

# Syllabus for Summer 2022 MATH 1530 Section 51212

Cuyahoga Community College Business, Technology & Mathematics Eastern Campus

Course: MATH 1530 College Algebra

Instructor: Mike McCraith

Lecture Hours: 04 hours Laboratory Hours: 00 hours

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-0965 Intermediate Algebra, or appropriate score on Math Placement Test, or departmental approval: equivalent coursework.

## Course Description

Topics include extensive function (linear, quadratic, polynomial, radical, roots, power, piece-wise, exponential, logarithmic) representation including verbal, numeric, graphic, and algebraic, identifying properties of the different function types, transformation of functions, solve polynomial, rational, absolute value, exponential and logarithmic equations. Solve quadratic, polynomial, and rational inequalities in one variable. Determine and graph conic sections, solve non-linear systems of equations and inequalities and solve systems of equations using matrices, arithmetic and geometric sequences and series. Includes applications and activities to build skills in problem solving.

## Course Schedule

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

## Learning Outcomes for Math 1530

Upon successful completion of Math 1530, the student should be able to:

1. Represent functions verbally, numerically, graphically and algebraically.
2. Solve Equations.
3. Solve Inequalities.
4. Define, Determine, and Graph Conic Sections and solve Non-linear Systems of Equations and Inequalities.
5. Solve systems of linear equations using matrices.
6. Recognize and differentiate arithmetic and geometric sequences and series, and determine specified terms and their sums if they exist.

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 mccraith05088. 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.

## Tests continued

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

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 1530". Take those tests and use the answer keys to check your work. **The midterm will cover Chapters 1 - 4 (Practice Tests 1 and 2). The Final is accumulative with each chapter covered equally (All four 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*	4
Weekly Planner*	4
Syllabus Quiz	4
Homework	108
Quizzes	80
Midterm	150
Final	200
<b>Total</b>	<b>550</b>

Final grades are based on:

Percent	Points	Final Grade
90 - 100	495 - 550	A**
80 - 89	440 - 494.99	B**
70 - 79	385 - 439.99	C**
60 - 69	330 - 384.99	D
0 - 59	Below 330	F
<b>**Passing Grade starting Summer 2005</b>		

† 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 1530 Schedule

Week of (Mondays)	Sections Covered	Mini Lecture Videos to Watch	Example Videos to Watch
June 13	<p><b>Check both your Tri-C email and Blackboard for important instructions</b></p> 1.1 Introduction to Graphing 1.2 Functions and Graphs 1.3 Linear Functions, Slopes, and Applications 1.4 Equations of Lines and Modeling 2.1 Increasing, Decreasing, and Piecewise Functions; Applications 2.2 The Algebra of Functions 2.3 The Composition of Functions 2.4 Symmetry 2.5 Transformations	1 - 3	1 - 26
June 20	3.1 The Complex Numbers 3.2 Quadratic Equations, Functions, and Models 3.3 Analyzing Graphs of Quadratic Functions 3.4 Solving Rational and Radical Equations 3.5 Solving Equations and Inequalities with Absolute Value	4 - 5	27 - 41
June 27	4.1 Polynomial Functions and Models 4.2 Graphing Polynomial Functions 4.3 Polynomial Division; The Remainder and Factor Theorems 4.4 Theorems about Zeros of Polynomial Functions 4.5 Rational Functions 4.6 Polynomial and Rational Inequalities	5 - 7	42 - 61
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 Chapters 1 - 4</b>  <b>Use Practice Tests 1 and 2 to prep</b></p> 5.1 Inverse Functions 5.2 Exponential Functions and Graphs 5.3 Logarithmic Functions and Graphs	7 - 8	62 - 70
July 11	5.4 Properties of Logarithmic Functions 5.5 Solving Exponential and Logarithmic Equations 5.6 Applications and Models: Growth and Decay, and Compound Interest 11.1 Sequences and Series 11.2 Arithmetic Sequences and Series 11.3 Geometric Sequences and Series	8 - 10	71 - 79, 120 - 139
July 18	9.2 Systems of Equations in Three Variables 9.3 Matrices and Systems of Equations 9.8 Partial Fractions	10 - 11	80 - 86, 97 - 101
July 25	10.1 The Parabola 10.2 The Circle and the Eclipse 10.3 The Hyperbola 10.4 Nonlinear Systems of Equations and Inequalities	11 - 12	102 - 119
August 1	<p><b>FINALS 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	1.1 - 1.4, 2.1 - 2.5	June 13 - June 21	Chapters 1 & 2
June 20 - June 27	3.1 - 3.5	June 20 - June 27	Chapter 3
June 27 - July 5	4.1 - 4.6	June 27 - July 5	Chapter 4
July 4 - July 11	5.1 - 5.3	July 11 - July 18	Chapters 5 & 11
July 11 - July 18	5.4 - 5.6, 11.1 - 11.3	July 18 - July 25	Chapter 9
July 18 - July 25	9.2, 9.3, 9.8	July 25 - August 2	Chapter 10
July 25 - August 2	10.1 - 10.4	<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>	

