SYLLABUS FOR SPRING 2020 MATH 1470 SECTION 12757

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: MW 9:00 - 10:00 am, 12:00 pm – 1:30 pm
TTH 9:00 – 10:00 am, 11:30 am – 1:00 pm

Email: mike.mccraith@tri-c.edu **Website:** mathaccordingtomike.com

Text: Mathematics with Applications, 12th Ed, Lial, Hungerford, Holcomb, Mullins
Graphing calculator is required - TI-83/83+, TI-84/84+ is recommended
Section 12757: MW 10:00 – 11:40 am EMHC 228

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.

Class Schedule

For the first few minutes of class (on non-test days), I will go over exercises that the student could not complete. The person who asks a question may be asked what they didn't like about the problem or what they didn't understand. The test will be given at the beginning of the class period and you will have the entire class time to take the test.

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.

Regular class attendance is expected. Tri-C is required by law to verify the enrollment of students who participate in federal Title IV student aid programs and/or who receive educational benefits through other funding sources. Eligibility for federal student financial aid is based in part on enrollment status.

Students who do not attend classes for the entire term are required to withdraw from the course(s). Additionally, students who withdraw from a course or stop attending class without officially withdrawing may be required to return all or a portion of their financial aid based on the date of last attendance. Students who do not attend the full session are responsible for withdrawing from the course(s).

Tri-C is responsible for identifying students who have not attended a course before financial aid funds can be applied to students' accounts. For in-person and blended-learning courses, students are required to attend the course by the 15th day of the semester (or equivalent for terms shorter than five weeks) to be considered attending. Students who have not met all attendance requirements for in-person and blended courses, as described herein, within the first two weeks or equivalent, will be considered not attending.

At the conclusion of the first two weeks of a semester or equivalent, instructors report any registered students who have "Never Attended" a course. Those students will be administratively withdrawn from that course. However, after the time period in the previous paragraphs, if a student stops attending a class or wants or needs to withdraw, for any reason, it is the student's responsibility to take action to withdraw from the course. Students must complete and submit the appropriate Tri-C form by the established withdrawal deadline.

Tri-C is required to ensure that students receive financial aid only for courses that they attend and complete. Students reported for not attending at least one of their registered courses will have all financial aid funds held until confirmation of attendance in registered courses has been verified. Students who fail to complete at least one course may be required to repay all or a portion of their federal financial aid funds and may be ineligible to receive future federal financial aid awards. Students who withdraw from classes prior to completing more than 60 percent of their enrolled class time may be subject to the required federal refund policy.

If illness or emergency should necessitate a brief absence from class, students should confer with instructors upon their return. Students having problems with coursework due to a prolonged absence should confer with the instructor or a counselor.

Learning Outcomes Assessment

Occasionally, in addition to submitting assignments to their instructors for evaluation and a grade, students will also be asked to submit completed assignments, called 'artifacts,' for assessment of course and program outcomes and the College's Essential Learning Outcomes (ELOs). The artifacts will be submitted in Blackboard or a similar technology. The level of mastery of the outcome demonstrated by the artifact DOES NOT affect the student's grade or academic record in any way. However, some instructors require that students submit their artifact before receiving their final grade. Some artifacts will be randomly selected for assessment, which will help determine improvements and support needed to further student success. If you have any questions, please feel free to speak with your instructor or contact the Learning Outcomes Assessment office.

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 mccraith76804**. You will have ample time to complete the homework. You should consider printing out the homework to do the problems on paper, log back in, and the submit answers. Each section is worth 5 points. Homework is only available for one week.

Projects are posted on Blackboard and are due on test day at 10:00:00 am. 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 20 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. With these slides, I will be making videos which will be available on my website (first page). You will be required to 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. **Whatever 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 projects and 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—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. Algebraic 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 must use the calculator to get the answer, and thus in those cases, the policy does not apply.

Make-up Exams and Quizzes

There will be no make-up exams offered. No make-up assignments 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 10:00:00 am. 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. **Extra time will NOT be given for any reason.**

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 on quizzes and 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 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. 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 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

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. 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.

Assistance

Tutoring is available in the Learning Center (ESS 1202) on a free, walk-in basis. Free online tutoring is available with a link under Student Services in My Tri-C Space through eTutoring and Smarthinking.

Student Accessibility Services (SAS)

If you need any special course adaptations or accommodations because of a documented disability, please notify your instructor

within a reasonable length of time, preferably the first week of the term with formal notice of that need (i.e. an official letter from the Student Accessibility Services (SAS) office). Accommodations will not be made retroactively. For specific information pertaining to ADA accommodation, please contact your campus SAS office or visit online athttp://www.tric.edu/accessprograms (http://www.tri-c.edu/accessprograms/). Blackboard accessibility information is available at http://access.blackboard.com.

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 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. For laboratory hours, one (1) credit shall be awarded for a minimum of three laboratory hours in a standard week for which little or no out-of-class study is required since three hours will be in the lab (i.e. Laboratory 03 hours). Whereas, one (1) credit shall be awarded for a minimum of two laboratory hours in a standard week, if supplemented by out-of-class assignments which would normally average one hour of out-of class study preparing for or following up the laboratory experience (i.e. Laboratory 02 hours). 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.

Concealed Carry Statement

College policy prohibits the possession of weapons on college property by students, faculty and staff, unless specifically approved in advance as a job-related requirement (i.e., Tri-C campus police officers) or, in accordance with Ohio law, secured in a parked vehicle in a designated parking area only by an individual in possession of a valid conceal carry permit.

