MATH 200

FUNDAMENTAL CONCEPTS OF ALGEBRA

MATH 200 Fundamental Concepts of Algebra Section EC Summer 2023

This syllabus is subject to change and any changes will be posted in the Announcements section of your eConcordia portal.

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

About the Course

What is MATH 200?

MATH 200 is a course offered by the Department of Mathematics and Statistics. This course is intended to give students an introduction to the fundamental concepts of algebra.

NOTE:

- *Students who have received credit or exemption for a course at the level of MATH 201 or above may not take this course for credit.*
- Students in programs leading to the BSc degree or the BA programs in Mathematics and Statistics may not take this course for credit to be applied to their program of concentration.

Instructor

Harry Greenspan

E-mail: math200@econcordia.com

Include the following information in all your e-mail communication:

- Full name
- Concordia student ID number
- Course name and number pertaining to your inquiry

Note: Please e-mail your instructor if you have general inquiries, or if there is a delay in hearing back from your TA.

Course Website

To access the course website, log in at <u>www.econcordia.com</u> and find MATH 200 in your *My Courses* list. On your eConcordia homepage you will see a link called *Course Website*. Clicking on that link will take you to the page that contains the course material.

Your eConcordia account will be valid until the end of the term for which you are registered. Your account will give you access to the online course material (videos, self-assessments, Discussion Board, graded assessments, and additional resources) on the course website for the duration of the term.

Course Content

The following fundamental concepts of algebra will be taught:

- Performing arithmetic operations with algebraic expressions
- Simplifying algebraic expressions
- Factoring algebraic expressions
- Solving linear and quadratic equations
- Solving linear inequalities
- Graphing linear equations in two variables
- Solving systems of linear equations in two variables
- Simplifying rational expressions
- Solving rational equations

Course Material

The course content and the links to the assignments, midterm and the final examination are available on eConcordia: <u>www.econcordia.com</u>.

The course comprises 12 lessons which can all be found by clicking on the *Course Website* link on the eConcordia home page. Lesson 13 contains videos on remedial material and will not be covered on any graded assessment.

Each lesson contains:

- **Lecture videos:** The pre-recorded lecture videos for each topic of the course are meant to simulate a class lecture. There are also videos showing how to solve example problems. The lesson videos cannot be downloaded or viewed offline.
- **Self-assessment questionnaire:** The 10-question self-assessments are there for you to practice each lesson's content. These are not graded and can be attempted as often as necessary. Detailed solutions are provided for every question.
- **Assignments:** Each lesson concludes with an assignment. These assignments count towards your final grade. More details are provided in the **Assessments** section below.

Textbook

There is a <u>required</u> textbook for this course entitled *MATH 200 Manual.* You can access this textbook on the MATH 200 EC Winter 2023 Moodle site.

Password to access the textbook: ConcordiaMATH200

Assessments

Evaluation Scheme

The final grade will be calculated using the HIGHER of Option A and Option B:

Option A

Assignments (WeBWorK)	20%
Test 1 (eConcordia Moodle)	20%
Test 2 (eConcordia Moodle)	20%
Final Examination (eConcordia Moodle)	40%

Option B

Assignments (WeBWorK)	20%
Test 1 (eConcordia Moodle)	10%
Test 2 (eConcordia Moodle)	10%
Final Examination (eConcordia Moodle)	60%

Components

NOTE: It is the student's responsibility to take note of the due dates (and times) for assignments and the dates (and times) for the midterm test and the final examination.

Assignments

There will be 12 assignments to complete through an online platform called **WeBWorK**.

You will have, as a rule, two weeks to complete each assignment: it will open on the same day as its respective lesson and will close in two weeks.

The due dates of all assignments are listed in the **agenda** at the end of this course outline.

There will be no accepted reason for missing an assignment (e.g. illness or computer issue). Please note, however, that the lowest out of the 12 grades will be dropped, so that only 11 out of the 12 assignments will count towards your final grade.

