Department of Mathematics & Statistics Concordia University

	MATH 202 College Algebra Summer 2021				
Instructor:	Dr. L. Dube Email: lakshmi.dube@concordia.ca				
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:	<i>College Algebra and Trigonometry,</i> 2nd Edition, by J.R. Durbin (Custom copy). The e-Coursepack will be available for purchase at: <u>https://www.bkstr.com/concordiastore</u> Note : Students should order textbooks as early as possible, especially for printed versions in case books are backordered or there are any shipping delays.				
Prerequisite:	MATH 201 or equivalent.				
Office Hours:	Your professor will announce his office hours during which he 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 with in 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.				

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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 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 , based on the material of weeks 1-3, which will contribute up to 40% to your final grade (see the Grading Scheme below). The test will be held on the 4th or 5th week. 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 two hours long, given online 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/ Lecture	Sections			Recommended Problems	
1/1	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	
1/2	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	
2/3	21: A,B,C,D,E,F	More about Real Zeros of Polynomials	p. 178	# 3,6,12,14,27,28,34	
2/4	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	
3/5	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	
3/6	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	
4/7	TEST – covering up to week 3 included.				
4/8	58: A,B,C	Mathematical Induction	p. 437	# 7,14,16,18,21	
5/9	59: A	Arithmetic Sequences and Series	p. 442	# 11,12,13,14	
	59: B	Summation Convention	p. 442	# 22,26,28	
5/10	60: A,B,C,D	Geometric Sequences and Series	p. 449	# 9,14,30,40	
6/11	61: A,B,C	The Binomial Theorem	p. 455	# 5,8,18,22,30	
6/12	62: A,B	Permutations	p. 462	# 13,16,17,18	
	63: A,B	Combinations	p. 466	# 14,17,20,21	
7/13	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: <u>concordia.ca/students/academic-integrity</u>." [Undergraduate Calendar, Sec 17.10.2]

Addendum: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, a midterm and/or a
final online exam will be provided through the Concordia Online Exams (COLE) platform
with online proctoring. More information about this may be found at the <u>COLE website</u>.

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 Time.
- That your image, voice and screen activity may 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 the recording will be encrypted and 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, Chrome browser and an ability to download the Proctorio extension, as well as a reliable internet connection with a minimum of a 3G connection).
- That you should enter the virtual test site and become familiar with the software that will be used for their exam before starting the exam.
- That you will need a quiet place within which to take the exam. Earplugs or noisecancelling 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 **July 12, 2021**.

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.

Note: Zoom is included as an institutionally approved technology. This means we have been assured of the privacy protections needed to use freely within the classroom.

Zoom will be used in this course to facilitate learning at a distance. It may be used to record some or all of the lecture and/or other activities in this course. If you wish to ensure that your image is not recorded, speak to your instructor as soon as possible.

Also, please note that you may not share recordings of your classes and that the instructor will only share class recordings for the purpose of course delivery and development. Any other sharing may be in violation of the law and applicable University policies, and may be subject to penalties.

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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 changes.