

# Syllabus for Summer 2022 MATH 1540 Section 51213

Cuyahoga Community College Business, Technology & Mathematics Eastern Campus

Course: MATH 1540 Trigonometry

Lecture Hours: 03 hours Laboratory Hours: 00 hours

Instructor: Mike McCraith

Office: EMHC 210

Office Phone: 216-987-2320

Office Hours: Monday and Wednesday 9 - 10:30 am

Online meetings available by appointment

Email: mike.mccraith@tri-c.edu

Website: mathaccordingtomike.com

Text: Precalculus 5th Ed., Beecher, Penna, Bittinger (only get the MyMathLab access to save money)

Graphing calculator is required - TI-83/83+, TI-84/84+ is recommended

\*I am not in my office this summer due to restrictions. Please use email to contact me.

## Prerequisites

MATH-1530 College Algebra or sufficient score on math placement test; or departmental approval: equivalent coursework. Note: MATH-1275 MATH-1280, MATH-1521, or MATH-152H taken prior to Fall 2016 will be accepted to meet prerequisite requirements for this course.

## Course Description

This course is part of a two semester sequence. Topics include trigonometric functions and their values for all angles, vectors and oblique triangles, graphs of trigonometric functions, trigonometric identities and equations. Applications and activities to build skills in problem solving included.

## Course Schedule

This course has example videos on my website above and also on YouTube which can be found on my website (above). Watch the videos, read the book, and take notes as if it were a traditional class prior to attempting the homework and quizzes.

## Learning Outcomes for Math 1540

Upon successful completion of Math 1540, the student should be able to:

1. Define and evaluate trigonometric functions.
2. Analyze, define, and interpret analytic trigonometry and right triangles.
3. Analyze, interpret, and define applications and laws of trigonometry.

For a more detailed Objective list, please visit <https://forms.tri-c.edu/OfficialCourseOutlines/>

## Attendance

It is your responsibility to be active in this class. The more often you work during the week, you increase the chance of a better grade.

To be marked as Attended, you **must** complete the following tasks by Tuesday, June 21, 2022 at 11:59 pm:

- Complete the About Me on mathaccordingtomike.com, and
- Complete the Weekly Planner and Syllabus Quiz on Blackboard, and
- Complete the first week's homework assignments on MyMathLab with at least a 70% or higher for each section.

## Homework and Quizzes

Homework and quizzes are posted on MyMathLab: <http://www.mymathlab.com>. The Course ID needed is mccraith34296. I highly recommend printing out the homework, selecting "Save", doing the problems on paper, and then logging back in to submit answers. Each section is worth 3 points. You will have one week to complete each homework assignment and have the chance to receive full credit. See the last page for availability dates for the homework.

Quizzes are also posted on the MyMathLab website listed above. Quizzes cover the entire chapter and are worth 10 points. You have only two hours to complete the quiz. You will have two attempts at the quiz and I will take the better grade. Make sure you stay organized as you do your homework and quizzes to ensure full credit is received. See the last page of the syllabus for a detailed schedule. Do not start the quiz until you are ready for it.

Homework and quizzes will have due dates where a student can receive full credit. Any homework turned in after that due date will receive a penalty of 30% (only the parts answered after the due date.) Quizzes completed after the due date lose 30% on the entire assignment. It's advisable to turn in everything by the due date to maximize your points as points in this course are very hard to come by. The late date to turn in all homework and quizzes is Tuesday, August 2, 2022 at 11:59 pm.

## Tests

This course will only have a midterm and a Final. The midterm will be worth 150 points and the comprehensive Final will be worth 200 points. These tests are paper/pencil and will be conducted ON EAST CAMPUS in a proctored environment. The room for the test will be announced on Blackboard.

You can either choose between a 10 am or 6 pm testing time on the given day below. You'll have two hours to complete the exam. Be sure to arrive to the exam room on time. You'll need to bring with you pencils, a calculator, and a photo ID (driver's license, Tri-C ID, passport, etc.) **A test will not be given if the student does not have a valid photo ID.** In the Syllabus Quiz, you'll need to declare which time you plan to take the exam.

