

MATH 200

Fundamental Concepts of Algebra

Section EC

Winter 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

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: Hadas Brandes

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: Fridays, time TBA. You are welcome to contact the instructor for an appointment if you cannot make it to the fixed office hours.

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 must be posted in the appropriate folder on the Discussion Board (see **Discussion Board** below).

Allow for a 24-hour response time from your TA during the week (Monday-Friday). Teaching Assistants check their messages once over the 48-hour weekend period and 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

There is no Moodle page for this course. The course content is available only on eConcordia: www.econcordia.com.

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:** Then 10-question self-assessments are for you to practice that 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:** Additional practice problems and external resources for each lesson will be posted on the Discussion Board regularly throughout the term.
- **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 required textbook for this course. Suggested reading material and additional resources will be posted on the Discussion Board throughout the term.

Course Website

To access the course website, log in at www.econcordia.com 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 must 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 okay.

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.

Read the other postings to confirm that your question has not already been answered.

Always be respectful. Refrain from making offensive statements and derogatory comments. For example, students must never insult another person or TA 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 exam.

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 10%
- Midterm test 1 30%
- Midterm test 2 30%
- Final exam* 30%

Evaluation scheme (B)

- Assignments 10%
- Midterm test 1 20%
- Midterm test 2 20%
- Final exam* 50%

** To pass this course, you must receive a minimum score of 50% on the final exam.*

Description of Graded Assessments

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 will remain open for two weeks. Starting in Week 4, there will be an assignment due every Monday night at 11:59 pm. The due dates of each assignment 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 are on the Course Website.

Summary:

- 12 Assignments posted on the website WeBWork
- One assignment for each lesson (*except* lesson 13)
- Due dates listed in the **Agenda** below

- Two formats for assignment submissions
 - 2 Hand-written assignments
 - These will be posted on WeBWork, but students will be asked to write full solutions by hand and follow instructions (TBA) for how to submit their hand-written work.
 - 10 WeBWork assignments
 - These will be posted on WeBWork and students will submit their solutions directly on WeBWork
 - Only the **best 8 out of the 10** assignments submitted directly on WeBWork will count towards the final grade

The 2 assignments with solutions to be written by hand will be posted on WeBWork and will include instructions for how to submit your hand-written work.

The TAs and instructor **will not respond to questions** about assignments that are asked **within 24 hours** of an assignment deadline.

Midterm tests (2 in total)

Summary:

- Written on the website WeBWork
- Midterm test 1:
 - Date: February 18
 - Covers lessons 1 to 4
- Midterm test 2:
 - Date: March 25
 - Covers lessons 5 to 8
- Open at: 9:00 am
- Duration: 90 minutes*
- Close at: 11:59 pm

**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 and will use WeBWork's quiz mode. A sample test will be made available approximately 1 week before each midterm test.

The midterm tests will be accessible between 9:00 am and 11:59 pm on the dates they are scheduled. When you begin the test, a timer will begin to count down. You will have to complete the test in the allotted time of 90 minutes. **The tests will close at 11:59 pm.** If you begin the tests after 10:30 pm, you will not be given the full 90 minutes.

Only a medical note clearly stating the reason for absence may be accepted as an excuse for missing a midterm test. In such a case, the weight of the midterm test will be transferred to your final exam.

Final Exam

Summary:

- Posted on the website WeBWork.
- 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.

The final exam will consist of two parts:

- **Part 1:** WeBWork exam
 - A timed exam similar to the midterm tests using WeBWork's quiz mode.
- **Part 2:** Hand-written exam
 - Students will write hand-written solutions to additional problems assigned on WeBWork.

Additional details about the format, duration*, and overall execution of the final exam will be announced towards the end of the course.

The date and time of the final exam is announced by the University on the **MyConcordia portal**.

**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 and midterm grades will be available in the Grades section of WeBWork.

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

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

Grade Distribution

| Letter Grade | Percentage (%) | Letter Grade | Percentage (%) |
|--------------|----------------|--------------|----------------|
| A+ | 90 to 100 | C | 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 |
| B | 74 to 76 | D- | 50 to 53 |
| B- | 70 to 73 | F | Less than 50 |
| C+ | 67 to 69 | | |

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: helpdesk@econcordia.com

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: [Technical Requirements](#). 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 there 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 will be offered virtually through one-on-one Zoom meetings in the Winter 2021 semester. The Math Help Center opens in the third week of the term. The schedule and links to access the Zoom meetings are on the Math Department's website at the following link: <https://www.concordia.ca/artsci/math-stats/services/math-help-centre.html>

Student Success Centre

Concordia University's Success Centre offers one-on-one free tutoring for MATH 200. Appointments with a mathematics tutor can be booked through your MyConcordia portal. For more information visit <http://www.concordia.ca/students/success/learning-support/math-engineering-help.html>.

