

DEPARTMENT OF MATHEMATICS

MATH 2132 ENGINEERING MATHEMATICAL ANALYSIS 2

May – June 2019

A01: Instructor: G.I. Moghaddam, 426 Machray Hall, 474-8345, e-mail: moghadm@cc.umanitoba.ca
Office hours: Tuesday and Wednesday 6:00-7:00 PM; and or by appointment
Lecture: EITC E2 105 , Tuesday, and Thursday 7:00–9:30 PM
Tutorial : EITC E2 105 ,Wednesday 7:00–8:30 PM

Textbook: Calculus for Engineers fourth edition, Donald Trim, Prentice-Hall

Course Outline:

1. **Infinite Series:** Power series, Taylor and Maclaurin series with application.
(Trim, Chapter 10)
2. **Differential Equations:** Separable, linear first order differential equations, linear n^{th} -order differential equations with application.
(Trim, Chapter 15)
3. **Laplace Transforms:** Properties of Laplace transforms and solutions of differential equations.
(Supplementary notes in the course web page and / or Zill , Cullen **Differential Equations** Chapter 7 sections 1-5)

Information about which sections/topics in the text are required material will be given in lectures. Students are advised to do as many of the exercises (in assigned sections) as possible. Difficulties will be addressed in the tutorial sessions.

Course webpage : <http://home.cc.umanitoba.ca/~moghadm/Math2132>

Midterm Exam: A 75 minutes midterm exam will be administered in the tutorial session on

Wednesday May 29

Calculators and/or reference material will NOT be allowed on tests or final examination.

Evaluation:

The midterm exam will count as 30% of the final grade.

A three hour final examination will count for the remaining 70% of the final grade. The final exam will be on Saturday June 22, in room 270 EITC E3 at 6:00–9:00 PM.

Notes:

- (1) If you miss an exam, you will be assigned a mark of “zero” unless reasons and acceptable supporting evidence are provided. Make-up exam will not be scheduled for missing midterm exam.
- (2) Note that past examinations are to be used for practice only; there is no guarantee that your examination in this course will in any way be similar.
- (3) Students are advised to familiarize themselves with the General Academic Regulations of the University contained in the Undergraduate calendar. All forms of academic dishonesty are treated very seriously by the Department of Mathematics, the Faculty of Science, and the Faculty of Engineering. Submitting another person's work as your own, copying from another person at an exam, or bringing unauthorized information into a test or examination is a serious offense. For further information, please see reverse.
- (4) Voluntary Withdrawal Deadline is Wednesday **May 8**, 2019.

Student Accessibility Services: If you are a student with a disability, please contact SAS for academic accommodation supports and services such as note-taking, interpreting, assistive technology and exam accommodations. Students who have, or think they may have, a disability (e.g. mental illness, learning, medical, hearing, injury-related, visual) are invited to contact SAS to arrange a confidential consultation.

Student Accessibility Services <http://umanitoba.ca/student/saa/accessibility>
520 University Centre
204 474 7423
Student_accessibility@umanitoba.ca

Academic Integrity

The Department of Mathematics, The Faculty of Science and The University of Manitoba regard acts of academic dishonesty in quizzes, tests, examinations, laboratory reports or assignments as serious offences and may assess a variety of penalties depending on the nature of the offence.

Acts of academic dishonesty include, but are not limited to bringing unauthorized materials into a test or exam, copying from another individual, using answers provided by tutors, plagiarism, and examination personation.

Note: cell phones, pagers, PDAs, MP3 units or electronic translators are explicitly listed as unauthorized materials, and must not be present during tests or examinations.

Penalties that may apply, as provided for under the University of Manitoba's Student Discipline By-Law, range from a grade of zero for the assignment or examination, failure in the course, to expulsion from the University. The Student Discipline By-Law may be accessed at:

http://umanitoba.ca/admin/governance/governing_documents/students/868.htm

Suggested minimum penalties assessed by the Faculty of Science for acts of academic dishonesty are available on the Faculty of Science web page:

http://umanitoba.ca/faculties/science/resources/Discipline_Penalties_Table_Jul09.pdf

All Faculty members (and their teaching assistants) have been instructed to be vigilant and report all incidents of academic dishonesty to the Head of the Department.