You may choose from the following:

MIDTERM: Wednesday, July 6<sup>th</sup> at 10 AM  
Wednesday, July 6<sup>th</sup> at 6 PM

FINAL: Wednesday, August 3<sup>rd</sup> at 10 AM  
Wednesday, August 3<sup>rd</sup> at 6 PM

## Tests continued

All steps must be shown, including setups for formulas, on the test or full credit will not be given (in Math, how you get the answer is sometimes more important than the actual answer.) It's recommended that you view the previous tests on my website. On the website, click on "Classes" and then on "Math 1540". Take those tests and use the answer keys to check your work. **The midterm will cover Sections 6.1 - 7.3 (All of Practice Test 1 and Problems 1 - 5 of Practice Test 2). The Final is accumulative with each chapter covered equally (All three Practice Tests).**

## Partial Credit Policy

While grading the midterm and Final, partial credit will be given based on the amount of work shown and how correct the work is. For example, a student who gets their answer straight from the calculator without showing any work will receive very few points, if any—even if the answer is correct. Whereas a student who does the correct work but somehow arrives at an incorrect answer will receive the majority of the credit. Arithmetic mistakes warrant only a few points lost; however, conceptual errors will not earn many points of partial credit. I understand that there are times where you don't need to use the calculator to get the answer, and thus in those cases, the policy does not apply. **If at any time, you need to reach for your calculator to get the answer, then you will need to write down the setup on the test paper and the corresponding answer.**

## Make-ups/Late Material

There will be no make-up tests (midterm and Final) offered. Be sure to have all materials on the day and by the time that they are required. Homework and quizzes turned in after the due date will be docked 30%. Other materials turned in after the due date will not be graded. **Extra time will NOT be given for any reason.**

## Cheating Policy

Cheating will not be tolerated by the instructor. It includes having any extra materials not approved by the instructor. Cheating also includes having these materials in your possession. For instance, if you borrow a calculator, you are obligated to make sure there are no formulas in the calculator.

Misuse of external resources (including, but not limited to, other texts, other student's work, the internet, and the student solution manual) by submitting work that is not their own also constitutes cheating. For example, if a student copies from the student solution manual and turns that in as their homework, it is considered cheating. If you do not understand how to get the answer, do not simply copy down the work from an external source. Instead, ask me to help you with the problem. Copying down from an external source does not demonstrate mastery of the material and will not help you on the exam and on the final. Never give me the impression that you are cheating. Never look over at other student's work and never talk during the test for any reason. Throughout the course, your handwriting samples will be used for the purpose of comparison. If there is any suspicion that cheating has occurred, such as someone else did the work, then the Cheating Policy will be enacted.

On the first instance of cheating, the student will be reported to the Dean of Student Affairs, the grade received for that entire assignment/exam will be a zero, the student's lowest test score will not be replaced by the Final, if higher, and the final grade will be lowered by one letter. For the second instance of cheating, automatic failure in the course will result and a Student Conduct Hearing will take place. See the Student Handbook for more information.

## Instructor's Expectations

Math is a difficult subject for most people, so I strongly encourage you to ask any questions you may have (without having to worry.) Follow the guidelines (see below) to start every week prepared. Be sure homework is done in a timely manner and that you adequately schedule your time to include homework and studying. Studying only a "couple hours" for a test is never enough. Be sure to start to study for a test at least 2 days before the test. That way, you leave enough time for the material to be understood and to ask any questions. Do not wait until the last minute to get the help you might need! If you do not ask questions when you have them, then you are shorting yourself of an opportunity to learn the material. I will answer all questions in a respectful, patient, and timely manner. **Please allow one week for the midterm to be returned.** The Final will not be returned.

**When corresponding through email, refrain from using "internet speak". Any such email will be returned.**

## Grading

Grades will be based on the following†:

About Me*	6
Weekly Planner*	6
Syllabus Quiz	7
Homework	51
Quizzes	30
Midterm	150
Final	200
<b>Total</b>	<b>450</b>

Final grades are based on:

Percent	Points	Final Grade
90 - 100	405 - 450	A**
80 - 89	360 - 404.99	B**
70 - 79	315 - 359.99	C**
60 - 69	270 - 314.99	D
0 - 59	Below 270	F
**Passing Grade starting Summer 2005		

† Total point value subject to change due to time

\* Graded on an all-or-nothing basis

Grades shown on MyMathLab are not your current grade—they only show the grade for what you completed, which may not be close to your actual grade. If you want to know your current class grade, please email me.

