MATH 200 Fundamental Concepts of Algebra Section EC Fall 2021

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

Important: This syllabus is an important document to understand how to succeed in this course. It provides key information regarding assessment, due dates, grading scheme, access to sites and resources, etc. It is your responsibility to be familiar with its contents.

This is a course offered by the Department of Mathematics and Statistics. It is intended to give students an introduction to the fundamentals 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 and Teaching Assistants (TA)

Instructor: Dr. Igor Gorelyshev

Instructor Contact Information: math200@econcordia.com

This email address allows you to contact the instructor directly if you have any questions or concerns about the general nature of the course, or if there is a delay in a reply from your TA.

Office hours: Monday, Wednesday, Friday, time TBA. Contact the instructor for an appointment if you cannot attend the fixed office hours. Note that your questions can also be answered by e-mail or if you post them on the eConcordia Discussion Board.

The exact time of the office hours will be posted in an announcement at the start of the semester. This announcement will include information about how to access the virtual office hours.

All other communication will be done through email, Announcements on your eConcordia homepage, or posts on the Discussion Board (see **Discussion Board** below).

Teaching Assistant (TA) Contact Information: Due to the large number of students enrolled in this course, you will be assigned a Teaching Assistant (TA). Their contact information (email address) will be posted on your eConcordia homepage.

Your TA is your first point of contact for discussing the mathematical content of the course. Questions about lesson material can be posted in the appropriate folder on the Discussion Board (see **Discussion Board** below). You are also strongly encouraged to pose your questions during the regular office hours.

Your TA(s) and instructor will be answering questions posted on the Discussion Board or sent by e-mail during regular hours before 5pm every day of the week except weekend. If your question is posted/sent after 5pm it may not be answered until the next day. If your question is posted/sent after 5pm on Friday, it will be answered by 5pm next Monday.

The TA(s) and instructor are not available on statutory or university holidays!

Include your full name and student ID in email messages to the instructor or TA. This will enable us to easily identify you on the class list and grade sheet and promptly reply to your questions.

Course Description

This course teaches the following fundamental concepts of algebra:

- 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, tests and the final examination (Moodle and Webwork) 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.
- Additional problems and learning resources: Review practice problems and (optional) external resources will be posted on our eConcordia Moodle page throughout the term. One such resource (available at the start of the semester) is the course manual. This manual is designed to include the topics of Lessons 1 12 and is there to help you develop problem solving skills.
- **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 no <u>required</u> textbook for this course. Additional resources will be posted on the eConcordia Moodle page throughout the term.

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.

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**.

Discussion Board

Questions about the mathematical content of the course can be posted in the appropriate lesson folder on the Discussion Board, which is accessible by clicking the *Discussion Board* link on your eConcordia homepage.

Posting on the Discussion Board is like raising your hand in class. You can ask for clarification of topics, or guidance on solving assignment problems. Do not ask others to solve your assignment problems for you; asking for a hint or help getting started is strongly encouraged.

The TAs are responsible for answering your questions; the instructor will monitor and moderate discussions. Students are welcome and encouraged to answer their classmates' questions as well.

Always read the other postings to verify if your question has already been answered.

Always be respectful. Refrain from making offensive statements and derogatory comments. For example, students must never insult another person, a TA or the instructor in any discussion.

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 midterm tests and final examination.

Do not post your student ID or other personal information on the discussion board.

Assessments

Evaluation Scheme

Your final grade will be calculated using the two evaluation schemes described below. The final grade you are given will be the **larger** of the two values.

Evaluation scheme (A)

- Assignments (Webwork) 20%
- Midterm test 1 (Moodle) 20%
- Midterm test 2 (Moodle) 20%
- Final examination (Moodle) 40%

Evaluation scheme (B)

Assignments	(Webwork)	20%
Midterm test 1	(Moodle)	10%
Midterm test 2	(Moodle)	10%
Final examination	(Moodle)	60%
	Assignments Midterm test 1 Midterm test 2 Final examination	Assignments(Webwork)Midterm test 1(Moodle)Midterm test 2(Moodle)Final examination(Moodle)

Description of Graded Assessments

DISCLAIMER: It is your responsibility to take note of the due dates (and times) for assignments and the dates (and times) for midterm tests and the final examination.