As a Tri-C student, your behavior on campus must comply with the student code of conduct which is available on page 29 within the Tri-C student handbook, available at http://www.tri-c.edu/student-resources/documents/studenthandbook.pdf. You must also comply with the College's Zero Tolerance for Violence on College Property available at http://www.tri-c.edu/policies-and-procedures/documents/3354-1-20-10-zero-tolerance-for-violence-policy.pdf

Grading

Grades will be based on the following†:

About Me*	15
Weekly Planner*	10
PowerPoint Package*	25
Homework Asgmts.	130
5 Projects	100
4 Exams	400
Final	200
TOTAL	880

* Graded on an all-or-nothing basis

Final grades are based on:

Percent	Points	Final Grade
90 - 100	792 -880	A
80 - 89	704 - 791	B
70 - 79	616 - 703	C
60 - 69	528 - 615	D
0 - 59	Below 528	F

† Point values subject to change due to time

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.

I am also available for online tutoring using Skype. Use my Tri-C email address to find me on Skype. **If you wish to meet with me, please give me advance notice by emailing me at my Tri-C address.** I do not log on unless I know someone is there.

Per College policy, no children in the class.

College Calendar

Date	Calendar Description	Date	Calendar Description
January 27, 2020	Session O (14 Weeks) Begins	April 17, 2020	Last Day to Withdraw from Session O (14 Weeks) Course with a "W" Grade
February 10, 2020	Last Day to Withdraw from Session O (14 Weeks) with NO RECORD	May 4-10, 2020	Final Exam Week - Full Term
March 9-15, 2020	Spring Break - No Classes Scheduled	May 10, 2020	Spring Semester Ends
March 20, 2020	Animal Crossing New Horizons Released	May 12, 2020	Final Grades Due
March 31, 2020	Persona 5 Royal Released	May 14, 2020	Commencement

Essential Learning Outcome Mapping

Critical/Creative Thinking: Analyze, evaluate, and synthesize information in order to consider problems/ideas and transform them in innovative or imaginative ways.

Quantitative Reasoning: Analyze problems, including real-world scenarios, through the application of mathematical and numerical concepts and skills, including the interpretation of data, tables, charts, or graphs.

Objectives 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 http://www.tri-c.edu/student-resources/curriculum/.

MATH 1470 SCHEDULE

Day of	Sections Covered	Day of	Sections Covered
January 27, 29	3.1 Functions 3.2 Graphs of Functions	March 23, 25	6.2 Larger Systems of Linear Equations 6.3 Applications of Systems of Linear Equations
February 3, 5	3.3 Applications of Linear Functions 3.4 Quadratic Functions and Applications	March 30, April 1	6.4 Basic Matrix Operations 6.5 Matrix Products and Inverses 6.6 Applications of Matrices
February 10, 12	3.5 Polynomial Functions 3.6 Rational Functions	April 6, 8	7.1 Graphing Linear Inequalities in Two Variables **Test 3: Chapter 6**
February 17, 19	4.1 Exponential Functions 4.2 Applications of Exponential Functions 4.3 Logarithmic Functions	April 13, 15	7.2 Linear Programming: The Graphical Method 7.3 Applications of Linear Programming
February 24, 26	**Test 1: Chapter 3 and 4.1 & 4.2** 4.4 Logarithmic and Exponential Equations 5.1 Simple Interest and Discount	April 20, 22	7.4 The Simplex Method: Maximization 7.5 Maximization Applications
March 2, 4	5.2 Compound Interest 5.3 Annuities, Future Value, and Sinking Funds 5.4 Annuities, Present Value, and Amortization	April 27, 29	7.6 The Simplex Method: Duality and Minimization **Test 4: Chapter 7**
March 9, 11	**Spring Break! No class**	Monday, May 4	**Review**
March 16, 18	6.1 Systems of Two Linear Equations in Two Variables **Test 2: 4.3 & 4.4 and Chapter 5**	**Wednesday, May 6**	**Final 9:15 am - 11:15 am Classroom TBA! CHECK YOUR SCHEDULE FOR OVERLAPS!**

DUE DATES

STEP 1: GET A DAILY PLANNER STEP 2: WRITE THESE DATES IN THE PLANNER STEP 3: BECOME ORGANIZED

HOMEWORK ASSIGNMENTS DUE DATES

Sections	Available Dates
3.1 - 3.2	Monday, January 27 – Monday February 3
3.3 - 3.4	Monday, February 3 – Monday February 10
3.5 - 3.6	Monday, February 10 – Monday February 17
4.1 - 4.3	Monday, February 17 – Monday February 24
4.4, 5.1	Monday, February 24 – March 2
5.2 - 5.4	Monday, March 2 - Monday, March 9
6.1	Monday, March 16 - Monday, March 23
6.2 - 6.3	Monday, March 23 - Monday, March 30
6.4 - 6.6	Monday, March 30 - Monday, April 6
7.1	Monday, April 6 - Monday, April 13
7.2 - 7.3	Monday, April 13 - Monday, April 20
7.4 - 7.5	Monday, April 20 - Monday, April 27
7.6	Monday, April 27 - Monday, May 4

HOMEWORK IS DUE AT 11:59 PM ON THE SECOND DATE LISTED.
NO EXCEPTIONS FOR ANY REASON.

PROJECTS ARE DUE AT 10:00:00 AM 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.