

MATH 200

Fundamental Concepts of Algebra

Section EC

Winter 2025

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. It is intended to give students a solid foundation in 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

You can e-mail your instructor if you have general inquiries, or if there is a delay in hearing back from your Teaching Assistant (TA). Please include the following information in all of your e-mail communications:

- Full name

- Concordia student ID number
- Course number pertaining to your inquiry (i.e. MATH 200)

Course Material

The learning material for this course, as well as links to the MATH 200 **eConcordia Moodle page**, the assignments, the midterm tests, and the final exam are all located on the MATH 200 Course Website, which is accessible through the eConcordia website: www.econcordia.com.

Note: No learning material will be posted on the *Concordia Moodle* page for MATH 200.

Your eConcordia account will be valid until the end of the term for which you are registered.

Course Website

To access the MATH 200 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 learning material for this course.

Textbook

There is a required textbook for this course entitled *MATH 200 Manual*. You can access the textbook at no cost by clicking on the link “MATH 200 MANUAL” located on the top right of the course website home page.

The password to open the file is: ConcordiaMATH200

Lesson Structure

In the Course Website, the learning material is divided into thirteen lessons (note that “Lesson 13” is a Remedial Lesson that some students may find useful *before* starting Lesson 1):

- **Lesson 1:** Fundamental Operations with Algebraic Operations
- **Lesson 2:** Linear Equations
- **Lesson 3:** Formulae and Linear Equations in Two Variables
- **Lesson 4:** Graphing Linear Equations in Two Variables
- **Lesson 5:** Linear Inequalities
- **Lesson 6:** Systems of Linear Equations
- **Lesson 7:** Percentages, Ratios, and Other Problems
- **Lesson 8:** Factoring Algebraic Expressions
- **Lesson 9:** Exponents and Radicals
- **Lesson 10:** Quadratic Equations
- **Lesson 11:** Rational Expressions
- **Lesson 12:** Rational Equations

- **Lesson 13: Remedial Lessons** (if necessary)

Within each lesson you will find:

- **Lecture and Example 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 of this course outline.

The following table shows which sections of the textbook correspond to each lesson.

| Lesson | Title | Textbook Section(s) |
|--------|--|--|
| 1 | Fundamental Operations with Algebraic Operations | 1.1 – Integer Exponents in Algebra 1.2 – Polynomials and Their Operations |
| 2 | Linear Equations | 2.1 – Solving Linear Equations |
| 3 | Formulae and Linear Equations in Two Variables | 2.2 – Formulae |
| 4 | Graphing Linear Equations in Two Variables | 3.3 – Linear Functions; Slope and Equation of a Line |
| 5 | Linear Inequalities | 4.1 – Solving Linear Inequalities 4.2 – Absolute Value Linear Inequalities |
| 6 | Systems of Linear Equations | 5.1 – Systems of Two Linear Equations 5.2 – Solving Systems of Two Linear Equations |
| 7 | Percentages, Ratios, and Other Problems | 6.1 – Percentages 6.2 – Ratios 6.3 – Mixing Problems |
| 8 | Factoring Algebraic Expressions | 7.1 – Factoring |
| 9 | Exponents and Radicals | 1.3 – Roots and Radicals 8.3 – Solving Radical Equations |
| 10 | Quadratic Equations | 7.2 – Solving Quadratic Equations |
| 11 | Rational Expressions | 8.1 – Rational Expressions (Fractions) |
| 12 | Rational Equations | 8.2 – Solving Equations Containing Fractions |
| 13 | Remedial Lessons | 0 – Prealgebra Review |

Assessments

The graded assessments for this course are:

- Eleven (11) online **Assignments**, on the platform WeBWork
- Two (2) **Midterm Tests**, on the eConcordia Moodle page
- The **Final Exam**, on the eConcordia Moodle page

Assignments

There will be 11 assignments, one for each lesson in the course, with the concepts from lessons 11 and 12 both appearing in assignment #11. The assignments are to be completed on the online platform called **WeBWork**.

You will have about two weeks to complete each assignment. An assignment will open on the same day as its respective lesson and will close about two weeks later.

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 (including illness or computer issues). Please note, however, that the lowest scoring assignment out of the 11 will be dropped, so that only 10 out of the 11 assignments will count towards your final grade.

Instructions for accessing and logging into WeBWork, as well as a guide on how to use WeBWork, can be found in the Assessments section of the Course Website.

