

MAST 330
Differential Equations
Fall 2024

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Class Schedule: Tuesdays & Thursdays, 1:15-2:30 PM.
Mid-term break: no class between October 15, 2024, and October 20, 2024.

Office Hours: TBA.

Text: *Elementary Differential Equations and Boundary Value Problems*, 12th Edition, by W. E. Boyce and R. C. DiPrima and D.B. Meade (optional)
Elementary Differential Equations, by W. F. Trench. Freely available online at <https://digitalcommons.trinity.edu/mono/8/>

Assignments: Homework assignments are an integral part of the class. They indicate the level of difficulty of the problems that the students are expected to understand and solve.

Assignments will be posted on Moodle weekly.

The solutions should be submitted electronically on Moodle by the due date. Students are expected to keep track of when each assignment is due. Late assignments will not be accepted for any reason. Instead, the lowest score will be dropped.

A representative sample of each assignment will be graded. Solution set will be posted within a week.

Collaboration on homework assignments is allowed and encouraged, but the work you submit must be written by you, in your own words. The loaning or copying of solutions is strictly forbidden. This includes but is not limited to the use of solution manuals or mathematical software (unless otherwise specified).

Calculators: Only calculators approved by the Department (with a sticker attached as proof of approval) are permitted for the class test and final examination.
For a list of Approved calculators see <http://www.concordia.ca/artsci/math-stats/services.html#calculators>.

Midterm Test: There will be a midterm test on **Thursday, October 10, 2024**, during lecture time. The test will be a 75 minutes long closed book exam. There is no make-up midterm test.

Final Exam: The final examination will be 3 hours long closed book exam. To obtain a good grade you must demonstrate a thorough understanding of the subject and good problem-solving skills.

Students are responsible for finding out the date, time and location of the final exam once the schedule is posted by the Examinations Office. Conflicts or problems with the scheduling of the final exam must be reported directly to the Examinations Office, not to your instructor. It is the Department's policy and the Examinations Office's policy that students are to be available until the end of the final exam period. Conflicts due to travel plans will not be accommodated.

Grading: 10% (weekly assignments) + 20% (midterm test) + 70% (final exam).

NOTE: If you are unable to write the midterm test for a valid reason, you must write to your instructor to request to move the weight of the midterm to the final exam. In that case, the grade will be calculated based on

10% (weekly assignments) + 90% (final exam).

Such a request will not be granted unless it is made in writing (by email), the reason is valid, and is supported by documentation or other evidence. Valid reasons for missing a midterm test include: conflicts with other exams or religious observances (must be reported to the instructor in advance); illness (Short-Term Absence form or valid medical note required); and bereavement.

If the grading scheme for this course includes graded assignments, a reasonable and representative subset of each assignment may be graded. Students will not be told in advance which subset of the assigned problems will be marked and should therefore attempt all assigned problems.

PLEASE NOTE THAT THERE IS NO "100% FINAL EXAM" OPTION IN THIS COURSE.

Grading Policies: Late submissions are not accepted and will not be graded.

Students are responsible for making sure their submissions are clear and legible. The graders reserve the right to not grade submissions that are, in their view, illegible.

All grading disputes must be brought to the attention of the instructor within a week of the graded assignment or test being returned.

The following table gives an indication of the scope and approximate pace of the course, in terms of sections of the textbook (Boyce, DiPrima).

Topics	Sections	No. of lectures on each topic
Introduction	1.1 – 1.3	3
First-order differential equations	2.1 – 2.6	8
Second-order differential equations	3.1 – 3.7	7
Systems of first-order linear equations	7.1 – 7.9	4

Academic Integrity and the Academic Code of Conduct

This course is governed by Concordia University's policies on Academic Integrity and the Academic Code of Conduct as set forth in the Undergraduate Calendar and the Graduate Calendar. Students are expected to familiarize themselves with these policies and conduct themselves accordingly. "Concordia University has several resources available to students to better understand and uphold academic integrity. Concordia's website on academic integrity can be found at the following address, which also includes links to each Faculty and the School of Graduate Studies: <https://www.concordia.ca/conduct/academic-integrity.html>" [*Undergraduate Calendar, Sec 17.10.2*]

Behaviour

All individuals participating in courses are expected to be professional and constructive throughout the course, including in their communications.

Concordia students are subject to the [Code of Rights and Responsibilities](#) which applies both when students are physically and virtually engaged in any University activity, including classes, seminars, meetings, etc. Students engaged in University activities must respect this Code when engaging with any members of the Concordia community, including faculty, staff, and students, whether such interactions are verbal or in writing, face to face or online/virtual. Failing to comply with the Code may result in charges and sanctions, as outlined in the Code.

Intellectual Property

Content belonging to instructors shared in online courses, including, but not limited to, online lectures, course notes, and video recordings of classes remain the intellectual property of the faculty member. It may not be distributed, published or broadcast, in whole or in part, without the express permission of the faculty member. Students are also forbidden to use their own means of recording any elements of an online class or lecture without express permission of the instructor. Any unauthorized sharing of course content may constitute a breach of the [Academic Code of Conduct](#) and/or the [Code of Rights and Responsibilities](#). As specified in the [Policy on Intellectual Property](#), the University does not claim any ownership of or interest in any student IP. All university members retain copyright over their work.

Extraordinary circumstances

In the event of extraordinary circumstances and pursuant to the [Academic Regulations](#) the University may modify the delivery, content, structure, forum, location and/or evaluation scheme. In the event of such extraordinary circumstances, students will be informed of the change.