

Syllabus for Fall 2021 MATH 1530 Section 86229

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 (on campus): MTWR 12 - 1 pm, MWR 2:40 - 3:40 pm
Office House (online): M 6 - 8 pm, T 5 - 6 pm; OR 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

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, quizzes, 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. Info on which YouTube video to watch is posted in the Math 1530 Schedule at the end of the syllabus.

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

As if this were a traditional class, you need to have the self-discipline to work on math every day to increase your chance of success. Try to do some work for this class every day. Even if you only have 20 minutes, it is better than not spending any time at all. To be marked as Attended, you **must** complete the following tasks. All items are due on September 20, 2021 by 11:59 pm.

- Send me an email to the address above copying the contract found in both the Welcome Email and Blackboard message;
- Complete the About Me and Weekly Planner on mathaccordingtomike.com;
- Complete the Syllabus Quiz on Blackboard; and
- Complete the first week's homework assignment 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 **mccraith28956**. 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 is Tuesday, December 14, 2021 at 11:59 pm.

Tests

This course will have only a midterm and a Final. The midterm will be worth 150 points and the comprehensive Final will be worth 200 points. These tests will be paper/pencil. **The day for the midterm will be Tuesday, November 2 and the day for the Final will be Tuesday, December 14, 2021.** Both days, the test will be held at 6:00 pm. See the Schedule for more information.

While taking the tests, no other materials, besides blank paper, calculator and formula sheet, may be used.

BEFORE TAKING THE TEST:

- 1) **Make a Zoom account by going to <https://zoom.us/>** . You will need to download Zoom for your computer or for your phone to use during the exams. Be sure to try it out by making a visit during office hours (see first page) or making an appointment before the day of the test.
- 2) **If you do not have a scanner, download a scanning app for your smartphone such as Microsoft Office Lens or Evernote/Evernote Scannable. One of your first assignments (Weekly Planner) is also going to be a test to make sure you can download and submit through Blackboard. If you have an issue, please let me know ASAP!**
- 3) **Practice creating a multiple-page PDF file using the software mentioned or the website <http://combinepdf.com>.**

Tests will appear on Blackboard at your preselected time. You are to perform the following steps:

- 1) Log into the Zoom meeting <https://us02web.zoom.us/j/5387886450> **10 minutes before the exam** with your webcam on. If you do not have a webcam, you'll need to download the Zoom app for your smartphone. Make sure your phone is charged throughout the exam. If there is a disruption during the exam, **email me immediately**. I will be proctoring and recording the test as you take it.
- 2) During the 10 minutes prior to the exam, I will be checking IDs. Make sure you have a photo ID ready.
- 3) Log into Blackboard and click on Tests in the menu on the left. Print out the test and do the work on the paper (preferred). If you cannot print, work on separate sheets of paper, write the problem number and show the work. You do not have to rewrite the actual problem. If you choose the latter, make sure that you do not skip around and the problems are done sequentially. Do not put more than one problem on a line. In other words, make sure the work is very easy to follow. If you need to put work on a separate sheet, mark on the test that the work is on another page and make sure the work is labeled. If I cannot find a problem, I will not grade it and you'll receive a zero. **If you print the test or use separate sheets, PRINT AND SIGN your name at the top of every page.** You can leave this website tab open during the test as you'll also use it to submit your completed test.
- 4) Once the test is complete, scan it and save the document as a PDF. If you do not have access to a scanner, then use a scanning app for your smartphone. If you use your smartphone, you might have to send the file to yourself to get it to your computer in order to submit the test. Failure to create one PDF document will result in a 10% grade reduction.
- 5) Go back to Blackboard and submit your test using the same page where you downloaded the test.
- 6) Tests are timed, so be sure to submit it within the window. It is advisable to document that the test was sent by taking a photo/screenshot showing the upload was successful. **If a test is submitted outside of the allotted time, the grade will automatically be a zero.**

Important Notes:

- Students must ALWAYS be facing their webcam/phone during the test and be the only person in the room
- A student will receive a zero if:
 - The student does not provide a photo ID.
 - The student leaves their computer for ANY reason other than to print/scan the exam.
 - Turns their back to their webcam for any reason.
 - Uses a cell phone for any reason besides using Zoom if a webcam isn't available.
 - There is another person in the room while taking your assessment or you are heard talking to a person in the room that is not in view of the camera.
 - Turns their webcam and/or audio off during the test.
 - The student takes a test without using Zoom via a webcam or cellphone app and microphone.

Once you begin the test, you must finish it. Do not answer the phone if it rings or you receive a text, use the internet for other pages besides the Blackboard Test page, and definitely do not give me the impression you are cheating. If you have a question during the test, use the hand raise option inside Zoom and I will privately message you back. It's recommended that you keep your phone on do not disturb/airplane mode during the test.

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.) I do not need to see screenshots from calculators. You will have 85 minutes for the Midterm and 120 minutes for the Final. It is your responsibility to manage your time accordingly. Set an alarm to make sure you stay on task.

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%. **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*	12
Weekly Planner*	10
Syllabus Quiz	10
Homework	108
Quizzes	80
Midterm	150
Final	200
Total	570

Final grades are based on:

Percent	Points	Final Grade
90 - 100	513 - 570	A**
80 - 89	456 - 512.99	B**
70 - 79	399 - 455.99	C**
60 - 69	342 - 398.99	D
0 - 59	Below 342	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.