## Assistance

Free online tutoring is available with a link under Student Services in My Tri-C Space through eTutoring and Smarthinking.

## College Calendar

Date	Calendar Description
June 13, 2022	Session L (8 Weeks) Begins
June 20, 2022	Juneteenth - College Closed - No Classes Scheduled
June 27, 2022	Last Day to Withdraw from Session L (8 Weeks) with NO RECORD
July 4, 2022	Independence Day - College Closed - No Classes Scheduled
July 22, 2022	Last Day to Withdraw from Session L (8 Weeks) Course with a "W" Grade
August 7, 2022	Summer Session Full Term, Session K (Second 5 Weeks) and Session L (8 Weeks) End
August 9, 2022	Final Grades Due, Full Term, Session K (Second 5 Weeks) and Session L (8 Weeks)
June 13, 2022	Session L (8 Weeks) Begins

## Student Accessibility Services (SAS)

Tri-C is committed to providing online services, software, and electronic information that is accessible and usable by all of our students, including those with disabilities. It is our mission to provide accessible opportunities and services by complying with Federal and State accessibility guidelines. If you need any special course adaptations or accommodations because of a documented disability, please contact Student Accessibility Services (SAS) (<https://www.tri-c.edu/student-accessibility-services>) or SAS via email at [CCCSAS@TRI-C.EDU](mailto:CCCSAS@TRI-C.EDU). Students have the right to request accommodations at any point in the semester; however, accommodations are not retroactive.

Eastern (216) 987-2052 - Voice. (216) 987-2423 - Fax  
Western (216) 987-5079 - Voice. (216) 987-5118 - Fax.  
Brunswick (216) 987-5079 - Voice. (216) 987-5118 - Fax.

Metropolitan (216) 987-4344 - Voice (216) 987-3257 - Fax.  
Westshore (216) 987-3900 - Voice. (216) 987-5294 - Fax.  
Off-Site (216) 987-5079 - Voice

## Incomplete Grades

The grade "I" is only given if a student meets **both** of the following conditions:

- The student has a **passing status** in the class and has completed at least 70% of the course work, AND
- The student is unable to complete the rest of the required course work due to circumstances *judged by me* to be beyond his/her control.

A notation of "I" indicates that you must complete the course requirements within five (5) weeks of the next semester (summer excluded) or the "I" will be automatically changed to an "F". See Student Handbook for more information.

## Academic Credit

Academic Credit According to the Ohio Department of Higher Education, one (1) semester hour of college credit will be awarded for each lecture hour. Students will be expected to work on out-of-class assignments on a regular basis which, over the length of the course, would normally average two hours of out-of-class study for each hour of formal class activity. Credit is also awarded for other hours such as directed practice, practicum, cooperative work experience, and field experience. The number of hours required to receive credit is listed under Other Hours on the syllabus. The number of credit hours for lecture, lab and other hours are listed at the beginning of the syllabus. Make sure you can prioritize your time accordingly. Proper planning, prioritization and dedication will enhance your success in this course. The standard expectation for an online course is that you will spend 3 hours per week for each credit hour. Courses offered in other part of terms (e.g. 14-week, 8-week, flexibly scheduled, etc.) ensure equivalent workloads. Students should prioritize their time accordingly, particularly when taking part of term courses.

## Coronavirus/Covid-19 Statement

Students are responsible for adhering to all College health and safety guidance, including that which relates to the COVID-19 pandemic. Public health requirements and standards are changing rapidly, and the College is adapting its guidance accordingly. Please check your Tri-C email and visit [tri-c.edu/coronavirus](http://tri-c.edu/coronavirus) regularly for updates. All students must adhere to the following general guidelines, until further notice:

- Remain at home if you are ill or experiencing symptoms of illness. Do not attend any in-person class or gathering. Contact [Risk.Management@tri-c.edu](mailto:Risk.Management@tri-c.edu) if you need further guidance.
- Notify your instructor(s) if you are ill, have tested positive for COVID-19, or were exposed to an individual who has tested positive for COVID-19. If you have tested positive for COVID-19 or were a close contact of a COVID-19 positive individual, please complete the form at [www.tri-c.edu/reportcovid](http://www.tri-c.edu/reportcovid) and Tri-C Risk Management will contact you with further guidance.
- Masks are required inside any Tri-C building, regardless of your vaccination status.
- Maintaining physical distance from others is optional inside any Tri-C building, regardless of your vaccination status.

