

Math 1051 - *Functions and Trigonometry*

Fall-12

Instructor: Sergey Ulanov
email: sulanov@lakeheadu.ca

Text: *Essentials of Technical Mathematics with Calculus, Second Edition*
Authors: Richard Paul and M. Leonard Shaevel

Lectures: M W F 01:30 pm – 02:30 pm SN 2011
Lab: T 02:30 pm – 04:30 pm RB3044
Grading: (Assignments{out of 100}) • (Midterm{out of 40} + Final Exam{out of 60})

Email communication: Any time. Do not forget to include the course number, your name and keywords in the subject line. For example, “Subject: Math 1051, John Smith, trigonometric formulas” (otherwise your message will not be opened).

Course content: This course is designed to meet the mathematical needs of students in the various engineering technologies. Topics include functions and graphs, trigonometric functions, trigonometric formulas and equations, straight lines, quadratic equations and functions, inequalities, analytic geometry.

We will cover Chapters 5 – 9, 12, 16 – 19, 21.

The instructor reserves the right to add or delete sections to the list.

The objective of this course is to gain a sound understanding of the fundamental concepts of elementary functions and trigonometry.

Assignments:

There will be assignments due on Wednesdays at 1:30 pm in the assignment box on the second floor of the Ryan Building. Please note that **LATE ASSIGNMENTS WILL NOT BE ACCEPTED**. Take special note of the grading scheme. Not completing all assignments will adversely affect your grade.

Each section of the assignments will be marked out of 2. One mark for completing all questions and showing the necessary work and one mark for presentation (following instructions listed below). Assignments will not be marked for correct answers. It is the students' responsibility to recognize their problem areas and seek help.

Assignments will be completed such that;

- your name with your student number under it will be written on the top right corner of every page
- the course number, “Math 1051” or “M1051”, will be written on the top left hand corner of the first page

- work will be done on only one side of the page
- work will shown in numerical order with question and section numbers clearly labeled
- final answers will be circled or highlighted
- all pages will be stapled (not ripped and folded, no paper clips, no duo tangs) in the top left corner.

Answers for all odd numbered questions can be found in the back of the textbook. Other solutions will be posted.

Exams:

There will be a Midterm exam held October 23, during the Lab time. The room will be announced at a later date.

The final exam will be scheduled by the Registrars office and the time and location will be posted at a later date.

If you complete and understand all the assignment questions, you will do well in this course.

List of Assignment Questions:

<u>Due date:</u>	<u>Section:</u>	<u>Questions:</u>
Sept 19	5.1	1...odd...31, 37...odd...47, 55
	5.2	3, 7, 13, 21, 25, 35, 39, 43
	6.1	3, 7, 11, 15, 19, 21, 25, 29, 33, 39, 47, 63, 79
	6.2	3, 7, 11, 15, 17, 21, 27
	6.3	3, 9, 15, 19, 23, 31
	6.4	1...odd...9, 21...odd...25, 35
Sept 26	7.1	3, 5, 7...odd...33, 37, 41, 45, 49, 53, 57, 61, 73...odd...77, 93...odd...97
	8.1	1...odd...11
	8.2	3...odd...13, 19...odd...23, 31, 37, 41, 45, 47, 53, 55
	8.3	1...odd...19
Oct 3	12.1	1, 3, 13, 17, 23, 31, 35, 41, 49, 53, 55, 57...odd...67, 71, 81, 87
	12.2	1...odd...13
	12.3	1, 3, 7, 11, 13, 17, 21, 27, 33, 39, 45, 53, 57, 59, 61
	12.4	1...odd...13, 17, 21...odd...25, 29
Oct 10	16.1	1, 5, 9, 13, 15, 19
	16.2	1, 5, 7, 11
	16.4	1, 3
Oct 17	16.5	3...odd...7
	16.6	all odd
	16.8	1...odd...25, 35, 43

Midterm Exam Oct 23 (no assignment due Oct. 24)

Oct 31	17.1	1, 5, 9, 13, 17, 21, 25, 29, 33, 37
	17.2	1, 3, 5, 9, 13, 17, 23, 25, 27, 31, 33
	17.3	1...odd...13, 21...odd...27
Nov 7	17.4	1, 5, 7, 9, 11, 15, 31
	18.1	1...odd...19
	18.2	1...odd...13, 19
Nov 14	19.1	1, 5, 9, 13, 17, 21, 25, 29, 31, 35
	19.2	1, 5, 7, 13, 15, 19, 23, 31, 35, 37
	19.3	1, 3, 5, 9, 13, 15, 21, 23, 25, 29, 33
Nov 21	21.1	Read
	21.2	1...odd...9
	21.3	1...odd...11, 13, 17, 21, 29
	21.4	1, 3, 7, 11, 13, 17, 21, 25, 27, 29, 33
Nov 28	21.5	3...odd...21
	21.6	1...odd...1, 23, 25
	21.7	1...odd...19
	21.8	3, 7, 11, 13, 15, 23