Midterm Tests

The two Midterm Tests will be done online:

- Midterm Test 1 will cover **Lessons 1 to 4** and will take place on **Wednesday March 5**
- Midterm Test 2 will cover **Lessons 5 to 8** and will take place on **Wednesday March 26**

The tests will take place on the **eConcordia Moodle** page, accessible only in the Assessments section of the Course Website. Please note that the tests are **NOT** on Concordia Moodle, which is a separate website.

Each test will be accessible from 9:00 AM to 11:59 PM (ET) on the day of the test.

Once you begin, you will have 60 minutes to complete the test, **or until it closes** at 11:59 PM (ET), whichever comes first.

You will need a calculator, and pen & paper to work out the answers.

You should complete the midterm using an up-to-date web browser. Do not exit the midterm test window until you have answered all the questions and have been given your result.

Note: It is the Department's policy that tests missed for any reason cannot be made up. If you miss either midterm test because of illness, the weight of the missed test will be shifted onto the final exam. In such cases, a medical note or certificate must be sent to your instructor **as soon as possible**.

Final Exam

The Final Examination will be done **online**. The exam will be two hours long and will cover all of the material in the course (from **Lessons 1 to 12**).

The final exam will take place on **eConcordia Moodle**, accessible only in the Assessments section of the Course Website.

The date of the final exam is set by the Examinations Office and will be posted in your Student Hub. You are responsible for finding out the date of the final exam 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 information will be provided to you by your instructor as the date of the final exam approaches.

Note: You are responsible for finding out the date and time of the final exam 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 and final exam automatically adjusted.*

Evaluation Scheme

Your final grade will be the HIGHER of the grades calculated using the following two options:

Option A

- Assignments 20%
- Midterm Test 1 20%
- Midterm Test 2 20%
- Final Exam 40%

Option B

- Assignments 20%
- Midterm Test 1 10%
- Midterm Test 2 10%
- Final Exam 60%

Letter Grades

The following table shows the percentage to letter grade conversion for MATH 200:

| | | | | | | | |
|----------------|-----------|----------|-----------|-----------|----------|-----------|----------|
| Letter | A+ | A | A- | B+ | B | B- | |
| % Score | 90-100 | 85-89 | 80-84 | 77-79 | 73-76 | 70-72 | |
| Letter | C+ | C | C- | D+ | D | D- | F |
| % Score | 67-69 | 63-66 | 60-62 | 57-59 | 53-56 | 50-52 | <50 |

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

Academic Support

Teaching Assistants

Due to the large number of students enrolled in this course, you will be assigned a Teaching Assistant (TA) by week 2. Their contact info (email address) will be posted on your eConcordia homepage.

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

Please include the following information in all of your e-mail communications with your TA:

- Full name
- Concordia student ID number
- Course number pertaining to your inquiry (i.e. MATH 200)

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

Save a copy of all e-mail correspondence for the duration of the term and until you have received your final letter grade for the course.

You are expected to be polite at all times. Communications that do not meet this requirement will not be answered.

Discussion Board

As of 2:00 PM on the first day of class, a Discussion Board will be activated and accessible from the *Discussion Board* link on the eConcordia homepage.

The Discussion Board is the ideal place for you to ask questions about anything that is unclear about the course material. While the TAs are responsible for answering questions (the instructor will monitor and moderate discussions), **all students** are encouraged to read and answer the posted questions.

Here are some guidelines to follow for posting on the Discussion Board:

- Do not post any personal information on the discussion board.
- Keep all posts and questions pertinent to the course material.
- Questions about grades or questions of a personal nature must be addressed directly to your TA or instructor.

- You can ask or answer questions about the concepts taught in the course, the self-assessments, the textbook, examples from videos, or even using your calculator.
- **Do not ask others to solve your assignment problems for you**, though asking for a hint or help getting started is acceptable.
- Read the other postings to confirm that your question has not already been asked and answered.
- Be respectful. Refrain from making offensive statements and derogatory comments.
- 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 day of the midterm tests and final exam.

If a question that you posted on the Discussion Board does not get answered or resolved in a timely manner, please e-mail your TA.

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

Office Hours

In fairness to students who live out-of-town, the instructor and the TAs have no in-person office hours. However, students may request on-line office hours with either their TA or the instructor.

E-mail correspondence and the Discussion Board are the preferred means of communication.

Announcements

The Announcements are the instructor's means of communicating important updates to you on a regular basis. Please keep up to date by reading the announcements on a weekly basis. The announcements are located on your eConcordia homepage.

