

MATH 201

Elementary Functions

Section EC2

Winter 2023

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 This Course

What is MATH 201?

MATH 201 is a course offered by the Department of Mathematics and Statistics. This course is intended to give students a solid foundation in Precalculus to succeed in future Science-level Mathematics courses.

The first half of the course explores functions such as lines, 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. 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

Name: Tom Hughes

E-mail: math201@econcordia.com

Include the following information in all your e-mail communication:

- Full name
- Concordia student ID number

- Course name and number pertaining to your inquiry

Note: Please e-mail your instructor if you have general inquiries, or if there is a delay in hearing back from your TA.

Course Material

The material for this course consists of the MATH 201 course website which includes video lectures and examples, self-assessments, assignments, and a discussion board.

The optional textbook is: An Investigation of Functions, Edition 1.5 by David Lippman and Melonie Rasmussen. This online book can be downloaded at no cost from:

<http://www.opentextbookstore.com/precalc/> You can use this book for extra practice. Some recommended problems from the book will be posted along with solutions.

Course Website

The Course Website can be accessed at www.econcordia.com using your username and password. Your eConcordia account will be valid until the end of the term for which you are registered. If you are unable to access the materials on the Course Website, contact the eConcordia Help Desk electronically at helpdesk@econcordia.com.

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.

Assessments

Assignments

All students will be given access to an online system called WeBWork to complete assignments. Starting in Week 2, there will be an assignment due every Sunday night, as per course Agenda, at 11:59PM. Late assignments will NOT be accepted.

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 issue) 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.

Self-Assessments

Each lesson also has a Self-Assessment to test your understanding of the lesson. Hints and solutions are provided for all questions.

Self-Assessments do NOT contribute towards your grade, but completing them is essential for success in this course. It is recommended that you finish the Self-Assessment before starting the assignment.

Midterm Test

The ONLINE midterm test will be held on March 14. It will be available on Concordia Moodle from 9:01AM to 11:59PM (ET). You will have 75 minutes from your start time or until the midterm closes at 11:59PM (ET), whichever comes first.

The test will be based on the material from Lessons 1 to 6. You will need a calculator, pen & paper to work out the answers.

You should complete the midterm using an updated browser. Do not exit the window until you have answered all the questions and get your result.

Note: It is the Department's policy that tests missed for any reason cannot be made up. If you miss the midterm exam because of illness (medical note required), the final exam will count for 85% of your final grade, and the assignments will count for the remaining 15%. In that case, the medical note or certificate must be sent to your instructor as soon as possible.

Final Exam

The final examination will cover all the material in the course. It will be In-Person.

NOTE: Students are responsible for finding out the date and time of the final exams 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.

Calculators: Only calculators approved by the Department (with a sticker attached as a proof of approval) are permitted for the class test and final examination. For a list of Approved and Not-approved calculators see www.concordia.ca/artsci/math-stats/services.html

Grades

Grading Scheme

The final grade will be calculated using the HIGHER of Plan A or Plan B:

PLAN A: 10% assignments, 10% midterm exam, 80% final exam

PLAN B: 10% assignments, 25% midterm exam, 65% final exam

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

Mark Breakdowns

| 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 | | |

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

Extraordinary Circumstances

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

Communication and Extra Help

Teaching Assistants

By Week 2, each student registered in this course will be assigned a Teaching Assistant (TA). TAs will help you with your studies, especially with any math questions you have. TAs are not required to help you with technical issues.

To access your TA's name and contact information, click on the Discussion Groups link of your eConcordia account. If you have not been assigned to a TA by Week 2, send an e-mail with your name, student ID number, and the name of your course (MATH 201) to discuss@econcordia.com and you will be assigned to a TA.

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

Discussion Board

The Discussion Board is a versatile tool in an online course. All students can ask questions and all students can read and answer the questions. Here are some guidelines to follow:

- Do not post any personal information. Keep all postings pertinent to the course material.
- Questions about grades or questions of a personal nature must be addressed directly to your instructor.
- Ask or answer questions about the ideas of the course, the self-assessments, the textbook, examples from videos, or any calculator issues.
- Do not ask others to solve your assignment problems. (Asking for a hint or help getting started is okay.)
- 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 and final exam.
- If your question does not get answered or resolved, please e-mail your TA instead.
- If you have a very specific issue (e.g. WeBWorK is not accepting your answer), please e-mail your TA and attach a screenshot of your work so that your TA can identify your problem.