College Calendar

Date	Calendar Description
September 13, 2021	Session O 14 Week Semester begins
November 11, 2021	Veteran's Day - College Closed - No Classes Scheduled
November 24, 2021	Last Day to Withdraw from Session O (14 Weeks) Course with a "W" Grade
November 25- November 28, 2021	Thanksgiving Recess - College Closed - No Classes Scheduled
December 13-19, 2021	<u>Final Exam Week - Full Term</u>
December 16, 2021	Commencement
December 19, 2021	Fall Semester Full Term, Session B (Second 8 Weeks) and Session O (14 Weeks) End
December 21, 2021	Final Grades Due - Full Term, Session B (Second 8 Weeks) and Session O (14 Weeks)
December 24, 2021 - January 1, 2022	Winter Recess - College Closed

Assistance

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

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. Students have the right to request accommodations at any point in the semester; however, accommodations are not retroactive.

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.

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'll find a link to my Zoom account in the Tests section and on Blackboard. You don't need an appointment if you come by during 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. I do not log on unless I know someone is there.

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.

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.

Math 1530 Schedule

Week of (TUESDAYS)	Sections Covered	Week of (TUESDAYS)	Sections Covered
September 14	1.1 Introduction to Graphing 1.2 Functions and Graphs 1.3 Linear Functions, Slopes, and Applications <i>Videos 1 - 7</i>	TUESDAY, November 2	MIDTERM CHAPTERS 1 - 4 6:00 - 7:25 PM Arrive by 5:50 PM
September 21	1.4 Equations of Lines and Modeling 2.1 Increasing, Decreasing, and Piecewise Functions; Applications 2.2 The Algebra of Functions <i>Videos 8 - 19</i>	November 9	5.2 Exponential Functions and Graphs 5.3 Logarithmic Functions and Graphs 5.4 Properties of Logarithmic Functions <i>Videos 64 - 72</i>
September 28	2.3 The Composition of Functions 2.4 Symmetry 2.5 Transformations <i>Videos 20 - 26</i>	November 16	5.5 Solving Exponential and Logarithmic Equations 5.6 Applications and Models: Growth and Decay, and Compound Interest 11.1 Sequences and Series <i>Videos 73 - 79, 120 - 126</i>
October 5	3.1 The Complex Numbers 3.2 Quadratic Equations, Functions, and Models 3.3 Analyzing Graphs of Quadratic Functions <i>Videos 27 - 37</i>	November 23	11.2 Arithmetic Sequences and Series 11.3 Geometric Sequences and Series 9.2 Systems of Equations in Three Variables <i>Videos 127 - 139, 80 - 83</i>
October 12	3.4 Solving Rational and Radical Equations 3.5 Solving Equations and Inequalities with Absolute Value 4.1 Polynomial Functions and Models <i>Videos 38 - 43</i>	November 30	9.3 Matrices and Systems of Equations 9.8 Partial Fractions 10.1 The Parabola <i>Videos 84 - 86, 97 - 106</i>
October 19	4.2 Graphing Polynomial Functions 4.3 Polynomial Division; The Remainder and Factor Theorems 4.4 Theorems about Zeros of Polynomial Functions <i>Videos 44 - 56</i>	December 7	10.2 The Circle and the Ellipse 10.3 The Hyperbola 10.4 Nonlinear Systems of Equations and Inequalities <i>Videos 107 - 119</i>
October 26	4.5 Rational Functions 4.6 Polynomial and Rational Inequalities 5.1 Inverse Functions <i>Videos 57 - 63</i>	Tuesday, December 14	FINAL (ACCUMULATIVE) 6:00 - 8:00 PM Arrive by 5:50 PM

Last day to submit outstanding homework and quizzes:
Tuesday, December 14, 2021

YOU FOUND THE SECRET MESSAGE!

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

Sept 14 - Sept 21	Sections 1.1 - 1.3
Sept 21 - Sept 28	Sections 1.4, 2.1 - 2.2
Sept 28 - Oct 5	Sections 2.3 - 2.5
Oct 5 - Oct 12	Sections 3.1 - 3.3
Oct 12 - Oct 19	Sections 3.4 - 3.5, 4.1
Oct 19 - Oct 26	Section 4.2 - 4.4
Oct 26 - Nov 2	Sections 4.5 - 4.6, 5.1
Nov 2 - Nov 9	Prep for Midterm!
Nov 9 - Nov 16	Sections 5.2 - 5.4
Nov 16 - Nov 23	Sections 5.5 - 5.6, 11.1
Nov 23 - Nov 30	Sections 11.2 - 11.3, 9.2
Nov 30 - Dec 7	Sections 9.3, 9.8, 10.1
Dec 7 - Dec 14	Sections 10.2 - 10.4

Quiz Availability Dates

Chapter 1	Sept 21 - Sept 28
Chapter 2	Sept 28 - Oct 5
Chapter 3	Oct 12 - Oct 19
Chapter 4	Oct 26 - Nov 2
Chapter 5	Nov 16 - Nov 23
Chapter 11	Nov 23 - Nov 30
Chapter 9	Nov 30 - Dec 7
Chapter 10	Dec 7 - Dec 14

The first date is when the assignment is available. The second date is when it is due.

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).