Syllabus for Spring 2022 MATH 1470 Section 12388

Cuyahoga Community College Business, Technology & Mathematics Eastern Campus

Course: MATH 1470 Modern Math for Bus/Sci I
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, 2:45 – 4:00 pm
Office Hours (online): M 6 – 7 pm; OR BY APPOINTMENT

Email: mike.mccraith@tri-c.edu

Website: mathaccordingtomike.com

Text: Mathematics with Applications, 12th Ed, Lial, Hungerford, Holcomb, Mullins (only get the MyMathLab access to save money)
Graphing calculator is required - TI-83/83+, TI-84/84+ is recommended
Section 81457: MW 1 – 2:50 pm EMHC 110

Prerequisites

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

Course Description

First of two-semester sequence. Topics include functions, mathematics of finance, linear systems, matrix algebra and linear programming with applications in business and social sciences.

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 one section at a time. If there's time between when you finish the homework, projects, and the test's 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 1470

Upon successful completion of Math 1470, the student should be able to:

1. Analyze, define, and utilize functions of various types
2. Analyze, define, solve, and utilize exponential and logarithmic equations and functions.
3. Interpret, evaluate, and apply various formulas related to the mathematics of finance.
4. Analyze, graph, solve, and apply systems of linear equations, including utilization of matrices.
5. Analyze, graph, solve, and apply systems of linear inequalities.

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 **must** complete the following tasks.
- Complete the About Me and Weekly Planner on mathaccordingtomike.com (both due February 7 at 1:00 pm).
- Complete the Syllabus Quiz on Blackboard (due February 7 at 1:00 pm).
- Complete the first week's homework assignment on MyMathLab with at least a 70% or higher for each section (due February 7 at 11:59 pm).

Homework, Projects, and PowerPoint Package

There will be online homework assigned for **every** section that we cover in class. Homework can be accessed on MyMathLab http://portal.mypearson.com. **The Course ID is mccraith71967**. 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.
Homework 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.) 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 Wednesday, May 11th at 11:59 pm.
Projects are posted on Blackboard and are due on test day at 1:00:00 pm. Projects are chapter-based and should be attempted after completing the homework relating to that chapter. More info on the projects as the course progresses. Each project is 15 points. All work and answers for projects, must be on separate sheets of paper that are stapled. If I cannot follow your steps on how you arrived at the answer, do not expect to receive credit for the work. All work must be shown to receive full credit. Late material will not be accepted for any reason.
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 chapter. 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 1470". Take those tests and use the answer keys to check your work. More information on this as the course progresses.

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 exams offered. No make-up assignments (About Me, Weekly Planner, Syllabus Quiz, projects and tests) will be accepted for any reason. Be sure to have all materials on the day and by the time that they are required which is 1:00:00 pm. Materials turned in after the class has begun will not be graded. 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.

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 site 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—whether or not you are using them. For instance, if you borrow a calculator, you are obligated to make sure there are no formulas in the calculator. Make sure to use common sense while test taking. Do not, for any reason, look over at another student. Otherwise, you will be considered to be cheating.

Misuse of external resources (including, but not limited to, the back of the book, other textbooks, another student's work, the internet, and the solution manual) by submitting work that is not their own also constitutes cheating. For example, if a student copies the answers from the back of the book and turns it 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. I would rather you leave a problem blank than write the copied answer from an external source. It is your responsibility to make sure you have all of your questions answered before the assignment is due.

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.

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.

Instructor's Expectations

Please be courteous to all members of the class. Actions deemed rude such as disruptive behavior, including talking, whispering, tardiness, early departure or insulting or disrespectful comments or actions towards anyone will not be tolerated. Math is a difficult subject for most people, so I strongly encourage you to ask any questions you may have (without having to worry.)

Come to class prepared for the day's lesson by reading ahead. This is the best way to take more out of the day's lecture. 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.

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. 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.**

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.

Grading

Grades will be based on the following[†]:

About Me*	12
Weekly Planner*	10
Syllabus Quiz	10
PowerPoint Package*	25
Homework	78
5 Projects	75
3 Exams	300
Final	200
TOTAL	**710**

Final grades are based on:

Percent	Points	Final Grade
90 – 100	639 – 710	A**
80 – 89	568 – 638.99	B**
70 – 79	497 – 567.99	C**
60 – 69	426 – 496.99	D
0 – 59	Below 426	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 homework grade for what you completed, which may not be close to your actual grade.

