MATH 200 Fundamental Concepts of Algebra Section EC Summer 2020

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: David Pearce

Instructor Contact Information: <u>math200@econcordia.com</u>

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: The instructor and Teaching Assistants do not have office hours for this course. All 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 fundamental concepts of algebra including:

- 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 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.
- WeBWorK assignment: The lessons conclude with a 10-question assignment on the website WeBWorK. The 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 all of the course material.

Your eConcordia account will be valid until the end of the term for which you are registered. Your account will allow you to access 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 ensure that you keep up to date by reading the announcements on a weekly basis. The announcements are found in 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 TA's 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 two evaluation schemes described below. The final grade you are given will be the **larger** of the two values.

Evaluation scheme (A)

•	WeBWorK assignments	10%
•	Midterm test 1	30%
•	Midterm test 2	30%
•	Final exam *	30%

Evaluation scheme (B)

•	WeBWorK 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

WeBWorK Assignments

Summary:

- Written on the website WeBWorK
- One assignment for each lesson (*except* lesson 13)
- Due dates listed in the Agenda below
- Only the best 10 out of 12 assignments will count towards your final grade

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 3, there will be an assignment due every Sunday night at 11:59 pm. The due dates of each assignment are listed in the **Agenda** at the end of this course outline.

Only the **best 10 out of 12** assignments will count towards your final grade. There will be no accepted reason for missing a WeBWorK assignment (e.g. illness or computer issues) because the two lowest scores will not be counted anyway.

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

The TA's and instructor **will not respond to questions** about WeBWorK 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:
 - o Date: Wednesday June 10
 - o Covers lessons 1 to 4
- Midterm test 2:
 - o Date: Wednesday July 15
 - 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. Once activated, 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:

- Written 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
 - o 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**.

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	С	64 to 66
А	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		

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 that the eConcordia course website works properly can be found here: <u>Technical Requirements</u>. The recommended web browsers are Google Chrome and Mozilla Firefox on PC, and Safari and Google Chrome on Mac devices. An up-to-date Adobe Flash Player is also necessary.

WeBWorK Technical Help

If you experience any technical problems with the 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 sit with you and help you with particular questions, explain things to you, and give you hints/insight.

The Math Help Center is located on the 9th Floor of the Library Building on the Downtown Campus, where the Math Department is located. The Math Help Center opens during the third week of the term, and the hours for the Summer 2020 semester are posted 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. **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.

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.

Important Information

Topic	Link
Academic Integrity	Academic Integrity
Educational Technology Guidelines	Educational software or services developed and owned by third parties
Access Centre for Students with Disabilities	ACSD
Concordia Library Citation & Style Guides	Citing - Help & How-to
Course Communication Tools	Communication
eConcordia Policies	Policies
Final Exams Information	Final Exams
Helpdesk/Support	FAQ
Refunds	Refunds
Technical Requirements	<u>Technical Requirements</u>
Tips for Studying Online	Studying Tips

MATH 200 Fundamental Concepts of Algebra Agenda Summer 2020

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

Week 1: May 4 - May 10		
May 04	Classes Begin	
	Read Course Outline	
	Watch "INTRODUCTION VIDEO" on Course Website	
	Lesson 13: Remedial Lessons (if necessary)	
	Lesson 1: Fundamental Operations with Algebraic Expressions	
May 05	Discussion Board opens at 2:00 pm	
Week 2: May 11 - May 17		
	Lesson 1: Fundamental Operations with Algebraic Expressions (Continued)	
May 11	DNE Date: Academic withdrawal deadline (with tuition refund)	
May 11	Last day to add or swap courses in this term	
Week 3: May 18 - May 24		
	Lesson 2: Linear Equations	
May 18	Journée nationale des patriotes (Quebec), Victoria Day (elsewhere in Canada) — University closed	
May 24	Assignment #1 due	
Week 4: May 25 - May 31		
	Lesson 3: Formulae and Linear Equations in Two Variables	
May 31	Assignment #2 due	
Week 5: June 1 - June 7		
	Lesson 4: Graphing Linear Equations in Two Variables	
June 7	Assignment #3 due	
Week 6: June 8 - June 14		

	Lesson 5: Linear Inequalities
June 10	Midterm test 1 (lessons 1 to 4) – Open from 9:00 am until 11:59 pm Discussion Board closed all day
June 14	Assignment #4 due
Week 7: June 15	- June 21
	Lesson 6: Systems of Linear Equations
June 18	Mid-term break starts
Week 8: June 22	- June 28
June 24	Fête Nationale - University Closed
June 24	Mid-term break ends
June 28	Assignment #5 due
Week 9: June 29	- July 5
	Lesson 7: Percentages, Ratios and Other Problems
July 01	Canada Day - University Closed
July 05	Assignment #6 due
Week 10: July 6 -	July 12
	Lesson 8: Factoring Algebraic Expressions
July 08	DISC Date: Academic withdrawal (without tuition refund)
July 12	Assignment #7 due
Week 11: July 13	- July 19
	Lesson 9: Exponents and Radicals
July 15	Midterm test 2 (lessons 5 to 8) – Open from 9:00 am until 11:59 pm Discussion Board closed all day
July 19	Assignment #8 due
Week 12: July 20	- July 26
	Lesson 10: Quadratic Equations
July 22	Past finals will be posted on the discussion board
July 26	Assignment #9 due
Week 13: July 27	- August 2
	Lesson 11: Rational Expressions
July 29	Course Evaluation released

August 02	Assignment #10 due
Week 14: August 3 - August 9	
	Lesson 12: Rational Equations
August 09	Assignment #11 due
Week 15: August 10 - August 16	
	Review course material
August 12	Last day of classes
August 12	Deadline to complete the course evaluation
August 16	Assignment #12 due
Examination Period: August 13 - August 18	
	Final Exam date and time posted on your MyConcordia Portal