information about this remote proctoring service is available in the Online Proctoring Guidelines at the following link:

[https://registrar.uwo.ca/academics/examinations/remote\\_proctoring\\_privacy.html](https://registrar.uwo.ca/academics/examinations/remote_proctoring_privacy.html)

Completion of this course will require you to have a device that meets the technical requirements for this service. Information about the technical requirements are available at the following link:

<https://www.proctortrack.com/tech-requirements/>

Please contact the course instructor if you are not able to meet the technical requirements or if you have any questions about the use of this remote proctoring service for this course.

If you have any problems with Proctortrack, please email to [rp-help@uwo.ca](mailto:rp-help@uwo.ca)

## WESTERN UNIVERSITY

Addendum to all Applied Mathematics Course Outlines

**SENATE POLICY ON PREREQUISITES:** Unless you have either the requisites for this course or written special permission from your faculty's Dean's Office to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

**STATEMENT ON ACADEMIC OFFENCES:** Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence. Computer-marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

If you are unable to meet a course requirement due to illness or other serious circumstances, you must provide valid medical or other supporting documentation to your faculty's Dean's Office as soon as possible and contact your instructor immediately. It is the student's

responsibility to make alternative arrangements with their instructor once the accommodation has been approved and the instructor has been informed. In the event of a missed final exam, a "Recommendation of Special Examination" form must be obtained from your faculty's Dean's Office immediately. For further information please see: <http://studentservices.uwo.ca/secure/index.cfm>

A student requiring academic accommodation due to illness, should use the Student Medical Certificate when visiting an off-campus medical facility or request a Records Release Form (located in the Dean's Office) for visits to Student Health Services. The form can be found here:

[https://studentservices.uwo.ca/secure/medical\\_document.pdf](https://studentservices.uwo.ca/secure/medical_document.pdf)

Mental Health Statement: Students who are in emotional/mental distress should refer to Mental Health@Western

<http://www.uwo.ca/uwocom/mentalhealth/>

for a complete list of options about how to obtain help.

Accessibility: Please contact the course instructor if you require lecture or printed material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at 661-2111 ext. 82147 if you have questions regarding accommodation.

Support Services: Learning-skills counselors at the Student Development Centre (<http://www.sdc.uwo.ca>) are ready to help you improve your learning skills. They offer presentations on strategies for improving time management, multiple-choice exam preparation/writing, textbook reading, and more. Individual support is offered throughout the Fall/Winter terms in the drop-in Learning Help Centre, and year-round through individual counseling. Additional student-run support services are offered by the USC,

<http://westernusc.ca/services>.

The website for Registrar Services is <http://www.registrar.uwo.ca>.