

# Syllabus for Spring 2024 MATH 1530 Section 14825

Cuyahoga Community College Business, Technology & Mathematics Eastern Campus

Course: MATH 1530 College Algebra

Lecture Hours: 04 hours    Laboratory Hours: 00 hours

Instructor: Mike McCraith

Office: EMHC 210

Office Phone: 216-987-2320

Office Hours: MW 8 - 10 am, 11:45 am - 1 pm

TTH 8 - 9 am, 10:30 - 11 am, 2:15 - 3 pm

Email: [mike.mccraith@tri-c.edu](mailto:mike.mccraith@tri-c.edu)

Website: [mathaccordingtomike.com](http://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

Section 14825: MW 1 - 2:50 pm 14-week EMHC 228

## 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

To be successful in the class, you must be determined and able to stay on task. Read the section, watch the corresponding YouTube videos, skim the section, and then try the homework. Do one section at a time! If there's time between when you finish the homework, projects, and the test due date, print out the practice tests (see Tests) and compare your work to the answer key. Do not wait until the last minute to start the material.

## 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 attend every class. The more classes you attend, you increase the chance of a better grade. You are also responsible to find out what you missed and your responsibility to contact a classmate for any notes you have missed. Students are expected to arrive on time and stay for the entire class. To be marked as Attended, you will need to submit the homework for Sections 1.1 - 1.3 by Monday, February 5, 2024.

## Homework, Quizzes, Project, and PowerPoint Package

There will be online homework assigned for every section that we cover in class. Homework can be accessed through Blackboard (Pearson Link). You will have one week to complete each homework assignment and have the chance to receive full credit. You should consider printing out the homework to do the problems on paper, log back in, and the submit answers. Each section is worth 3 points.

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 Monday, May 6, 2024 at 11:59 pm.

You may work on the project with only people from our class, by yourself, or you may ask me for help. You may not seek outside help including, but not limited to, tutors, friends, family, or the internet. Due dates on the project will be announced. More information will be given as the course progresses.

All of the planned class examples will be typed and available to you on Blackboard under the button called the PowerPoint Package. You should come to class with these slides and write the answer to the exercise as we work it out together in class. They are worth 5 points per collection. Whichever sections the test covers is what you will need to turn in for your projects and the PowerPoint Package on the day of the test. Do not come late on test day. Any material submitted after the class has begun will not be accepted for credit.

## Grade Replacement Policy

If all homework assignments are turned in on time and a score of 70% or higher is received on all homework assignments, and has not been caught cheating, then the lowest test score is **replaced** by the Final if the Final is higher. Otherwise, all tests and Final scores are kept.

## Tests

A test will be given approximately two classes after the final section the test will include is covered in class. A 200-point Final will be given on the last day of class (see schedule.) Tests will consist of homework-style problems and short answer. The test must be done in pencil. A test not done in pencil or one that is done in poor handwriting will not be graded. All steps must be shown 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.) A test will not be given to a student if the student arrives on the day of the test after the first test has been handed in. Be sure to get to the class early on test days. It is highly recommended that you view the previous tests using the website (address above.) On the site, click on "Classes" and then "Math 1530". Take those tests and use the answer keys to check your work. More information on this as the course progresses. Other test day rules: You may not use the bathroom during test time. Also, asking for a calculator and/or pencil on test day will result in a 5-point loss per request.

### Partial Credit Policy

While grading the tests, 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 offered. No make-up assignments (About Me, Weekly Planner, Syllabus Quiz, projects and tests) will be accepted for any reason. If you know you will not be able to make it to class when an assignment is due, you can send a scanned copy of your work to my email. You may also take a photo with your cell phone and email it to me. Make sure the file size is not large or the email may not be received. The deadline for scanned material remains the same as if you were in class. Requests for extra time are handled on a case-by-case basis, but are rarely granted. Get your assignments done early to avoid any issues.

### Cell Phone Policy

Tests are already stressful parts of any math class, but, a disruption, like a cell phone, can make the entire experience worse. Due to this, if any disruption is caused during a test from a cell phone, the student with the cell phone will be required to write a paper. See below for information on the paper. If the paper is not turned in within one week, the student will receive a zero on the test. The paper should focus on disruptions during a test caused from cell phones. You may also briefly discuss other forms of disruptions. End the paper with a summary of what you have learned in this process. The paper is to be three pages in length, double-spaced, with an additional page of references. You must cite two references using the MLA format.