College Calendar

Date	Calendar Description
January 31, 2022	Session O (14 Weeks) Begins
February 14, 2022	Last Day to Withdraw from Session O (14 Weeks) with NO RECORD
March 14 - 20, 2022	Spring Break - No Classes Scheduled
April 22, 2022	Last Day to Withdraw from Session O (14 Weeks) Course with a "W" Grade
May 9-15, 2022	Final Exam Week - Full Term
May 15, 2022	Spring semester Full Term, Session B (Second 8 Weeks) and Session O (14 Weeks) End
May 17, 2022	Final Grades Due: Full Term, Session B (Second 8 Weeks) and Session O (14 Weeks)
May 19, 2022	Commencement

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:
a) The student has a **passing status** in the class and has completed at least 70% of the course work, AND
b) 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 Course 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 on Blackboard. Email me a photo of a lion cub by the end of the first Friday of Week 1 for some extra credit. 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.

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 1470 Schedule

Day of	Sections Covered	Day of	Sections Covered
Jan 31, Feb 2	3.1 Functions 3.2 Graphs of Functions	**Mar 28, 30**	6.1 Systems of Two Linear Equations in Two Variables 6.2 Larger Systems of Linear Equations **Test 2: 4.3 - 4.4 and Chapter 5**
Feb 7, 9	3.3 Applications of Linear Functions 3.4 Quadratic Functions and Applications	**Apr 4, 6**	6.3 Applications of Systems of Linear Equations 6.4 Basic Matrix Operations 6.5 Matrix Products and Inverses
Feb 14, 16	3.5 Polynomial Functions 3.6 Rational Functions	**Apr 11, 13**	6.6 Applications of Matrices 7.1 Graphing Linear Inequalities in Two Variables
Feb 21, 23	4.1 Exponential Functions 4.2 Applications of Exponential Functions	**Apr 18, 20**	7.2 Linear Programming: The Graphical Method 7.3 Applications of Linear Programming
Feb 28, Mar 2	4.3 Logarithmic Functions **Test 1: Chapter 3 and 4.1 - 4.2**	**Apr 25, 27**	7.4 The Simplex Method: Maximization 7.5 Maximization Applications
Mar 7, 9	4.4 Logarithmic and Exponential Equations 5.1 Simple Interest and Discount 5.2 Compound Interest	**May 2, 4**	**Test 3: Chapter 6 and 7.1 – 7.4** 7.6 The Simplex Method: Duality and Minimization
Mar 14, 16	Spring Break!	**May 9**	Review
Mar 21, 23	5.3 Annuities, Future Value, and Sinking Funds 5.4 Annuities, Present Value, and Amortization	**Wednesday, May 11**	**Final 1:00 – 3:00 pm** **Same Classroom!**

Homework Due Dates

Step 1: Get a daily planner   Step 2: Write these dates in the planner   Step 3: Become organized

Sections	Available Dates (All dates are Mondays)
3.1 – 3.2	Jan 31 – Feb 7
3.3 – 3.4	Feb 7 – Feb 14
3.5 – 3.6	Feb 14 – Feb 21
4.1 – 4.2	Feb 21 – Feb 28
4.3	Feb 28 – Mar 7
4.4, 5.1 – 5.2	Mar 7 – Mar 14
5.3 – 5.4	Mar 21 – Mar 28
6.1 – 6.2	Mar 28 – Apr 4
6.3 – 6.5	Apr 4 – Apr 11
6.6 – 7.1	Apr 11 – Apr 18
7.2 – 7.3	Apr 18 – Apr 25
7.4 – 7.5	Apr 25 – May 2
7.6	May 2 – May 9

Homework is due at 11:59 pm on the second date listed for full credit. After that day/time, there is a 30% deduction applied only on later material submitted. No exceptions for any reason.

Projects are due at 1:00:00 pm in class on test day.
You are only allowed to work on projects with fellow students from our class.
You can also ask me for help.