

**MATH 208**  
Fundamental Mathematics I  
*Summer 2020*

- Instructor:** Dr. U. Tiwari  
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- Textbook:** *Finite Mathematics for Business, Economics, Life Sciences, and Social Sciences*, 14th Edition, by Barnett, Ziegler, Byleen & Stocker, Pearson Education, Inc.  
The digital version of the textbook will be available at:  
[https://pearsonhighered.onthefhub.com/WebStore/OfferingDetails.aspx?o=a957f85c-4db5-  
ea11-812c-000d3af41938](https://pearsonhighered.onthefhub.com/WebStore/OfferingDetails.aspx?o=a957f85c-4db5-<br/>ea11-812c-000d3af41938)
- Caution:** It is assumed that you have the pre-requisite of MATH 206 or its equivalent. If you do not, please consult with a course advisor.
- Office Hours:** Your professor will announce his office hours during which he will be also available to give a reasonable amount of help. The office hours will be held over Zoom and one can also send questions via email. Note that the system does not allow one to reply to a mail sent from Moodle. So emails should be sent from one's own mailer, not Moodle. Note, however, that if you missed a lecture it is not reasonable to expect your professor to cover the missed material for you.
- Math Help Centre:** Math Help Centre staffed by graduate students is available. The schedule of its operation will be posted in the Department and on the Department webpage (<https://www.concordia.ca/artsci/math-stats/services/math-help-centre.html>).
- MyLabMath:** Every student who buys an electronic version of the textbook will also receive an access code to an online system called **MyLabMath**. Once they have registered for **MyLabMath**, student can download the Pearson e-text 2.0 app so that they can access the textbook from their phone or tablet. The system provides you with a full electronic version of the text (an eBook) as well as many exercises and practice problems. Students will use this system to do online assignments (see **Assignments** below). Students are also strongly encouraged to use this resource to help with problems similar to assignment problems, and in areas where they need extra assistance. If you have an old **MyLabMath** account, please refer to the footnote\* on page 2.
- Assignments:** Students are expected to submit assignments online using **MyLabMath**. Late assignments **will not** be accepted. Assignments contribute 10% to your final grade. Working regularly on the assignments is essential for success in this course. Students are also strongly encouraged to do as many problems as their time permits from the list of supplementary problems included in this outline. A solutions manual for all odd-numbered questions is packaged with the textbook.

**Calculators:** Only calculators approved by the Department such as **Sharp EL 531** or the **Casio FX 300MS**, are permitted for the class test and final examination. See <https://www.concordia.ca/content/dam/artsci/math-stats/docs/AppCalculatorList.pdf> for a list of Approved and Non-Approved calculators.

**Midterm Test:** There will be one **midterm test**, based on the material of lectures 1-7, which will contribute up to 20% to your final grade (see the **Grading Scheme** below). Missed tests cannot be made up. **Midterm test will be held during online lecture time.**

**NOTE:** It is the Department's policy that tests missed for any reason, **including illness**, cannot be made up. If you miss the midterm test **because of illness (medical note required)** the final exam will count for 90% of your final grade, and the assignments will count for the remaining 10%.

**Final Exam:** **The final examination will be given online.** This exam will be held three hours long and cover all the material in the course.

**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.**

**Grading Scheme:** The final grade will be based on the higher of (a) or (b) below:

- a) 10% for the assignments,  
20% for the midterm test,  
70% for the final exam.
- b) 10% for the assignments,  
10% for the midterm test,  
80% for the final exam.

**IMPORTANT:** **PLEASE NOTE THAT THERE IS NO "100% FINAL EXAM" OPTION IN THIS COURSE.**

#### **Academic Integrity and the Academic Code of Conduct**

This course is governed by Concordia University's policies on Academic Integrity and the Academic Code of Conduct as set forth in the Undergraduate Calendar and the Graduate Calendar. Students are expected to familiarize themselves with these policies and conduct themselves accordingly. "Concordia University has several resources available to students to better understand and uphold academic integrity. Concordia's website on academic integrity can be found at the following address, which also includes links to each Faculty and the School of Graduate Studies: [concordia.ca/students/academic-integrity](http://concordia.ca/students/academic-integrity)." [Undergraduate Calendar, Sec 17.10.2]

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\*If you are repeating this course and have an old **MyLabMath** account, you might be able to get your account extended. To request this, please contact our Pearson representative at [Christine.Cozens@PearsonEd.com](mailto:Christine.Cozens@PearsonEd.com) and provide the following information:

- Your full name and Concordia student ID number.
- The name of the course, section, and the term you are currently registered in (e.g. MATH 208/Section CA – Summer 2020).

Lectures	Topics		Supplementary Problems	
1	1.2	Graphs and Lines	p. 23:	27, 29, 57, 64, 66, 80.
	2.3	Quadratic Functions	p. 80:	20, 27, 38, 66.
2	2.4	Polynomial and Rational Functions	p. 93:	37, 43, 58, 59.
	2.5	Exponential Functions	p. 104:	30, 32, 34, 44, 48, 52.
3	2.6	Logarithmic Functions	p. 115:	25, 29, 46, 48, 80.
	B.2	Arithmetic and Geometric Sequences	p. 626:	24, 28, 34, 36, 50.
4	3.1	Simple Interest	p. 132:	35, 37, 45.
	3.2	Compound Interest	p. 144:	33, 43, 45, 52, 62, 66, 68.
5	3.3	Future Value	p. 154:	21, 28, 30, 36, 40.
	3.4	Present Value	p. 164:	20, 28, 36, 42, 44.
6	4.1	Systems of Linear Equations	p. 183:	15, 27, 66, 68.
	4.2	Systems of Linear Equations/Augmented Matrices	p. 195:	40, 50, 55, 59, 63, 65.
7	4.3	Gauss-Jordan Elimination	p. 206:	44, 48, 52, 56, 58.
	4.4	Matrices: Basic Operations	p. 219:	33, 37, 56, 58, 66.
8	4.5	Inverse of a Square Matrix	p. 232:	28, 48, 52, 54, 60.
	4.7	Leontief Input-Output	p. 248:	18, 20, 28, 36, 40.
9	5.1	Inequalities in Two Variables	p. 261:	9, 13, 42, 46, 52.
	5.2	Systems of Linear Inequalities in Two Variables	p. 267:	18, 22, 28, 32, 40.
10	5.3	Linear Programming in Two Dimensions	p. 278:	18, 20, 24, 28, 32.
	7.3	Basic Counting Principles	p. 366:	16, 23, 37, 40, 52.
11	7.4	Permutations & Combinations	p. 378:	44, 48, 62, 66, 76.
	8.1	Sample Spaces, Events and Probability	p. 396:	29, 59, 77, 83, 92.
12	8.2	Union, Intersection and Complement of Events	p. 409:	62, 68, 80, 82, 86.
	8.3	Conditional Probability	p. 422:	29, 31, 39, 48, 62.
13	<b>REVIEW</b>			