Instructions for logging into WeBWorK and using it can be found on the Course Website.

Tests

The two ONLINE Tests will be held on **June 21 and July 19.** They will be available on the **eConcordia Moodle** page, accessible only through the course website Assessments page, from 9:00AM to 11:59PM (ET). Please note the tests will NOT be available on Concordia Moodle, which is a separate course page.

You will have 75 minutes from your start time or until the tests closes at 11:59PM (ET), whichever comes first.

Test 1 will cover **Lessons 1 to 4**, and Test 2 will cover **Lessons 5 to 8**. You will need a calculator, pen & paper to work out the answers.

You should complete the tests using an updated browser. Do not exit the window until you have answered all the questions and get your result.

Note: It is the Department's policy that tests missed for any reason cannot be made up. If you miss either test **because of illness (medical note required),** the final exam will count for 60% or 70% of your final grade, and the assignments and other test will count for the remaining 40% or 30%. In that case, the medical note or certificate must be sent to your instructor **as soon as possible**

Final Exam

The final ONLINE examination will be two hours long and will cover all the material in the course. The final exam will take place on eConcordia Moodle, accessible through the course website Assessments page.

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.

Additional exam-specific details will be announced towards the end of the course.

* *Students registered with Concordia's Access Centre for Students with Disabilities (ACSD) will have the duration of their midterm tests automatically adjusted.*

Grades

Number to letter grade conversion

Letter Grade	Percentage (%)	Letter Grade	Percentage (%)
A+	90 to 100	С	64 to 66
A	85 to 89	C-	60 to 63
A-	80 to 84	D+	57 to 59
B+	77 to 79	D	54 to 56
В	74 to 76	D-	50 to 53
B-	70 to 73	F	Less than 50
C+	67 to 69		

Your final letter grade for the course will be posted in your Student Hub at the end of the term.

Communication and Extra Help

Teaching Assistants

By Week 2, each student registered in this course will be assigned a Teaching Assistant (TA). Their contact information (email address) will be posted on your eConcordia homepage.

TAs will help you with your studies, especially with any math questions you have. TAs are not required to help you with technical issues.

Allow for a 24-hour response time during the week (Monday-Friday). TAs check their messages once over the 48-hour weekend period and are not available on statutory or university holidays.

Discussion Board

The Discussion Board is a versatile tool in an online course. All students can ask questions and all students can read and answer the questions. The TAs are responsible for answering your questions; the instructor will monitor and moderate discussions.

Here are some guidelines to follow:

- Do not post any personal Keep all postings pertinent to the course material.
- Questions about grades or questions of a personal nature must be addressed directly to your
- Ask or answer questions about the ideas of the course, the self-assessments, the textbook, examples from videos, or any calculator.
- Do not ask others to solve your assignment problems. (Asking for a hint or help getting started is acceptable)
- Read the other postings to confirm that your question has not already been asked.
- Always be respectful. Refrain from making offensive statements and derogatory remarks.
- Students who fail to respect these rules will be asked to leave the discussion. It is within our discretion and authority to remove or edit any posting at any time.

Note: The Discussion Board will be closed on the days of the midterms and final exam. If your question does not get answered or resolved, please e-mail your TA instead.

If you have a very specific issue (e.g. WeBWorK is not accepting your answer), please e-mail your TA and attach a screenshot of your work so that your TA can identify your problem.

Announcements

The Announcements section of the course website is our means of communicating important changes and updates to you on a regular basis. Please keep up to date by reading the announcements on a weekly basis. The announcements are at the centre of your eConcordia homepage.

To receive announcements in your email inbox, click on *My Account* on your eConcordia homepage, select the box next to *I would like to receive course announcements by email* (below your personal information), and click **Update**.