The general guidelines listed above do not encompass all COVID-19 related guidance and are subject to change at the discretion of the College and under the direction of public health authorities. For the most up-to-date guidance, please visit [www.tri-c.edu/coronavirus](http://www.tri-c.edu/coronavirus). Students who fail to adhere to College guidance may be subject to disciplinary action under the College's Student Code of Conduct and the Student Judicial Code.

## Extra Information

Office hours! Use them to your advantage. Let no question go unasked. **Be sure to have your questions prepared in advance to maximize efficiency during office hours.** There is not time to redo the lecture during office hours so come prepared to ensure all students are given a chance for help. You don't need an appointment if you come by during on-campus office hours. Just pop in anytime you have a question. I am also available for online tutoring using Zoom. If you wish to meet with me outside of my office hours, please give me advance notice by emailing me at my Tri-C address. Please let me know which day(s) and time(s) you wish to meet. Email me a photo of a lion cub by the end of the first Friday of Week 1 for some extra credit. I do not log on unless I know someone is there. You'll find a link to my Zoom account on Blackboard and also the Green Video Icon on [mathaccordingtomike.com](http://mathaccordingtomike.com). An important note: **You are not bothering me!** Some students feel that they ask too many questions. I'd rather you ask than not ask.

The syllabus is a fluid document and is subject to change. Any changes/clarifications that need to occur will be posted in Blackboard. Be sure to check there throughout the course as not all announcements are emailed out.

For more information concerning Tri-C's Academic Credit, Accessibility, Attendance, Learning Outcome Assessment, Concealed Carry, and COVID-19 statements, please visit <https://www.tri-c.edu/student-resources/curriculum/documents/syllabus-part-b.pdf>.

# Math 1540 Schedule

Week of (Mondays)	Sections Covered	Example Videos to Watch
June 13	<p><b>Check both your Tri-C email and Blackboard for important instructions</b></p> 6.1 Trigonometric Functions of Acute Angles 6.2 Applications of Right Triangles 6.3 Trigonometric Functions of Any Angle	1 - 16
June 20	6.4 Radians, Arc Length, and Angular Speed 6.5 Circular functions 6.6 Graphs of Transformed Sine and Cosine Functions	17 - 37
June 27	7.1 Identities: Pythagorean and Sum/Difference 7.2 Identities: Co-function Double Angle 7.3 Proving Trig Identities	38 - 52
July 4	<p><b><u>Midterm Week! Midterm: Wednesday, July 6<sup>th</sup> at either 10 am or 6 pm</u></b>  <b>The Midterm covers Sections 6.1 - 7.3</b>  <b>Use Practice Tests 1 and 2 to prep (see Tests Section for more info)</b></p> 7.4 Inverse of Trig Functions 7.5 Solving Trig Equations	53 - 62
July 11	8.1 Law of Sines 8.2 Law of Cosines	63 - 72
July 18	8.3 Complex Numbers 8.4 Polar Coordinates	73 - 85
July 25	8.5 Vectors 8.6 Vector Operations	86 - 98
August 1	<p><b>FINAL WEEK! Final: Wednesday, August 3<sup>rd</sup> at either 10 am or 6 pm.</b>  <b>Last day to turn in homework and quizzes is Tuesday, August 2<sup>nd</sup> at 11:59 pm.</b></p>	

# Homework and Quiz Due Dates

Step 1: Get a daily planner

Step 2: Write these dates in the planner

Step 3: Become organized

Homework Assignments Availability Dates		Quiz Availability Dates	
June 13 - June 21	6.1 - 6.3	June 20 - June 27	Chapter 6
June 20 - June 27	6.4 - 6.6	July 4 - July 11	Chapter 7
June 27 - July 5	7.1 - 7.3	July 25 - August 2	Chapter 8
July 4 - July 11	7.4 - 7.5	<p>The first date is when the assignment is available. The second date is when it is due.</p> <p>Homework and quizzes are due at 11:59 pm of the second date listed.</p> <p>After the second date listed, homework and quizzes are penalized 30% (See Homework and Quizzes). No exceptions for any reason.</p>	
July 11 - July 18	8.1 - 8.2		
July 18 - July 25	8.3 - 8.4		
July 25 - August 2	8.5 - 8.6		

