# MATH 201
# Elementary Functions
# Section EC
# Winter 2026

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

**Disclaimer:** In the event of extraordinary circumstances, and pursuant to Academic Regulations, the University may modify the delivery, content, structure, form, location and/or evaluation scheme of this course. In the event of such extraordinary circumstances, students will be informed of the change.

## About Academic Integrity

Concordia University places the principle of academic integrity, that is, honesty, responsibility and fairness in all aspects of academic life, as one of its highest values.

Academic offenses to Concordia's Code of Academic Conduct include plagiarism and unauthorized collaboration. It is your responsibility to understand what these are and the possible consequences of a charge being upheld against you. You are not authorized to collaborate with others in the resolution of any of the course assessments, not to use AI or any other software to assist in the resolution of the course assessments.

### Behaviour

All individuals participating in courses are expected to be professional and constructive throughout the course, including in their communications.

Concordia students are subject to the Code of Rights and Responsibilities which applies both when students are physically and virtually engaged in any University activity, including classes, seminars, meetings, etc. Students engaged in University activities must respect this Code when engaging with any members of the Concordia community, including faculty, staff, and students, whether such interactions are verbal or in writing, face to face or online/virtual. Failing to comply with the Code may result in charges and sanctions, as outlined in the Code.

# About the Course

## What is MATH 201?

MATH 201 is a course offered by the Department of Mathematics and Statistics. It is intended to give students a solid foundation in pre-calculus to succeed in future science-level mathematics courses.

The first half of the course explores various functions such as linear functions, quadratic functions, rational functions, exponentials, and logarithms. The second half is about trigonometry, the branch of mathematics devoted to the relationships between the sides and angles of a triangle, as well as rotation. Real-life applications of functions and trigonometry will also be covered.

There are no tutorials for this online section of MATH 201.

**Note:**

- *Students who have received credit or exemption for MATH 203 or equivalent, or for a course having MATH 203 or equivalent in its sequence of prerequisites, 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

**Thomas Hughes**

**E-mail:** math201@econcordia.com

You can e-mail your instructor if you have inquiries (general, or regarding assignments and exams), 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 201)

# Course Material

The course website can be accessed at www.econcordia.com.

The learning material for this course, including videos, lectures, Discussion Board, and **all** graded course components, are all located on the MATH 201 EC course website.

## Course Website

To access the MATH 201 EC course Website, log in at www.econcordia.com and find MATH 201 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 course website.

## Textbook

There is an optional textbook for the course, titled *An Investigation of Functions*, Edition 1.5 by David Lippman and Melonie Rasmussen. This online book can be downloaded at the following link: http://www.opentextbookstore.com/precalc/

You can use this book for extra practice. Related problems and solutions may be posted throughout the term.

## Lesson Structure

The course website, containing the learning material is divided into eleven lessons, along with an additional “Lesson 0” that contains an introductory video and a pdf document that reviews basic algebra concepts.

- **Lesson 1:** Analytic Geometry
- **Lesson 2:** Introduction to Functions
- **Lesson 3:** Combining Functions
- **Lesson 4:** Quadratic and Rational Functions
- **Lesson 5:** Exponential Functions and Logarithms (Part) I
- **Lesson 6:** Exponential Functions and Logarithms (Part) II
- **Lesson 7:** Measuring Angles
- **Lesson 8:** Introduction to Trigonometry
- **Lesson 9:** Trigonometric Functions
- **Lesson 10:** Trigonometric Equations
- **Lesson 11:** Oblique Triangles