Assignments

All students will be given access to an online system called WeBWorK to complete assignments.

Assignments will open on the same day as their respective lesson and, with a minor exception of a shorter deadline for the assignments 11 and 12, will remain open for 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).

Instructions for how to log into WeBWorK and use it can be found on the eConcordia Moodle page.

Summary:

- 12 Assignments posted on the website WeBWorK;
- There is one assignment for each lesson (*except* lesson 13);

- Only the best 11 out of the 12 assignments will count towards the final grade;
- Due dates for each assignment are listed in the **Agenda**

Midterm tests (2 in total) written on Moodle.

Summary:

Midterm test 1 (covers lessons 1 to 4):

- Date: October 16, 2021 (Saturday) end of week #6
- Time: 10:00 am
- Duration: 60 minutes

Alternate test 1:

- Date: October 17, 2021 (Sunday) end of week #6
- Time: 12:00 pm (noon)
- Duration: 60 minutes

Midterm test 2 (covers lessons 5 to 8):

- Date: November 13, 2021 (Saturday) end of week #10
- Time: 10:00 am
- Duration: 60 minutes

Alternate test 2:

- Date: November 14, 2021 (Sunday) end of week #10
- Time: 12:00 pm (noon)
- Duration: 60 minutes

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

The midterm tests will consist of 10 questions each and will use the Moodle quiz mode. A sample test will be made available approximately 1 week before each midterm test.

Every student will be allowed to write the alternate test. For each of the tests the best of the two scores received will count towards the final grade.

In the case of exceptional circumstances out of your control that keep you from writing a midterm test, the weight of that test will be transferred to your final examination.

Final Exam (Moodle)

Summary:

- Date and time will be posted in your MyConcordia portal.
- Covers lessons 1 to 12.
- 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

Your assignment grades will be available in the Grades section of **WeBWorK**. Grades for midterm tests 1 and 2 will be available on **Moodle**. Your final grade will be posted on **MyConcordia** portal.

It is your responsibility to ensure your assignment and midterm results have been properly recorded and to contact the instructor via e-mail if you have any questions concerning your grades.

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		

Grade Distribution

Important Information

Торіс	Link
Academic Integrity	Academic Integrity
Educational Technology Guidelines	Concordia Educational Technology Guidelines for Faculty and Students (the "Guidelines")
Access Centre for Students with Disabilities	ACSD
Concordia Library Citation & Style Guides	How to cite
Course Communication Tools	Communication
eConcordia Policies	Policies
Final Exams Information	Final Exams
Helpdesk/Support	FAQ
Refunds	Refunds
Technical Requirements	Technical Requirements
Tips for Studying Online	Studying Tips
Tips on how to reach online learning goals (learning modules)	How to Succeed @ eConcordia

Technical Help and Support

eConcordia HelpDesk

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>

Phone: (514) 848-8770, open Monday to Friday from 9:00 am to 5:00 pm Eastern time.

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.

Math Help Centre

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.

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:

https://www.concordia.ca/artsci/math-stats/services/math-help-centre.html

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-</u> <u>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: https://www.concordia.ca/students/success/learning-support/math-help.html#tutoring

Study Habits

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

Set aside 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 lecture videos 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 tests and final examination.

Complete your work early in the week so that you could have enough time to pose questions to your TA and instructor before an assignment is due. **Do not** wait until the last day before the deadline to complete an assessment. Use the agenda to make it easier to plan ahead.

As you work through each lesson, write down all of the important formulas and procedures that you learn. Try to do examples yourself *before* viewing the solution in the lesson video. Alternate between watching a lesson video and solving problems related to material you just learned in that lesson. These strategies will keep you alert while you watch the videos and make it easier for you to study for the examinations.

Tutorial Companies

Please note that private tutorial companies, some of whom aggressively promote their services on and off campus, are not authorized by Concordia University to distribute flyers on University premises and may not use Concordia University facilities to promote or provide their services on some flyers.

