

# Syllabus for Spring 2022 MATH 1240 Section 13700

Cuyahoga Community College Business, Technology & Mathematics Eastern Campus

Course: MATH 1240 Contemporary Mathematics

Instructor: Mike McCraith

Lecture Hours: 03 hours      Laboratory Hours: 00 hours

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: Contemporary Mathematics McCraith, Van Pelt  
Scientific calculator required (multi-lined preferred)

## Prerequisites

MATH-0955 Beginning Algebra, or sufficient score on Math assessment test; or departmental approval: equivalent coursework.

## Course Description

Applications of mathematics in contemporary life. Introduction to financial literacy, dimensional analysis as applied to measurement and unit conversions, graph theory, topics in probability and descriptive statistics.

## Course Schedule

This course has videos on my website above and also on YouTube which can be found on my website (above) or by doing a search on YouTube for "Math 1240 Flipped". There are two types of videos: 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 1240

Upon completion of MATH 1240 Contemporary Mathematics, the student should be able to:

- Identify and apply the different terminology and computational methods associated with graph theory.
- Determine and use the correct financial formula depending in various situations.
- Compute probabilities of various situations.
- Convert between different systems of measurement.
- Organize, compute, and interpret numerical data.

For a more detailed Objective list, please visit <http://www.tri-c.edu/student-resources/curriculum/>.

## 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 February 7, 2022 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.

## 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.

## Homework and Quizzes

Homework and quizzes are posted on Mobius: <https://mccraith.mobius.cloud/class/GWAFB> Each section is worth 3 points. You will have one week to complete that week's homework assignment. Each section is worth 3 points. The last day to turn in any homework is Tuesday, May 10 2022 at 11:59 pm. Towards the end of the syllabus, there is a recommended schedule to follow to make sure you stay on task with the homework. DO NOT GET BEHIND THIS SCHEDULE. It is quite difficult to catch up and you might not be adequately prepared for the quizzes and tests.

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 maximize the credit received. Do not start the quiz until you are ready for it. Unlike homework, quizzes have a firm start and end date.

## Partial Credit Policy

While grading 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, including the setup to the problem, 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 there's no work to show, 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 assessments (homework, quizzes, midterm, and Final) offered. Be sure to have all materials on the day and by the time that they are required.

## 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 and one of two days. 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 day and time you plan to take the exam.

You may choose from the following:

MIDTERM:	Monday, March 7 at 10 AM
	Monday, March 7 at 6 PM
	Tuesday, March 8 at 10 AM
	Tuesday, March 8 at 6 PM
FINAL:	Monday, May 9 at 10 AM
	Monday, May 9 at 6 PM
	Tuesday, May 10 at 10 AM
	Tuesday, May 10 at 6 PM

It's recommended that you view the previous tests on my website. On the website, click on "Classes" and then on "Math 1240". Take those tests and use the answer keys to check your work. **The midterm will have two parts: the first part will be in-person on-campus on the days and times listed above and will cover Chapter 1, and Sections 2.1, 2.4, 3.9, and 3.10. The take-home portion will appear on Blackboard on Wednesday, March 9, 2022, will cover Sections 2.2, 2.3, and 2.5, and will be due Friday, March 11, 2022 by 11:59 pm. The Final is accumulative (except for Sections 2.2, 2.3, and 2.5) and covers each chapter equally. Please allow one week for your midterm to be returned.**

## 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, 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

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. Email me a photo of a lion cub by the end of the first Friday of Week 1 for some extra credit. 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†: **Final grades are based on:**

Syllabus Quiz	13	Percent	Points	Final Grade
About Me*	10	90 - 100	468 - 520	A**
Weekly Planner*	10	80 - 89	416 - 467.99	B**
Homework	87	70 - 79	364 - 415.99	C**
Quizzes	50	60 - 69	312 - 363.99	D
Midterm	150	0 - 59	Below 312	F
Final	200	<b>**Passing Grade starting Summer 2005</b>		
<b>Total</b>	<b>520</b>	† Total point value subject to change due to time		

\* Graded on an all-or-nothing basis

Grades shown on Mobius 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.

