## **Department of Mathematics & Statistics**

**Concordia University** 

#### **MATH 200**

Fundamental Concepts of Algebra **Summer 2014** 

Instructor*:		
Office/Tel No.:		
Office Hours:		

**Course Examiner:** Dr. N. Hardy.

**Text:** *Elementary Algebra, 5th Edition, Larson/Hostetler (Brooks Cole).* 

**Credit:** This is an introductory course in Algebra. Students with credits for any

Concordia Math course will not receive credit for this course.

Office Hours: Your professor will announce her/his office hours during which she/he

will be available to give a reasonable amount of help. However, if you missed a class, it is not reasonable to expect your professor to cover the

missed material for you.

**Tutorials:** The material in this course requires a lot of practice. There is not enough

class time to do all the examples and problems needed to learn the material thoroughly. The Department has therefore organized special **tutorials** conducted once per week for two hours for every section of this course to provide additional support to students outside the lecture room environment. Tutorials are conducted by graduate students who will help with solving problems on the topics learned in class that week, with particular emphasis on the material that students may have difficulties with in this course. Students are strongly encouraged to participate and be active at these problem-solving sessions. They are an important new

resource to help you succeed in this course.

Math Help Centre: In addition to tutorial sessions, a Math Help Centre staffed by graduate

students is available. The schedule of its hours of operation and its

location will be posted in the Department.

**WeBWorK:** Every student will be given access to an online system called **WeBWorK**.

The system provides you with many exercises and practice problems. Students will use this system to do *online* assignments (see below). In

<sup>\*</sup>Students should get the above information from their instructor during class time. The instructor is the person to contact should there be any questions about the course.

addition, before the midterm test and a few weeks before the end of the course, a number of practice problems will be posted in WeBWorK to help you review the material.

## **Assignments:**

Students are expected to submit assignments online using **WeBWorK**. Late assignments **will not** be accepted. Working regularly on the assignments is essential for success in this course. Students are also strongly encouraged to do as many problems on their own as their time permits from the list of recommended problems included in this outline as well as the practice problems in WeBWorK. A solutions manual for all odd-numbered questions is packaged with the textbook.

#### **Calculators:**

Only calculators approved by the Department (with a sticker attached as proof of approval) are permitted in the class test and final examination. The preferred calculators are the **Sharp EL 531** and the **Casio FX 300MS**, available at the Concordia Bookstore. See www.mathstat.concordia.ca for more information.

#### **Midterm Test:**

There will be one midterm test based on the material covered on chapters 1 to 4, inclusive. The date and time of the midterm will be announced in class. Students who will not be able to write the test that day for a valid reason, e.g. religious or illness (medical note is required), may write an alternate midterm test; date and time for the alternate will be announced in class.

#### **Final Exam:**

The final examination will be three hours long and will cover all the material in the course.

**NOTE:** Students are responsible for finding out the date and time of the final exam once the schedule is posted by the Examinations Office. Any conflict or problems with the scheduling of the final exam must be reported to the Examinations Office, **not** to your instructor. It is the Department's policy and the Examinations Office's policy that **students are to be available until the end of the final examinations period**. Conflicts due to travel plans will **not** be accommodated.

### **Grading Scheme:**

The final grade will be based, in all cases, on the **higher** of the two options:

- a) 10% for the assignments, 25% for the midterm test, 65% for the final exam.
- b) 10% for the assignments, 10% for the midterm test, 80% for the final exam.

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

# IMPORTANT: THERE IS NO "100% FINAL EXAM" OPTION IN THIS COURSE.

Lectures	Sections	Recommended problems	
1	Chapter 1	1.1	1, 3, 9, 13, 15, 35, 39, 43, 49, 51, 69, 71, 73
	Real Numbers	1.2	1-75 (odd numbers)
		1.3	1-57 (odd numbers)
		1.4	1-65 (odd numbers)
		1.5	1-71 (odd numbers)
			review exercises (as many as possible)
2	Chapter 2	2.1	1-85 (odd numbers)
	Fundamentals of Algebra	2.2	35-61 (odd numbers), 73-87 (odd numbers),
			99-135 (odd numbers)
		2.3	1-60 (odd numbers)
		2.4	1-33 (odd numbers)
3	Chapter 3	3.1	1-41 (odd numbers), 71-79 (odd numbers)
	Linear Equations	3.2	1-65 (odd numbers)
	1	3.3	1-69 (odd numbers), 79-85 (odd numbers)
4		3.4	1-61 (odd numbers)
		3.5	1-41 (odd numbers)
		3.6	1-71 (odd numbers)
5	Chapter 4	4.1	1-25 (odd numbers), 35-39 (odd numbers)
	Equations & Inequalities	1.1	51-57 (odd numbers)
	Equations & mequanties	4.2	1-15 (odd numbers), 25-35 (odd numbers)
		4.3	1-87 (odd numbers)
		4.4	1-75 (odd numbers)
6	Chapter 5	5.1	1-147 (odd numbers)
	Exponents & Polynomials	5.2	31-65 (odd numbers), 99 & 101
7	Test	5.3	1-99 (odd numbers)
8	Chapter 6	6.1	1-79 (odd numbers), 101, 103
	Factoring	6.2	1-59(odd numbers)
		6.3	1-71 (odd numbers)
9		6.4	<u>'</u>
9		6.5	1-59 (odd numbers) 67, 69 1-43 (odd numbers) 53-57 (odd numbers)
10	Chapter 7	7.1	41-89 (odd numbers)
10	Rational Expressions &	7.1	1-81 (odd numbers)
	Equations	7.2	15-79 (odd numbers)
	Equations	7.4	1-35 (odd numbers)
		7.5	1-63 (odd numbers)
11	Chapter 8	8.1	1-25 (odd numbers)
1 11	Systems of Linear Equations	8.2	11-45 (odd numbers)
12	Systems of Emeur Equations	8.3	5-61 (odd numbers)
12		8.4	1-57 (odd numbers) (omit 49)
13	Chapter 9	9.1	1-57 (odd numbers)
	Roots & Radicals	9.2	1-103 (odd numbers)
	Roots & Rudreals	9.3	1-119 (odd numbers)