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 | Analytic Geometry | 2.1 – Linear Functions<br>2.2 – Graphs of Linear Functions<br>5.1 – Circles |
| 2 | Introduction to Functions | 1.1 – Functions and Function Notation<br>1.2 – Domain and Range |
| 3 | Combining Functions | 1.4 – Composition of Functions<br>1.5 – Transformations of Functions<br>1.6 – Inverse Functions |
| 4 | Quadratic and Rational Functions | 3.2 – Quadratic Functions<br>3.7 – Rational Functions |
| 5 | Exponential Functions and Logarithms (Part) I | 4.1 – Exponential Functions<br>4.2 – Graphs of Exponential Functions<br>4.3 – Logarithmic Functions<br>4.5 – Graphs of Logarithmic Functions |
| 6 | Exponential Functions and Logarithms (Part) II | 4.4 – Logarithmic Properties |
| 7 | Measuring Angles | 5.2 – Angles |
| 8 | Introduction to Trigonometry | 5.3 – Points on Circles Using Sine and Cosine<br>5.4 – The Other Trigonometric Functions<br>5.5 – Right Triangle Trigonometry |
| 9 | Trigonometric Functions | 6.1 – Sinusoidal Graphs<br>6.2 – Graphs of the Other Trig Functions<br>6.3 – Inverse Trig Functions |
| 10 | Trigonometric Equations | 7.1* – Solving Trigonometric Equations with Identities<br>7.2 – Addition and Subtraction Identities<br>7.3 – Double Angle Identities |
| 11 | Oblique Triangles | 8.1 – Non-Right Triangles: Laws of Sines and Cosines |
| ** Lesson 10: Section 10.4 Solving Trigonometric Equations is no longer part of the course and will not be included on the assignment nor final exam. While section 7.1 of the textbook covers solving trigonometric equations, you are expected to know the listed trigonometric identities.* | | |

# Assessments

The graded assessments for this course are:

- Eleven (11) online **Assignments**, on the platform WeBWorK
- The **Midterm Test**, on the eConcordia course page, on the Assessments tab
- The **Final Exam**, in-person, on campus

## Assignments

There will be 11 assignments – one for each lesson in the course – to complete on the online platform called **WeBWorK,** accessible on the Assessments tab of the course website.

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, as well as on the **Calendar** tab on the course website. There will be no acceptable reason for missing an assignment (including illness or computer issues).

Instructions for accessing and logging into WeBWorK, as well as a guide on how to use WeBWorK, can be found in the WeBWorK Assignments section on the Assessments tab of the course website.

## Midterm Test

The Midterm Test will be done **online**. It will cover **Lessons 1 to 6** and will take place on **Sunday March 15**.

The test will take place online on the Assessments tab of the course website. Please note that the test is **NOT** on Concordia Moodle, which is a separate website.

The 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 75 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.

**Notes:**

- If you encounter a **technical problem** while accessing the midterm test, record the time, note the webpage, and provide a brief description of the incident by e-mail to your TA and instructor immediately.

- It is the Department's policy that tests missed for any reason cannot be made up. If you miss the midterm test due to a legitimate reason (e.g., illness, death of a family member), the final exam will count for 90% of your final grade, and the assignments will count for the remaining 10%. In such cases, a medical note or certificate must be sent to your instructor **as soon as possible**.

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

## Final Exam

The Final Examination will be held **in-person**. The exam will cover all of the material in the course (from **Lessons 1 to 11**) and will have a duration of 3 hours.

The date and time 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 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.

**Note: To pass MATH 201 EC, you must receive a minimum score of 50% on the final exam.**

## Calculators

Only calculators approved by the Department (with a sticker attached as a proof of approval) are permitted for the final exam. For a list of Approved calculators, see: www.concordia.ca/artsci/math-stats/services.html

## Evaluation Scheme

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

**Option A**

- Assignments 10%
- Midterm Test 20%
- Final Exam* 70%

**Option B**

- Assignments 10%
- Midterm Test 10%
- Final Exam* 80%

*** Note: To pass MATH 201 EC, you must receive a minimum score of 50% on the final exam.**

## Letter Grades

The following table shows the percentage to letter grade conversion for MATH 201:

| **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 3. Their contact information (email address) will be available on the Contact Page on the Course Home tab of the course website.

TAs will help you understand the course content by answering your questions on the Discussion Board, or during their online Office Hours (see below). Note that your TA is not responsible for helping 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 201)

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

On the first day of classes, a Discussion Board will be available on the Course Home tab of the course website.

