201-015-50 Algebra and Trigonometry – Section 05

Fall 2019

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Classes schedule and Office hours:

	Monday	Tuesday	Wednesday	Thursday	Friday
8h30 – 9h00		Calculus II			Caculus II
9h00 – 9h30		Section 06			Section 05
9h30 – 10h00		P-210			C-0017
10h00 – 10h30		Office			
10h30 – 11h00		Hours			
11h00 – 11h30					Office
11h30 – 12h00	Calculus II	Calculus II			Hours
12h00 – 12h30	Section 05	Section 05			
12h30 – 13h00	H-335	H-335	Calculus II		
13h00 – 13h30	Office	Math Help	Section 06		Calculus II
13h30 – 14h00	Hours	Center	H-232		Section 06
14h00 – 14h30					H-312
14h30 – 15h00	Alg&Trig	Alg&Trig	Alg&Trig		Alg&Trig
15h00 – 15h30	Section 05	Section 05	Section 05		Section 05
15h30 – 16h00	HO-214	H-219	H-219		P-211
16h00 – 16h30					
16h30 – 17h00					

Evaluations: the class grade will be built up from the grades coming from homework assignments and in-class tests in the following percentage:

80%	4 tests (each worth 20%),
10%	quizzes,
10%	homework.

Tests: tests will be 1 hour and 15 minutes long.

Coats and backpacks are not allowed during a test and will be stored at the front of the class. During a test, cellphones must be turned off and stored with the backpack. Any student looking at his/her cellphone during a test will be reported as cheating.

Elements of competencies tested in each test:

Test #1	1., 2., 3.
Test #2	1., 2.
Test #3	1., 2.
Test #4	4., 5.

Homeworks: you will be given weekly homeworks to submit online on WebWork. Discussions and work group are highly encouraged!

After the deadline for each homework, the exercises will still be available for practising, but they will not be graded. No late submission will be accepted.

Quizzes: the first few minutes of each class, except during exercise sessions, will be dedicated to evaluate students' knowledge and preparation.

Students will be called to solve an exercise at the board, based on the material covered in the previous class.

Skipping classes or arriving systematically late in order to avoid these oral quizzes will result in a quiz grade equal to zero.

Exercise sessions: every Friday, unless otherwise announced, there will be an exercise session to review the material seen during the rest of the week.

Attendance and (most importantly) active participation to the session may give a maximum of 5% bonus on the class mark.

Final grade: the final course grade will be the better of

$$50\% \text{ class} - 50\% \text{ final} \qquad \text{or} \qquad 25\% \text{ class} - 75\% \text{ final}.$$

Make-ups: any student missing a test will receive a grade of zero unless the following conditions are met: the absence to the test is legitimate and documented and the instructor is notified of the absence before the test day.

Under these conditions, the student will write an alternative test (note that this alternative test might be harder than the original test).

Expectations: While in class, you are expected to follow the student code of conduct as outlined in the academic calendar. In particular, the following rules apply.

- No swearing or other disrespectful behaviour in class.
- Each class will start sharply on the time announced in the schedule. Students must be in class ready before that time. Students being late in class will be asked to take a seat near the door.
- Students must remain in class during the entire duration of the class. If you need to go early, please warn me before class starts and take a seat near the door.
- No talking during lecture or when another student's question is answered.
- No explaining of topics between students during the lecture periods. It's distracting and unfair to the rest of the class. If you have questions, directly ask me and I will explain it for the entire class.
- Electronic devices must be closed and put away. In case of exceptional circumstances (ex. answering an important phone call), please leave the classroom to do so. Any electronic device seen on your desk will be confiscated for the duration of the class.
- During problem solving sessions, you must actually be solving problems from this course.

(Tentative) course calendar:

	Monday	**Tuesday**	**Wednesday**	**Friday**
Week 1 (Aug 26th)	welcome; definition of "function"	combining functions, linear functions	inverse functions, inverse of linear functions	piecewise linear functions; exercises
Week 2 (Sep 2nd)	*Labour Day - no classes*	similar figures (supplement)	integer exponents	exercises
Week 3 (Sep 9th)	factoring quadratics, completing the square	completing the square (part II), solving equations by taking square roots	quadratic formula	exercises
Week 4 (Sep 16th)	graphs of quadratic functions	factoring higher degree polynomials	polynomial inequalities	**review for Test #1**
Week 5 (Sep 23rd)	**Test #1: all till factoring higher degree polynomials**	polynomial long division	domains of rational functions, sums and difference of rational functions	*class canceled (Climate Change Rally)*
Week 6 (Sep 30th)	complex fractions	rational equations, rational inequalities	roots, radicals and rational exponents	exercises
Week 7 (Oct 7th)	equations involving roots	graphs of root functions	domain of algebraic functions	exercises
Week 8 (Oct 14th)	*Thanksgiving - Action de grâce*	exponential function	**review for Test #2**	**Test #2: from polynomial inequalities to domain of algebraic functions**
Week 9 (Oct 21st)	compound interest formula	introduction to logarithms	number e, natural logarithm	exercises
Week 10 (Oct 28th)	laws of logarithms	laws of logarithms (part II)	change of base formula	exercises

Disclaimer: the instructor reserves the right to make changes to the course calendar should this be necessary for academic or other reasons. Every effort will be made to minimize such changes.

	Monday	Tuesday	Wednesday	Friday
Week 11 (Nov 4th)	logarithmic equations	exponential equations	review of exponentials and logarithms	exercises
Week 12 (Nov 11th)	trigonometry in right triangles	applications of trigonometry	**review for Test #3**	**Test #3: all exponentials and logarithms**
Week 13 (Nov 18th)	trigonometric circle; trigonometric functions of arbitrary angle	reference angles, trigonometric values in the quadrants	special angles, radians	exercises
Week 14 (Nov 25th)	graphs of sine and cosine	trigonometric identities	sine and cosine laws	exercises
Week 15 (Dec 2nd)	vectors (supplement)	vectors (supplement)	vectors (supplement)	**review for Test #4**
Week 16 (Dec 9th)	**Test #4: all trigonometry**	**review for the Final**		