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 exam.

Complete your work early in the week so that you have time to e-mail your TA if you have any questions before an assignment is due. **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. Try to do examples yourself *before* viewing the solution in the lesson video. Alternate between watching a lesson video and doing exercises 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 exams.

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.

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. If you are interested in the University's approved tutoring services, consult the services listed in your course outline or other services listed on the University's website.

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. They 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.

Important Information

| Topic | 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 |

MATH 200 - Fundamental Concepts of Algebra Agenda Winter 2021

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

| Week 1: January 11 - January 17 | |
|----------------------------------|--|
| | Read Course Outline |
| | Watch "INTRODUCTION VIDEO" on Course Website |
| | Lesson 13: Remedial Lessons (if necessary) |
| | Lesson 1: Fundamental Operations with Algebraic Expressions |
| January 13 | Classes Begin |
| January 13 | Discussion Board opens at 2 PM. |
| Week 2: January 18 - January 24 | |
| | Lesson 1: Fundamental Operations with Algebraic Expressions (Continued) |
| Week 3: January 25 - January 31 | |
| | Lesson 2: Linear Equations |
| January 26 | Last day to add winter-term courses. |
| January 26 | DNE Date: Deadline for withdrawal with tuition refund from winter-term courses. |
| Week 4: February 1 - February 7 | |
| | Lesson 3: Formulae and Linear Equations in Two Variables |
| February 01 | Assignment #1 due |
| Week 5: February 8 - February 14 | |
| | Lesson 4: Graphing Linear Equations in Two Variables |

| | |
|--|---|
| | Midterm tutorial session (link to be posted in an announcement). Exact date TBA |
| February 08 | Assignment #2 due |
| Week 6: February 15 - February 21 | |
| | Lesson 5: Linear Inequalities |
| February 15 | Assignment #3 due |
| February 18 | Midterm test 1 (lessons 1 to 4) – Open from 9:00 am until 11:59 pm Discussion Board closed all day |
| Week 7: February 22 - February 28 | |
| | Lesson 6: Systems of Linear Equations |
| February 22 | Assignment #4 due |
| Mid-Term Break: March 1 - March 7 | |
| March 01 | Mid-term break begins. |
| March 01 | Assignment #5 due |
| March 04 | University closed |
| March 05 | President's Holiday - University closed. |
| March 07 | Mid-term break ends. |
| Week 8: March 8 - March 14 | |
| | Lesson 7: Percentages, Ratios and Other Problems |
| March 08 | Assignment #6 due |
| Week 9: March 15 - March 21 | |
| | Lesson 8: Factoring Algebraic Expressions |
| | Midterm tutorial session (link to be posted in an announcement). Exact date TBA |
| March 19 | Last day to register with the Access Centre for Students with Disabilities and receive exam accommodations for the final examination period. |
| Week 10: March 22 - March 28 | |
| | Lesson 9: Exponents and Radicals |
| March 22 | Assignment #7 due |

| | |
|--|--|
| March 25 | Midterm test 2 (lessons 5 to 8) – Open from 9:00 am until 11:59 pm Discussion Board closed all day |
| Week 11: March 29 - April 4 | |
| | Lesson 10: Quadratic Equations |
| March 29 | DISC Date: Last day for academic withdrawal from winter-term courses |
| March 29 | Assignment #8 due |
| April 02 | University closed |
| April 03 | University closed |
| April 04 | University closed |
| Week 12: April 5 - April 11 | |
| | Lesson 11: Rational Expressions |
| April 05 | University closed |
| April 05 | Assignment #9 due |
| Week 13: April 12 - April 18 | |
| | Lesson 12: Rational Equations |
| April 12 | Assignment #10 due |
| April 13 | Last day for instructor-scheduled tests or examinations |
| Week 14: April 19 - April 25 | |
| | Review course material |
| | Final exam tutorial session (link to be posted in an announcement). Exact date TBA |
| April 19 | Assignment #11 due |
| April 20 | Last day of classes |
| Examinations Period: April 24 - May 9 | |
| | Final Exam date and time is posted on your MyConcordia Portal |
| April 26 | Assignment #12 due |