

MATH 202
College Algebra
Fall 2023

- Instructor:** Dr. Mohamad-Ahed Hindawi, Office: LB 916 (SGW), Phone: 848-2424, Ext. 3223
Email: mohamad-ahed.hindawi@concordia.ca
- Textbook:** *College Algebra and Trigonometry*, 2nd Edition, by J.R. Durbin (Custom copy).
The e-coursepack will be available for purchase at:
<https://www.bkstr.com/concordiastore>
- Prerequisite:** MATH 201 or equivalent.
- Office Hours:** Your professor will announce his office hours during which he will also be available to give a reasonable amount of help. Note, however, that if you missed a class it is not reasonable to expect your professor to cover the missed material for you.
- Tutorials:** The material in this course requires a lot of practice. There is not enough class time to do all the examples and problems needed to learn the material thoroughly. The Department has therefore organized special tutorial sessions conducted every week to provide additional support to students outside the lecture room environment. These sessions are conducted by tutors who will help with solving problems on the topics learned in class that week, with particular emphasis on the material that students may have difficulties within this course. Tutorials are an important resource to help you succeed in this course and students are strongly encouraged to participate and be active at these problem-solving sessions.
- Math Help Centre:** A Math Help Centre staffed by graduate students is available. The schedule of its operation will be posted in the Department and on the Department webpage <https://www.concordia.ca/artsci/math-stats/services/math-help-centre.html>.
- WeBWorK:** Every student will be given access to an online system called WeBWorK. The system provides you with many exercises and practice problems. Students will use this system to do online assignments (see **Assignments** below). In addition, before the midterm test and before the final exam, a number of practice problems will be posted in WeBWorK to help you review the material of the course.
- Assignments:** Students are expected to submit assignments online using WeBWorK. Late assignments will not be accepted. Assignments contribute 10% to your final grade. Working regularly on the assignments is essential for success in this course. Students are also strongly encouraged to do as many problems as their time permits from the list of recommended problems included in this outline, as well as practice problems.

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 **one midterm test**, based on the material of weeks 1-6 (as listed in the CONTENTS below), which will contribute up to 30% to your grade (see the **Grading Scheme**). The test will be common for all sections of the course and will be held on **Sunday 29 October 2023, at 17:00** (i.e. **5:00 P.M.**).

Students who are unable to write the midterm test for a valid reason must inform their instructor in advance to request a 90% final exam option in calculating their grade (*see below*). Such a request **will not** be granted unless it is made in writing by email, and the reason is accepted as valid and supported by appropriate documentation or other evidence. **Valid reasons** for missing the midterm test include time conflicts (coinciding exam times) with other exams, religious observances (must be reported to the instructor *in advance*); illness (to be reported as soon as possible and supported by a valid medical note). Students who miss the midterm test but were not approved for 90% final exam option as described above will not be granted it and will forfeit the marks for the midterm test.

N.B: Travel arrangements are not considered a valid reason for missing the test.

NOTE: If you are taking another course with a common midterm test at the same time (NOT just the day) as this one, you may choose which of the two tests you want to write. You must then inform the instructor of the other (to be missed) course that you will not write that test because of the time conflict between the two courses, indicating clearly the second course and its section. In this case, the “90% final +10% assignments” scheme will be applied to calculate your grade.

Final Exam: The final examination will be three hours long, will cover all the material in the course, and will contribute up to 80% to the final grade (see **Grading Scheme** below).

NOTE: Students are responsible for finding out the date and time of the final exams 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.

Grading Scheme: The final grade will be based on the higher of (a) or (b) below:
a) 10% for the assignments, 30% for the midterm test, 60% for the final exam.
b) 10% for the assignments, 10% for the midterm test, 80% for the final exam.

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

Active participation in classes and continuous work on the course material during the exam is important for success in this course. Years of experience have shown that students who do not attend class and believe they can keep up on their own do poorly on the final exam.

CONTENTS

Weeks	Sections		Recommended Problems	
1	8: A to E	Quadratic Equations	p. 72	# 24,35,46,53
	18: A,B,C	Division of Polynomials	p. 154	# 6,16,26,35
2	19: A,B,C	Factors and Real Zeros	p. 159	# 3,13,18,27,42
	20: A,B,C,D	Graphs of Polynomials	p. 169	# 22,32,34
3	21: A,B,C,D,E,	More about Real Zeros of Polynomials	p. 178	# 3,6,12,14,27,28,34
4	6: A,B,C	Rational Expressions	p. 49	# 43,44,59,60
	22: A,B	Graphs of Rational Functions	p. 185	# 1,4,6,14
5	22: C	Graphs of Rational Functions (cont'd)	p. 185	# 16,22,26,29
	46: A,B	Complex Numbers	p. 353	# 22,26,34
Reading week				
6	46: C,D	Complex Numbers (cont'd)	p. 353	# 46,60,64,75
	47: A,B,C,D	Trig Form, de Moivre's Theorem	p. 360	# 2,10,12,13, 15, 35, 37 # 21,26,28,38
7	TEST – covering up to week 6 included. (Sunday, October 29, 5:00-6:30 PM)			
8	48: A to C	Complex Zeros of Polynomials	p. 366	# 2,6,7,13,18,26,27
	58: A,B,C	Mathematical Induction	p. 437	# 7,14,16,18,21
9	59: A	Arithmetic Sequences and Series	p. 442	# 11,12,13,14
	59: B	Summation Convention	p. 442	# 22,26,28
10	60: A,B,C,D	Geometric Sequences and Series	p. 449	# 9,14,30,40
11	61: A,B,C	The Binomial Theorem	p. 455	# 5,8,18,22,30
	62: A,B	Permutations	p. 462	# 13,16,17,18
	63: A,B	Combinations	p. 466	# 14,17,20,21
12	Review for final exam which covers the entire course			

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.