Math Help Center

The Department of Mathematics and Statistics has a free Math Help Centre for students enrolled in MATH 200 where you can ask a tutor for one-on-one help. The tutors at the Math Help Center are graduate students in mathematics who will help you with particular questions, explain things to you, and give you hints and insight. Its schedule of operation will be posted by Week 2 in the Department and on the Department webpage: https://www.concordia.ca/artsci/math-stats/services/math-help-centre.html

The Math Help Center opens in the third week of the term. The schedule and (if offered remotely) links to access the Zoom meetings can be found on the website of the Department of Mathematics and Statistics: <u>https://www.concordia.ca/artsci/math-stats/services/math-help-centre.html</u>

Student Success Centre

Concordia University's Success Centre (<u>https://www.concordia.ca/students/success.html</u>) offers a variety of resources to students. Visit <u>https://www.concordia.ca/students/success/learning-support/math-help.html</u> to learn about available resources.

To book an appointment for one-on-one tutoring for MATH 200, you can go to: <u>https://www.concordia.ca/students/success/learning-support/math-help.html#tutoring</u>

Study Habits

To succeed in an online course, good study habits are essential. A learner who is motivated, selfdisciplined, and has good organizational skills will be able to progress normally in the course. Here are some tips to help you succeed.

Set aside some specific days and times to work on the course. On average, a student should spend **six hours per lesson** in MATH 200. This time would be spent watching (and re-watching) the video lectures and examples, working on the self-assessment, and completing the assignment. Note that six hours is an estimate only and should be adjusted based on your ability to learn the material. More time will be needed to study for the midterm and final exam.

Complete your work early in the week so that you have time to e-mail your TA if you have any questions. **Do NOT wait until the last day before a deadline to complete an assessment.** Use the agenda to help you plan ahead.

As you work through each lesson, write down all of the important formulas and procedures that you learn. This will keep you alert while you watch the videos, and it will also make it easier for you to study for the exams.

Technical Help and Support

eConcordia Help Desk

If you experience any technical problems with the eConcordia website such as videos not loading or playing, please contact the **eConcordia HelpDesk**:

E-mail: <u>helpdesk@econcordia.com</u>

The necessary technical requirements to ensure the eConcordia course website works properly can be found here: <u>Technical Requirements</u>. The recommended web browsers are Google Chrome on PC, and Safari and Google Chrome on Mac devices.

WeBWorK Technical Help

If you experience any technical problems with WeBWorK please contact Concordia's WeBWorK Teaching Assistants:

E-mail: webwork.mathstat@concordia.ca

The recommended web browsers for WeBWorK are Google Chrome and Mozilla. Do not use Safari or Internet Explorer.

NOTE: The WeBWorK Teaching Assistants will not answer questions about the mathematical content of your WeBWorK assignments or other assessments. All such questions should be directed to your MATH 200 TA or instructor.

Third Party Software/Website

Here is an excerpt on Concordia's policy on Educational software or services developed and owned by third parties, including those linked to textbooks, in-class surveys, lecture capture, virtual classrooms, course assignments and quizzes can be invaluable tools for the development and teaching of courses.

Third-Party software/websites that require personal information (name, email, student number, etc.):

Students are advised that external software and/or websites will be used in the course and students may be asked to submit or consent to the submission of personal information (for example, name and email) to register for an online service. Students are responsible for reading and deciding whether or not to agree to any applicable terms of use. Use of this software and service is voluntary. Students who do not consent to the use the software or service should identify themselves to the course instructor as soon as possible, and in all cases before the DNE deadline, to discuss alternate modes of participation.

Third-party software/websites for work submission:

Students are advised that external software and/or websites will be used in the course and students may be asked to submit or consent to the submission of their work to an online service. Students are responsible for reading and deciding whether or not to agree to any applicable terms of use. Use of this software and service is voluntary. Students who do not consent to the use the software or service should identify themselves to the course instructor as soon as possible to discuss alternate modes of participation that do not require them to give copyright or the right to use their work to a third party.