The Discussion Board is the ideal place for you to ask questions about the course material. While the TAs and instructor are responsible for answering questions, **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 test.

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 or instructor.

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

Your TA and your instructor will each provide a minimum of one online office hour each week via Zoom. The day and time of their office hours, and the link to join the Zoom meeting, will be posted under **Virtual Office Hour**s on your eConcordia course website.

## 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 the Course Home tab of the course website.

By default, students are subscribed to receive forum updates.

## Math Help Centre

The Department of Mathematics and Statistics has a free Math Help Centre for students enrolled in MATH 201 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 201, 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 201. 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 to ask your TA or instructor during their Office Hours.
- 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

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 201 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 and Websites

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 and the midterm test is prohibited.

# MATH 201 - Elementary Functions
# Agenda
# Winter 2026

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

| | |
|---|---|
| **Week 1: January 12 – January 18** | |
| | **Read Course Outline** |
| | Receive your WeBWorK login credentials |
| | Lesson 0: About This Course - Algebra Review pdf file (if necessary) |
| | Lesson 1: Analytic Geometry |
| **January 12** | **Classes begin** |
| **January 12** | **Discussion Board opens at 2 PM** |
| **Week 2: January 19 – January 25** | |
| | Lesson 2: Introduction to Functions |
| **January 21** | **Assignment #1 due at 11:59 PM** |
| **Week 3: January 26 - February 1** | |
| | Lesson 3: Combining Functions |
| **January 26** | **Deadline to add winter-term courses** |
| **January 26** | **Deadline for withdrawal with tuition refund (DNE) from winter-term courses** |
| **January 28** | **Assignment #2 due at 11:59 PM** |
| **Week 4: February 2 – February 8** | |
| | Lesson 4: Quadratic and Rational Functions |
| **February 4** | **Assignment #3 due at 11:59 PM** |
| **Week 5: February 9 – February 15** | |
| | Lesson 5: Exponential Functions and Logarithms I |
| **February 11** | **Assignment #4 due at 11:59 PM** |
| **Week 6: February 16 – February 22** | |
| | Lesson 6: Exponential Functions and Logarithms II |
| **February 18** | **Assignment #5 due at 11:59 PM** |

| Week 7: February 23 – March 1 | |
|---|---|
| | Lesson 7: Measuring Angles |
| **February 25** | **Assignment #6 due at 11:59 PM** |
| **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 2026 final examination period** |
| **Mid-Term Break: March 2 – March 8** | |
| **March 2** | **Reading week begins** |
| **March 6** | **President's Holiday – University Closed** |
| **March 8** | **Reading week ends** |
| **Week 8: March 9 – March 15** | |
| | Lesson 8: Introduction to Trigonometry |
| **March 11** | **Assignment #7 due at 11:59 PM** |
| **March 15** | **Midterm Test (Lessons 1 – 6), 9:00 AM to 11:59 PM** |
| **Week 9: March 16 – March 22** | |
| | Lesson 9: Trigonometric Functions |
| **March 18** | **Assignment #8 due at 11:59 PM** |
| **Week 10: March 23 – March 29** | |
| | Lesson 10: Trigonometric Equations |
| **March 23** | **Last day for academic withdrawal (DISC) from winter-term courses** |
| **March 25** | **Assignment #9 due at 11:59 PM** |
| **Week 11: March 30 – April 5** | |
| | Lesson 11: Oblique Triangles |
| **April 1** | **Assignment #10 due at 11:59 PM** |
| **April 3** | **University Closed** |
| **April 4** | **University Closed** |
| **April 5** | **University Closed** |
| **Week 12: April 6 – April 13** | |
| | Review the course material |
| **April 6** | **University Closed** |
| **April 7** | **Last day for instructor-scheduled tests or examinations** |

| | |
|---|---|
| **April 8** | **Assignment #11 due at 11:59 PM** |
| **April 13** | **Last day of classes, winter term** |
| **Examination Period: April 16 – April 30** | |
| | **Final Exam date, time and location is posted on your Student Hub** |