Department of Mathematics & Statistics
Concordia University

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MATH 202
College Algebra
Fall 2020

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Preface: **Due to exceptional circumstances, this course will be taught, and all assessments will be done completely ONLINE. Given the subject matter and nature of this course, at least one of the exams, including the midterm and/or the final exam will be given online through the Concordia Online Exams (COLE) platform with online proctoring. For more details read the ADDENDUM at the end of this Course Outline.**

Textbook: *College Algebra and Trigonometry*, 2nd Edition, by J.R. Durbin (Custom copy).
The e-Coursepack and print version of the coursepack will be available for purchase at:
https://www.bkstr.com/concordiastore
Note: Students should order textbooks as early as possible, especially for print versions in case books are backordered or there are any shipping delays.

Prerequisite: **MATH 201** or equivalent.

Office Hours: Your professor will announce her office hours during which she will be also 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 ONLINE tutorial sessions conducted every week to provide additional support to students outside the ONLINE lecture room environment. These ONLINE 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: In addition to tutorials, a Math Help Centre staffed by graduate students is available. The schedule of its operation will be posted 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, several 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 such as **Sharp EL 531** or the **Casio FX 300MS**, are permitted for the class test and final examination.
See http://www.concordia.ca/artsci/math-stats/services.html #calculators for details.

Midterm Test: There will be one **midterm test** (via **COLE),** based on the material of weeks 1-6, which will contribute up to 40% to your final grade (see the **Grading Scheme** below). The test will be **common** for all sections of this course and will be held on **Sunday October 25, 2020, at 10:00 A.M.** Students who will not be able to write the test that day for a valid reason, e.g. religious (to be reported to the section's **instructor** in advance) or illness (*a valid medical note required*), may write an alternate midterm test on **Saturday October 31, 2020, at 10:00 A.M. The midterm test will be given online.**

NOTE: It is the Department's policy that tests missed for any reason, including illness, cannot be made up. If you miss the midterm for any valid reason, e.g. illness, religious, etc., **supported by appropriate documentation**, the final exam will count for 90% of your final grade, and the assignments will count for the remaining 10%.

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

Final Exam: The final examination will be given online two hours long through the **COLE** platform. The exam will cover all the course material, and will contribute up to 65% to the final grade (see the Grading Scheme).

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, 40% for the midterm test, 50% for the final exam.
b) 10% for the assignments, 25% for the midterm test, 65% 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 throughout the term 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.

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Week	Sections		Recommended Problems	
W1	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
W2	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
W3	21: A,B,C,D,E,F	More about Real Zeros of Polynomials	p. 178	# 3,6,12,14,27,28,34
W4	6: A, B, C	Rational Expressions	p. 49	# 43,44,59,60
	22: A, B, C	Graphs of Rational Functions	p. 185	# 1,4,6,14, 16,22,26,29
W5	46: A, B, C, D	Complex Numbers	p. 353	# 22,26,34, 46,60,64,75
	47: A, B	Trig Form, de Moivre's Theorem	p. 360	# 2,10,12,13,15, 35, 37
W6	47: C, D	Trig Form, de Moivre's Theorem	p. 360	#21,26,28,38
	48: A to C	Complex Zeros of Polynomials	p. 366	# 2,6,7,13,18,26,27
	Midterm.			
W7	58: A,B,C	Mathematical Induction	p. 437	# 7,14,15, 16,18,21,26,27
W8	59: A	Arithmetic Sequences and Series	p. 442	# 11,12,13,14
	59: B	Summation Convention	p. 442	# 22,26,28
W9	60: A, B, D	Geometric Sequences and Series	p. 449	# 9,14,30,40
W10	61: A, B, C	The Binomial Theorem	p. 455	# 5,8,18,22,30
W11	62: A, B	Permutations	p. 462	# 13,16,17,18
W12	63: A, B	Combinations	p. 466	# 14,17,20,21
W13	**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: concordia.ca/students/academic-integrity." *[Undergraduate Calendar, Sec 17.10.2].*
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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.

Disclaimer: In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in the course is subject to change.

Addendum: This course will be taught and all assessments will be completely online. A midterm and/or a final online exam will be provided through the Concordia Online Exams (COLE) platform with online proctoring (also known as auto-proctoring). More information about the COLE system may be found at the COLE website.

Please note the following respect to online proctored exams:

- That the exam will take place during the exam period at the designated date and time set by the professor (midterm) or the Exams office (final). All exam times will be set to Eastern Standard/Daylight Time.
- That your image, voice and screen activity will be recorded throughout the duration of the exam.
- That you must show your Concordia University Identification card to validate your identity. Alternative government issued photo identification will be accepted, though it is not recommended. Only identification in English or French will be accepted.
- That any recording made will only be viewed by authorized university personnel (no external entity has authorization to review the recording).
- That you will be responsible for ensuring appropriate, properly functioning technology (webcam, a microphone, appropriate browser and an ability to download any necessary software, as well as a reliable internet connection with a minimum of a 3G connection).
- That you are very **strongly recommended** to enter the virtual test site found at the COLE website and become familiar with the software that will be used for your exam before starting the exam.
- That you will need a quiet place within which to take the exam. Earplugs or noise-cancelling headphones that are not connected to a device may also be used to allow you to focus for the duration of the exam.

Students who are unable to write an exam because they are unable to meet the above conditions and requirements are advised that they will need to drop the course. More information can be provided on the next offering of this course by consulting the Department. Students are advised that the drop deadline (DNE) for this course is September 21, 2020.

Students who require additional accommodations for their exams due to a documented disability should contact the Access Centre for Students with Disabilities as soon as possible (acsdinfo@concordia.ca).

If you face issues during the exam, you should inform your professor of those issues immediately. Please note that there are in-exam supports you should spend time getting to know. Visit the COLE website for more information.