



# Mathematics 1051

ISTEM – Functions and Trigonometry

**Instructor:** John Kimball

**Lecture Schedule:** Tuesdays and Thursdays, 2:30pm – 4:00pm, RB2025

**Lab Schedule:** Tuesday, 12:30pm – 2:30pm, RB2025

**Office Hours:** Thursdays 8:45am – 9:45am, RB2006 or by appointment.

**Email:** [jfkimbal@lakeheadu.ca](mailto:jfkimbal@lakeheadu.ca)

**Textbook:** Math 1051 YA – 2023/2024, Functions and Trigonometry, Course Guide Notes by John Kimball

**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:

<b>Attendance</b>	<b>10%</b>
<b>Assignments</b>	<b>20%</b>
<b>MidTerm Exam</b>	<b>20%</b>

<b>Test #1</b>	<b>10%</b>
<b>Test #2</b>	<b>10%</b>
<b>Final Exam</b>	<b>30%</b>

**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, October 31<sup>st</sup>, 2023**; Test #2 will be on **Thursday, February 15<sup>th</sup>, 2024**. 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 9<sup>th</sup>, 2024.

**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 5	• Course Intro	25	Jan 9	• Section 6.1, 6.2
2	7	• Section 1.1	26	11	• Section 6.3, 6.4
3	12	• Section 1.2	27	16	• Section 6.5, 6.6
4	14	• Section 1.3	28	18	• Section 6.7
5	19	• Section 1.4	29	23	• Section 7.1
6	21	• Section 1.5	30	25	• Section 7.2
7	26	• Section 1.6	31	30	• Section 7.3
8	28	• Section 2.1	32	Feb 1	• Section 7.4
9	Oct 3	• Section 2.2, 2.3	33	6	• Section 8.1
10	5	• Section 2.5	34	8	• Section 8.2
11	17	• Section 2.6	35	13	• Review
12	19	• Section 2.7	36	15	• Test #2
13	24	• Section 3.1, 3.2	37	27	• Section 8.3
14	26	• Test #1 – Review	38	Feb 29	• Section 9.1
15	31	• Test #1	39	Mar 5	• Section 9.2, 9.3, 9.4
16	Nov 2	• Section 3.3	40	7	• Section 9.5
17	7	• Section 3.4, 3.5	41	12	• Section 10.1
18	9	• Section 3.6, 3.7	42	14	• Section 10.2, 10.3
19	14	• Section 5.1, 5.2	43	19	• Section 11.1, 11.2
20	16	• Section 5.3	44	21	• Section 12.1
21	21	• Section 5.4, 5.5	45	26	• Section 12.2
22	23	• Section 5.6	46	28	• Section 12.3
23	28	• Graphing	47	Apr 2	• Review
24	30	• Review	48	4	• Review

## Assignment – Due Dates

<b>1</b>	Thurs, Sept 14	<b>6</b>	Thurs, Oct 26	<b>11</b>	Mid Term	<b>16</b>	Tues, Feb 27
<b>2</b>	Thurs, Sept 21	<b>7</b>	Thurs, Nov 2	<b>12</b>	Thurs, Jan 18	<b>17</b>	Thurs, Mar 7
<b>3</b>	Thurs, Sept 28	<b>8</b>	Thurs, Nov 16	<b>13</b>	Thurs, Jan 25	<b>18</b>	Thurs, Mar 14
<b>4</b>	Thurs, Oct 5	<b>9</b>	Thurs, Nov 23	<b>14</b>	Thurs, Feb 1	<b>19</b>	Thurs, Mar 21
<b>5</b>	Thurs, Oct 19	<b>10</b>	Thurs, Nov 30	<b>15</b>	Thurs, Feb 8	<b>20</b>	Thurs, Mar 28