By using the external software or websites, students agree to provide and share their work and certain personal information (where applicable) with the website/software provider. Students are advised that the University cannot guarantee the protection of intellectual property rights or personal information provided to any website or software company. Intellectual property and personal information held in foreign jurisdictions are subject to the laws of such jurisdictions.

Third-party technology to record a course:

Note that, as a part of this course, some or all of the lectures and/or other activities in this course may be recorded. Recordings will be focused on the instructor and will normally exclude students. It is possible, however, that your participation may be recorded. If you wish to ensure that your image is not recorded, speak to your instructor as soon as possible.

<u>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.</u>

MATH 200 - Fundamental Concepts of Algebra Agenda Summer 2023

All deadlines indicated are on the due date listed by 11:59 p.m. unless otherwise indicated.

	Week 1: May 10 - May 14		
	Read Course Outline		
	Watch "INTRODUCTION VIDEO" on Course Website		
	Lesson 0: Remedial Lessons (if necessary)		
	Lesson 1: Fundamental Operations with Algebraic Expressions		
May 10	Discussion Board opens at 2 PM.		
May 10	Classes Begin		
	Week 2: May 15 - May 21		
	Lesson 2: Linear Equations		
May 17	Deadline for withdrawal with tuition refund (DNE) from two-term summer session courses		
May 17	Deadline to add two-term summer session courses		
May 19	Assignment #1 due at 11:59PM		
	Week 3: May 22 - May 28		
	Lesson 3: Formulae and Linear Equations in Two Variables		
May 22	Journée nationale des patriotes (Quebec), Victoria Day (elsewhere in Canada) — University closed.		
May 26	Assignment #2 due at 11:59 PM		
	Week 4: May 29 - June 4		
	Lesson 4: Graphing Linear Equations in Two Variables		

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June 02	Assignment #3 due at 11:59 PM	
	Week 5: June 5 - June 11	
	Lesson 5: Linear Inequalities	
June 09	Assignment #4 due at 11:59 PM	
	Week 6: June 12 - June 18	
	Lesson 6: Systems of Linear Equations	
June 16	Assignment #5 due at 11:59PM	
	Week 7: June 19 - June 25	
	Lesson 7: Percentages, Ratios and Other Problems	
June 21	Test 1 on Lessons 1-4 (9:00AM to 11:59PM), held on eConcordia Moodl	
June 21	Assignment #6 due at 11:59 PM	
June 22	Mid-term break begins, two-term summer session courses	
June 23	University Closed	
June 24	Fête Nationale - University Closed	
	Week 8: June 26 - July 2	
June 30	University Closed	
July 01	Canada Day - University Closed	
July 02	Mid-term break ends, two-term summer session courses	
	Week 9: July 3 - July 9	
	Lesson 8: Factoring Algebraic Expressions	
July 07	Assignment #7 due at 11:59 PM	
	Week 10: July 10 - July 16	
	Lesson 9: Exponents and Radicals	
July 14	Assignment #8 due at 11:59 PM	

	Week 11: July 17 - July 23	
	Lesson 10: Quadratic Equations	
July 19	Test 2 on Lessons 5-8 (9:00AM to 11:59PM), held on eConcordia Moodle	
July 21	Assignment #9 due at 11:59 PM	
	Week 12: July 24 - July 30	
	Lesson 11: Rational Expressions	
July 27	Assignment #10 due at 11:59 PM	
	Week 13: July 31 - August 6	
	Lesson 12: Rational Equations	
August 03	Assignment #11 due at 11:59 PM	
	Week 14: August 7 - August 13	
	Review course material	
August 09	Assignment #12 due at 11:59 PM	
August 10	D Last day of classes, two-term summer session courses	
August 13	Deadline for academic withdrawal (DISC) from two-term summer session courses	
	Examination Period: August 14 - August 20	
	Final Exam date and time is posted on your Student Hub	