If after all of this and the same student allows their cell phone to disrupt another test, the student will be asked to leave the class and will receive a zero on their test. A disruptive cell phone includes one that rings and one that is on vibrate. I completely understand that life occurs outside of the classroom. If it is a test day and you are expecting an important call, simply place the cell phone on your desk and put it on silent. The cell phone will still light up to let you know there's an incoming call or text. If that occurs, turn your test over and quietly leave the room to answer the call. That way, you will minimize the disruption and it should not break the concentration of fellow students. During class, cell phones are considered to be participating in disruptive behavior and will not be tolerated in class. Cell phones may not be used during tests. They also may not be used during class to take photos of the board. They must be turned off or on silent- not vibrate. Anyone using one to text message during any class period will be asked to leave for that day.

### 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, unauthorized aids on a test, using purchased or pre-made term papers, projects, or other work, and plagiarism) by submitting work that is not their own also constitutes cheating. Use of AI also falls in this category (see below). 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, and the overall 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.

### The Use of AI

By enrolling in this course, you pledge to always conduct yourself with honor and integrity. You pledge to not lie, cheat, or collaborate when prohibited, and to actively contribute to a community of trust. You are fully responsible for all assignments, instructions and information presented in this course, whether you are present or not. When you turn in an assignment, you are acknowledging that it is your work, and you are responsible for explaining it and your thought process. At any point, you may be asked to meet one-on-one with your professor for a brief discussion of your work: a live conversation in which you answer questions about the material and demonstrate a deep understanding thereof. The grade for an assignment or for the course can be withheld until the meeting occurs.

The use of all AI technologies is prohibited in the course for any assignment. AI technologies include, but are not limited to, ChatGPT, Google Bard, Hugging Chat, etc. All work submitted for grading must be generated by the student. The use of any AI to complete any coursework would be subject to the academic dishonesty procedures as outlined in the Student Handbook. You are fully responsible for knowing and adhering to Cuyahoga Community College policies on academic integrity as described in the Tri-C Student Handbook. Failure to adhere to these guidelines will lead to the Cheating Policy being enforced.

### 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.) 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. The Final will not be returned. When corresponding through email, refrain from using "internet speak". Any such email will be returned.

### Assistance

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

### 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.

## College Calendar

Date	Calendar Description
January 29, 2024	Spring Semester Session O (14 Weeks) Begin
February 12, 2024	Last Day to Withdraw from Session O (14 Weeks) with NO RECORD
March 11 - 17, 2024	Spring Break - College Closed - No Classes Scheduled
April 5, 2024	Deadline to Petition for Graduation
April 19, 2024	Last Day to Withdraw from Session O (14 Weeks) Course with a "W" Grade
May 6-12, 2024	Final Exam Week - Full Term
May 12, 2024	Spring semester Full Term, Session B (Second 8 Weeks), Session M (12 Weeks) and Session O (14 Weeks) End
May 14, 2024	Final Grades Due: Full Term, Session B (Second 8 Weeks), Session M (12 Weeks) and Session O (14 Weeks)
May 17, 2024	Commencement

## Grading

Grades will be based on the following†:

About Me * ‡ •	4
Weekly Planner ‡ •	4
Syllabus Quiz * ‡ Ω	4
Quizzes	40
Homework	108
Project	15
PowerPoint Package * Ω	20
Exams	300
Final	200
<b>TOTAL</b>	<b>695</b>

Final grades are based on:

Percent	Points	Final Grade
90 - 100	625.5 - 695	A**
80 - 89	556 - 625.49	B**
70 - 79	486.5 - 555.99	C**
60 - 69	417 - 486.49	D
0 - 59	Below 417	F
**Passing Grade starting Summer 2005		

† Total point value subject to change due to time

\* Graded on an all-or-nothing basis

‡ Due on January 31, 2024 at 1:00:00 pm

• Found on mathaccordingtomike.com

Ω Found on Blackboard

Grades shown on MyMathLab are not your current grade—they only show the homework and quiz grade for what you completed, which may not be close to your actual grade.

## 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. Email me a photo of a lion cub by the end of the first Wednesday of Week 1 for some extra credit. 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.