Math Help Centre

The Math Department runs a Math Help Centre staffed by graduate students, which provides free online tutoring and personal assistance for students enrolled in MATH 201. 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

The University runs a Student Success Centre, which provides free tutoring for students enrolled in MATH 201. Visit:

www.concordia.ca/students/success/learningsupport/mathengineering-help/tutoring-appointments.html or www.concordia.ca/students/success/learning-support/math-engineering-help.html for more information.

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 would be spent watching (and re-watching) the video lectures 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 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.

Technical Matters

For technical questions and inquiries such as login and account issues, or if you are having difficulty accessing the eConcordia site, contact the eConcordia Help Desk electronically at helpdesk@econcordia.com or by telephone at (514) 848-8770 or toll-free at 1-888-361-4949. The Help Desk is open Monday to Friday from 9am to 5pm ET.

Tutorial Companies

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

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

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

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 201 - Elementary Functions Agenda Winter 2023

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

| Week 1: January 9 - January 15 | |
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| | Navigate the course website. |
| | Review the course outline. |
| | Receive your WeBWork login credentials. |
| | Look over the "Algebra Review" file. |
| January 09 | Classes begin, winter term |
| January 09 | Discussion Board opens at 2 PM. |
| Week 2: January 16 - January 22 | |
| | Lesson 1: Analytic Geometry |
| | Be assigned to a Teaching Assistant (TA). |
| Week 3: January 23 - January 29 | |
| | Lesson 2: Introduction to Functions |
| January 23 | Deadline to add winter-term courses |
| January 23 | Deadline for withdrawal with tuition refund (DNE) from winter-term courses |
| January 29 | Assignment #1 due |
| Week 4: January 30 - February 5 | |
| | Lesson 3: Combining Functions |
| February 05 | Assignment #2 due |
| Week 5: February 6 - February 12 | |

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| | Lesson 4: Quadratic and Rational Functions |
| February 12 | Assignment #3 due |
| Week 6: February 13 - February 19 | |
| | Lesson 5: Exponential Functions and Logarithms I |
| February 19 | Assignment #4 due |
| Week 7: February 20 - February 26 | |
| | Lesson 6: Exponential Functions and Logarithms II |
| February 26 | Assignment #5 due |
| Midterm Break: : February 27 - March 5 | |
| February 27 | Start of Midterm Break |
| March 03 | President's Holiday - University Closed |
| March 05 | END OF MIDTERM BREAK |
| March 05 | Assignment #6 Due |
| Week 8: March 6 - March 12 | |
| | Lesson 7: Measuring Angles |
| March 12 | Assignment #7 due |
| Week 9: March 13 - March 19 | |
| | Lesson 8: Introduction to Trigonometry |
| March 14 | Midterm Exam on Lessons 1-6 (9:00AM to 11:59PM) |
| March 17 | Last day to register with the Access Centre for Students with Disabilities and receive exam accommodations for the final examination period. |
| March 19 | Assignment #8 due |
| Week 10: March 20 - March 26 | |
| | Lesson 9: Trigonometric Functions |
| March 26 | Assignment #9 due |
| Week 11: March 27 - April 2 | |
| | Lesson 10: Trigonometric Equations |

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| April 02 | Assignment #10 due |
| Week 12: April 3 - April 9 | |
| | Lesson 11: Oblique Triangles |
| April 06 | Last day for instructor-scheduled tests or examinations |
| April 07 | University closed |
| April 08 | University closed |
| April 09 | Assignment #11 due |
| Week 13: April 10 - April 16 | |
| | Review the course. |
| April 10 | University closed |
| April 16 | Assignment #12 due |
| Week 14: April 17 - April 19 | |
| April 17 | Last day of classes |
| April 18 | Deadline for academic withdrawal (DISC) from winter-term courses |
| Examinations Period: April 20 - May 2 | |
| | Final Exam date and time is posted on your Student Hub |