To receive announcements in your email inbox, click on *My Profile* -> *Edit Profile* on the 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 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 Centre 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>

Student Success Centre

Concordia University's Success Centre (<https://www.concordia.ca/students/success.html>) offers a variety of resources to students. Visit <https://www.concordia.ca/students/success/learning-support/math-help.html> 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 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 should be spent watching (and re-watching) the video lectures and examples, working on the self-assessment, and completing the assignments.
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 write and post pertinent questions on the Discussion Board, or 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 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, please contact the **eConcordia HelpDesk**:

- **E-mail:** helpdesk@econcordia.com
- **Phone:** (514) 848-8770
- **Toll-free:** (888) 361-4949

The Help Desk is open Monday to Friday from 9:00 AM to 5:00 PM ET.

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 TAs:

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 TAs 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.

Other Important Information and Useful Links

| 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 |
| Multifactor Authentication | MFA for Students |
| 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 |

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 that 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 that 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.

You are not permitted to share recordings of your classes. 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.

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.

ChatGPT and similar generative AI products

Chat GPT is a predictive text-generating artificial intelligence (AI). While it may prove useful in certain circumstances, it is not designed and is not intended to solve mathematical problems. In many cases, when prompted to solve a mathematical problem, Chat GPT will fail to provide a structured and sound mathematical answer.

For this reason, the use in this course of generative artificial intelligence tools or apps (including tools like ChatGPT and other AI writing or coding assistants) for assignments, midterm tests, and the final exam is prohibited.

MATH 200 - Fundamental Concepts of Algebra Agenda Winter 2025

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

| Week 1: January 13 - January 19 | |
|-----------------------------------|---|
| | Read Course Outline |
| | Lesson 13: Remedial Lessons (if necessary) |
| | Lesson 1: Fundamental Operations with Algebraic Expressions |
| January 13 | Classes begin, Winter term |
| January 13 | Discussion Board opens at 2 PM |
| Week 2: January 20 - January 26 | |
| | Lesson 2: Linear Equations |
| January 26 | Assignment #1 due at 11:59 PM |
| Week 3: January 27 - February 2 | |
| | Lesson 3: Formulae and Linear Equations in Two Variables |
| January 27 | Deadline to add winter-term courses |
| January 27 | Deadline for withdrawal with tuition refund (DNE) from winter-term courses |
| February 02 | Assignment #2 due at 11:59 PM |
| Week 4: February 3 - February 9 | |
| | Lesson 4: Graphing Linear Equations in Two Variables |
| February 09 | Assignment #3 due at 11:59 PM |
| Week 5: February 10 - February 16 | |
| | Lesson 5: Linear Inequalities |
| February 16 | Assignment #4 due at 11:59 PM |
| Week 6: February 17 - February 23 | |
| | Lesson 6: Systems of Linear Equations |

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|--|---|
| February 23 | Assignment #5 due at 11:59 PM |
| Mid-Term Break: February 24 - March 2 | |
| February 24 | Reading week begins |
| February 27 | Last day to submit required documentation to register with the Access Centre for Students with Disabilities and request exam accommodations for the Winter 2025 final examination period |
| February 28 | President's Holiday - University Closed |
| March 02 | Reading week ends |
| Week 7: March 3 - March 9 | |
| | Lesson 7: Percentages, Ratios and Other Problems |
| March 05 | Midterm Test 1 (Lessons 1 to 4), 9:00AM to 11:59PM |
| March 09 | Assignment #6 due at 11:59 PM |
| Week 8: March 10 - March 16 | |
| | Lesson 8: Factoring Algebraic Expressions |
| March 16 | Assignment #7 due at 11:59 PM |
| Week 9: March 17 - March 23 | |
| | Lesson 9: Exponents and Radicals |
| March 23 | Assignment #8 due at 11:59 PM |
| Week 10: March 24 - March 30 | |
| | Lesson 10: Quadratic Equations |
| March 26 | Midterm Test 2 (Lessons 5 to 8), 9:00AM to 11:59PM |
| March 30 | Assignment #9 due at 11:59 PM |
| Week 11: March 31 - April 6 | |
| | Lesson 11: Rational Expressions |
| April 06 | Assignment #10 due at 11:59 PM |
| April 05 | Last day for instructor-scheduled tests or examinations |
| Week 12: April 7 - April 13 | |
| | Lesson 12: Rational Equations |
| April 12 | Last day of classes, winter term |
| April 12 | Last day for academic withdrawal (<u>DISC</u>) from winter-term courses |
| April 13 | Assignment #11 due at 11:59 PM |

Examinations Period: April 15 - May 4

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|-----------------|---|
| | Final Exam date, time and location is posted on your Student Hub |
| April 18 | University Closed |
| April 19 | University Closed |
| April 20 | University Closed |
| April 21 | University Closed |