As for a hint: be sure not to only write down what I write down on the board, but also what I say in between the steps. This will greatly help you as you study. Also, if you need to audio record the class, feel free to do so. Believe it or not, this could help you fill in the gaps to your notes. Please, no children in the class. **When corresponding through email, refrain from using "internet speak". Any such email will be returned.**

# Math 1530 Schedule

Day of	Sections Covered	Day of	Sections Covered
January 29 & 31	Introduction 1.1 Introduction to Graphing 1.2 Functions and Graphs 1.3 Linear Functions, Slopes, and Applications	March 25 & 27	5.1 Inverse Functions 5.2 Exponential Functions and Graphs Test 2: Chapters 3 and 4
February 5 & 7	1.4 Equations of Lines and Modeling 2.1 Increasing, Decreasing, and Piecewise Functions; Applications 2.2 The Algebra of Functions	April 1 & 3	5.3 Logarithmic Functions and Graphs 5.4 Properties of Logarithmic Functions 5.5 Solving Exponential and Logarithmic Equations
February 12 & 14	2.3 The Composition of Functions 2.4 Symmetry 2.5 Transformations	April 8 & 10	5.6 Applications and Models: Growth and Decay, and Compound Interest 11.1 Sequences and Series 11.2 Arithmetic Sequences and Series
February 19 & 21	3.1 The Complex Numbers 3.2 Quadratic Equations, Functions, and Models Test 1: Chapters 1 and 2	April 15 & 17	11.3 Geometric Sequences and Series 9.2 Systems of Equations in Three Variables 9.3 Matrices and Systems of Equations
February 26 & 28	3.3 Analyzing Graphs of Quadratic Functions 3.4 Solving Rational and Radical Equations 3.5 Solving Equations and Inequalities with Absolute Value	April 22 & 24	Test 3: Chapters 5 and 11 9.8 Partial Fractions 10.1 The Parabola
March 4 & 6	4.1 Polynomial Functions and Models 4.2 Graphing Polynomial Functions 4.3 Polynomial Division; The Remainder and Factor Theorems	Apr 29 & May 1	10.2 The Circle and the Eclipse 10.3 The Hyperbola 10.4 Nonlinear Systems of Equations and Inequalities
March 11 & 13	Spring Break! Celebrate National Pi Day March 14th!	May 6	<b>Review</b>
March 18 & 20	4.4 Theorems about Zeros of Polynomial Functions 4.5 Rational Functions 4.6 Polynomial and Rational Inequalities	May 8	<b>Final 1:00 - 3:00 pm Same Classroom!</b>

# Homework, Quiz, and Project Schedule

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	
Jan 29 - Feb 5	Sections 1.1 - 1.3	Chapter 1	February 5 - 12
February 5 - 12	Sections 1.4, 2.1 - 2.2	Chapter 2	February 12 - 19
February 12 - 19	Sections 2.3 - 2.5	Chapter 3	Feb 26 - Mar 4
February 19 - 26	Sections 3.1 - 3.2	Chapter 4	March 18 - 25
Feb 26 - Mar 4	Sections 3.3 - 3.5	Chapter 5	April 8 - 14
March 4 - 11	Sections 4.1 - 4.3	Chapter 11	April 15 - 22
March 18 - 25	Sections 4.4 - 4.6	Chapter 9	April 22 - 29
Mar 25 - Apr 1	Sections 5.1 - 5.2	Chapter 10	April 26 - May 6
April 1 - 8	Sections 5.3 - 5.5	Project Availability Dates	
April 8 - 15	Sections 5.6, 11.1 - 11.2	April 8 - April 15	
April 15 - 22	Sections 11.3, 9.2 - 9.3	<p>The first date is when the assignment is available. The second date is when it is due.</p>	
April 22 - 29	Sections 9.8 - 10.1		
April 29 - May 6	Sections 10.2 - 10.4		

Homework and quizzes are due at 11:59 pm of the second date listed.

After the second date listed, homework and quizzes are penalized 30% (See Homework and Quizzes). The project cannot be turned in late for credit. No makeups for tests. No exceptions for any reason.

Last day to submit outstanding homework and quizzes:

Monday, May 6, 2024 at 11:59 pm.

Click here for the [TRI-C Instructional Policies](#)

This includes

- I. Academic Credit
- II. Accessibility Statement
- III. Attendance Tracking
- IV. Religious Accommodations
- V. Learning Outcomes Assessment
- VI. Concealed Carry Statement

<https://www.tri-c.edu/student-resources/curriculum/documents/syllabus-part-b.pdf>