## 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.

## 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	<a href="#">Final Exam Week - Full Term</a>
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

## 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 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 in the Tests section above and also on Blackboard. You don't need an appointment if you come by during office hours. Just pop in anytime you have a question.

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.

# Homework and Quiz Dates

Step 1: Get a daily planner

Step 2: Write these dates in the planner

Step 3: Become organized

RECOMMENDED Homework Assignments Dates		Quiz Availability Dates	
Jan 31 - Feb 7	Sections 1.1 - 1.2	Feb 14 - Feb 21	Chapter 1
Feb 7 - Feb 14	Sections 1.3 - 1.5	Feb 28 - Mar 7	Chapter 2, 3.9, 3.10
Feb 14 - Feb 21	Sections 1.6, 2.1 - 2.2	Apr 11 - Apr 18	Chapter 3 (remaining)
Feb 21 - Feb 28	Sections 2.3 - 2.5	Apr 25 - May 2	Chapter 4
Feb 28 - Mar 7	Sections 3.9 - 3.10	May 2 - May 9	Chapter 5
Mar 21 - Mar 28	Section 3.1 - 3.2	<p>Follow the homework schedule on the left and stay on task for the course. The last day to turn in homework is Tuesday, May 10, 2022 at 11:59 pm.</p> <p>Concerning quizzes, the first date is when the quiz is available. The quiz is due on the second date listed at 11:59 pm.</p>	
Mar 28 - Apr 4	Sections 3.3 - 3.4		
Apr 4 - Apr 11	Sections 3.5 - 3.7		
Apr 11 - Apr 18	Sections 3.8 and 3.11		
Apr 18 - Apr 25	Sections 4.1 - 4.2		
Apr 25 - May 2	Sections 4.3 - 4.4		
May 2 - May 9	Sections 5.1 - 5.3		

# Math 1240 Schedule

Week of (Mondays)	Sections Covered	Videos to Watch
January 31	1.1 Simple Interest 1.2 Compound Interest	1 - 16
February 7	1.3 Consumer Loans 1.4 More About Home Loans 1.5 Saving for Retirement	17 - 35
February 14	1.6 Average Daily Balance 2.1 The Mean, Median, Midrange, and Mode 2.2 Measures of Variability	36 - 48
February 21	2.3 Grouped Data 2.4 Graphical Displays of Data 2.5 Linear Regression	49 - 61
February 28	3.9 The Normal Distribution 3.10 The Standard Normal Distribution	62 - 69
<b>MIDTERM TIME</b>	<b>MIDTERM</b> Either Monday, March 7 or Tuesday, March 8, 2022 at either 9 AM or 6 PM Take-Home portion due Friday, March 11, 2022 by 11:59 pm. See Blackboard	
March 21	3.1 Probability Basics 3.2 Probability with OR	70 - 80
March 28	3.3 Probability with NOT 3.4 The Fundamental Counting Principle	81 - 108
April 4	3.5 Conditional Probability 3.6 Permutations and Combinations 3.7 Probabilities with Permutations and Combinations	109 - 134
April 11	3.8 Binomial Probability 3.11 Expected Value	135 - 144
April 18	4.1 Introduction to Graph Theory and Networks 4.2 Paths, Circuits, Euler Paths, and Euler Circuits	145 - 159
April 25	4.3 Hamilton Paths, Hamilton Circuits, and the Traveling Salesman Problem 4.4 Trees	160 - 169
May 2	5.1 Measuring Length in the English and Metric Systems 5.2 Measuring Area and Volume in the English and Metric Systems 5.3 Measuring Weight and Temperature	170 - 192
<b>FINAL TIME</b>	<b>Either Monday, May 9 or Tuesday May 10 at 10 AM or 6 PM</b>	

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>.