



Mathematics 1051

ISTEM – Functions and Trigonometry

Instructor: John Kimball

Lecture Schedule: Tuesdays and Thursdays, 11:30am – 1:00pm, RB2025/Zoom

Lab Schedule: Fridays, 8:30am – 10:30am, RB2025/Zoom

Office Hours: Thursdays 9:00am – 10:00am, RB2006 or by appointment.

Email: jfkimbal@lakeheadu.ca

Textbook: *Algebra and Trigonometry* by Jay Abramson via OpenStax, found at:
<https://openstax.org/details/books/algebra-and-trigonometry>

Course Webpage: There is a page for the course on MyCourseLink through myInfo. Announcements, Assignments, due dates, the syllabus, and any other course information will be posted here.

Course Content: By the end of the course students will be able to: understand the concept of a function; graph functions using the Cartesian coordinate system; find the domain and range of a variety of functions; successfully compose two functions; define one-to-one and onto functions; compute inverses of functions; solve linear equations and inequalities; write and interpret solutions using interval notation; convert angles between radians and degrees; compute trigonometric ratios and recall special triangles; solve trigonometric equations; and convert between polar and rectangular coordinates.

Course Evaluation:

Attendance	10%
Assignments	20%
MidTerm Exam	20%

Test #1	10%
Test #2	10%
Final Exam	30%

Attendance: Students are expected to attend every class and on time. Being late to class is disruptive and disrespectful to the instructor and your peers. Furthermore, coming to every class greatly increases your chances in being successful in this course.

Assignments: 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 extra practice problems.

Penalty for Late Assignments:

Late	Deduction	Late	Deduction
Less Than 1 Day	10%	More than 3 Days	100%
Between 1 and 3 Days	20%		

Test #1 & #2: Test #1 will be on **Tuesday, November 1st, 2022**; Test #2 will be on **Thursday, February 16th, 2023**. Students who will not be able to write these days for a valid reason, e.g. religious or illness (medical note is required), must inform both Lisa and myself. An alternative plan will be conjured to ensure you have equal opportunity as your peers to be assessed.

Exams: There will be a MidTerm Exam held during the end of the Fall term and a Final Exam at the end of the Winter term. The dates and times will be scheduled by the registrar.

Course Withdrawal: The final date that you may drop this course without academic penalty is Friday, February 10th, 2023.

Tutors: Information to follow...

Electronic Devices: In order to be successful in class and minimize distractions for others, cell phones, iPods and other electronic devices must be turned off while lectures are in progress. In an emergency situation, the instructor may give a student permission to use a cell phone or pager.

Appropriate Language: In all areas of the University environment, students are responsible to show respect for others. Swearing, or language that is discriminatory or derogatory in relation to race, sex, ethnic background, religious beliefs, age and physical condition is not appropriate.

Students with Disabilities or Chronic Conditions: Reasonable accommodations are available for students with a documented disability or chronic condition. It is the student's responsibility to seek these accommodations. If a student has a disability or chronic condition and may need accommodation to fully participate in this class, he/she should contact the Student Accessibility Services located at SC0003 or by phone: 343-8047.

Day	Date	Activity	Day	Date	Activity
1	Sept 6	• Course Intro	25	Jan 10	• Section 6.1, 6.2
2	8	• Section 1.1	26	12	• Section 6.3, 6.4
Lab	9	• Review 1.1	Lab	13	• Review 6.1, 6.2, 6.3, 6.4
3	13	• Section 1.2	27	17	• Section 6.5, 6.6
4	15	• Section 1.3	28	19	• Section 6.7
Lab	16	• Review 1.2, 1.3 • Assignment #1 - Due	Lab	20	• Review 6.5, 6.6, 6.7 • Assignment #10 - Due
5	20	• Section 1.4	29	24	• Section 7.1
6	22	• Section 1.5	30	26	• Section 7.2
Lab	23	• Review 1.4, 1.5 • Assignment #2 - Due	Lab	27	• Review 7.1, 7.2 • Assignment #11 - Due
7	27	• Section 1.6	31	31	• Section 7.3
8	29	• Section 2.1	32	Feb 2	• Section 7.4
Lab	30	• Review 1.6, 2.1 • Assignment #3 - Due	Lab	3	• Review 7.3, 7.4 • Assignment #12 - Due
9	Oct 4	• Section 2.2, 2.3	33	7	• Section 8.1
10	6	• Section 2.5	34	9	• Section 8.2
Lab	7	• Review 2.2, 2.3, 2.5 • Assignment #4 - Due	Lab	10	• Review 8.1, 8.2 • Assignment #13 - Due
11	18	• Section 2.6	35	14	• Review
12	20	• Section 2.7	36	16	• Test #2
Lab	21	• Review 2.6, 2.7 • Assignment #5 - Due	Lab	17	• No Lab
13	25	• Section 3.1, 3.2	37	28	• Section 8.3
14	27	• Test #1 – Review	38	Mar 2	• Section 9.1
Lab	28	• Review 3.1, 3.2	Lab	3	• Review 8.3, 9.1
15	Nov 1	• Test #1	39	7	• Section 9.2, 9.3, 9.4
16	3	• Section 3.3	40	9	• Section 9.5
Lab	4	• Review 3.3 • Assignment #6 - Due	Lab	10	• Review 9.2, 9.3, 9.4, 9.5 • Assignment #14 - Due
17	8	• Section 3.4, 3.5	41	14	• Section 10.1
18	10	• Section 3.6, 3.7	42	16	• Section 10.2, 10.3
Lab	11	• Review 3.4, 3.5, 3.6, 3.7 • Assignment #7 - Due	Lab	17	• Review 10.1, 10.2, 10.3 • Assignment #15 - Due
19	15	• Section 5.1, 5.2	43	21	• Section 11.1, 11.2
20	17	• Section 5.3	44	23	• Section 12.1
Lab	18	• Review 5.1, 5.2, 5.3 • Assignment #8 - Due	Lab	24	• Review 11.1, 11.2, 12.1 • Assignment #16 - Due
21	22	• Section 5.4, 5.5	45	28	• Section 12.2
22	24	• Section 5.6	46	30	• Section 12.3
Lab	25	• Review 5.4, 5.5, 5.6 • Assignment #9 - Due	Lab	31	• Review 12.2, 12.3 • Assignment #17 - Due
23	29	• Graphing	47	Apr 4	• Review
24	Dec 1	• Review	48	6	• Review
Lab	2	• Review Graphing	Lab	7	• No Lab