Concordia University and its academic departments do not have any affiliation with these companies even though names such as JMSB, Concordia, or references to specific departments often appear in a visible way.

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.

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.

MATH 200 - Fundamental Concepts of Algebra Agenda Fall 2021

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

Week 1 : September 6 - September 12		
	Read Course Outline	
	Watch "INTRODUCTION VIDEO" on Course Website	
	Lesson 13: Remedial Lessons (if necessary)	
	Lesson 1: Fundamental Operations with Algebraic Expressions	
September 07	Classes begin, fall term	
September 07	Discussion Board opens at 2 PM	
Week 2: September 13 - September 19		
	Lesson 1: Fundamental Operations with Algebraic Expressions (Continued)	
	Week 3: September 20 - September 26	
	Lesson 2: Linear Equations	
September 20	Deadline to add fall-term courses	
September 20	Deadline for withdrawal with tuition refund (DNE) from fall-term courses	
Week 4: September 27 - October 3		
	Lesson 3: Formulae and Linear Equations in Two Variables	
September 27	Assignment #1 due on Monday, September 27, 2021 at 11:59 PM	
Week 5: October 4 - October 10		
	Lesson 4: Graphing Linear Equations in Two Variables	

October 04	Assignment #2 due on Monday, October 4, 2021 at 11:59 PM	
	Week 6: October 11 - October 17	
	Lesson 5: Linear Inequalities	
October 11	Thanksgiving Day - University closed.	
October 12	Assignment #3 due on Tuesday, October 12, 2021 at 11:59 PM	
October 16	Midterm test 1 (lessons 1 to 4) – Saturday, October 16, 2021 at 10AM on Moodle Discussion Board closed all weekend	
October 17	Alternate test 1 - Sunday, October 17, 2021 at noon on Moodle Discussion Board closed all weekend.	
Week 7: October 18 - October 24		
	Lesson 6: Systems of Linear Equations	
October 18	Assignment #4 due on Monday, October 18, 2021 at 11:59 PM	
Week 8: October 25 - October 31		
	Lesson 7: Percentages, Ratios and Other Problems	
October 25	Assignment #5 due on Monday, October 25, 2021 at 11:59 PM	
	Week 9: November 1 - November 7	
	Lesson 8: Factoring Algebraic Expressions	
November 01	Assignment #6 due on Monday, November 1, 2021 at 11:59 PM	
	Week 10: November 8 - November 14	
	Lesson 9: Exponents and Radicals	
November 08	Deadline for academic withdrawal (DISC) from fall-term courses	
November 08	Assignment #7 due on Monday, November 8, 2021 at 11:59 PM	
November 12	Last day to register with the Access Centre for Students with Disabilities and receive exam accommodations for the final examination period.	
November 13	Midterm test 2 (lessons 5 to 8) – Saturday, November 13, 2021 at 10AM on Moodle Discussion Board closed all weekend	
November 14	Alternate test 2 - Sunday, November 14, 2021 at noon on Moodle Discussion Board closed all weekend	

Week 11: November 15 - November 21		
	Lesson 10: Quadratic Equations	
November 15	Assignment #8 due on Monday, November 15, 2021 at 11:59 PM	
Week 12: November 22 - November 28		
	Lesson 11: Rational Expressions	
November 22	Assignment #9 due on Monday, November 22, 2021 at 11:59 PM	
Week 13: November 29 - December 5		
	Lesson 12: Rational Equations	
November 29	Last day for instructor-scheduled tests or examinations	
November 29	Assignment #10 due on Monday, November 29, 2021 at 11:59 PM	
December 03	Assignment #11 due on Friday, December 3, 2021 at 11:59 PM	
Week 14: December 6 - December 12		
	Review course material	
December 06	Last day of classes	
December 07	Assignment #12 due on Tuesday, December 7, 2021 at 11:59 PM	
Examinations Period: December 8 - December 22		
	Final Exam date, time and location is posted on your MyConcordia Portal	