MATH-0465-001: SYLLABUS
COLLEGE OF DUPAGE: SPRING 2021

CONTENTS

1. Course Information

- Course Title: Preparatory Mathematics for General Education
- Course Number: 0465
- Credit Hours: 5; Clinical Hours: 0; Lecture Hours: 5; Lab Hours: 0
- Meet Times: Monday, Wednesday, and Friday from 9:00 am to 10:25 am
- Meet Location: BIC 1437
- Course Description: Students develop the foundational mathematical skills necessary for general education mathematics courses (Math 1218 and Math 1220). Content features collaborative project-based and technology-enabled group work including modeling, problem solving, critical thinking, data analysis, algebra fundamentals, and both verbal and written communication of mathematical ideas.
- Repeatable for Credit: NO
- Pre-Enrollment Criteria: N/A
- Prerequisite: MATH 0461 Pre-Algebra with a grade of "C" or better, or equivalent or
- Prerequisite: MATH 0481 Foundations for College Mathematics I with a grade of "C" or better, or equivalent or a qualifying score on the math placement exam

2. Instructor Information

- Name: Michael McCabe, M.S.
- Email: mccabem85@cod.edu
- Office: 3436B or Blackboard Collaborate
- Office Phone: 630 942 2152
- Office Hours: Labeled on Blackboard (always avaiable by appointment)

3. General Course Objectives

Upon successful completion of the course the student should be able to do the following:

At the conclusion of this course a student should be able to:

1. Apply characteristics of functions in mathematical modeling and real world problem solving

2. Perform operations on algebraic expressions and functions

3. Apply algebraic operations in modeling and real world problem solving

4. Solve equations and inequalities in the context of modeling and real world problem solving

5. Translate mathematical information symbolically, visually, numerically, and verbally

6. Estimate answers to mathematical problems in order to determine reasonableness, identify alternatives, and select optimal results

7. Recognize the value and limitations of mathematical models

8. Use mathematically correct vocabulary and symbolism in problem statements, problem solving methods, and solution interpretations

4. Topical Outline

Topics: must include the following:
    1.: Functions including graphical analysis
    2.: Operations on algebraic expressions including factoring
    3.: Modeling with linear functions and nonlinear functions
Topics: must also include at least two of the following:
    1.: Modeling with systems of equations
    2.: Modeling using probability and statistics
    3.: Modeling using geometry and right triangle trigonometry
    4.: Modeling using proportional reasoning

5. Required Texts, Materials, and Supplies

5.1. **Required Text.** The required Textbook is: Math Lit: A Pathway to College Mathematics, 3rd Edition, by Kathleen Almy and Heather Foes.

5.2. **Materials.** Physical copy of the Math Lit textbook, Access code for My Math Lab (MML), writing tools, and if possible a internet enabled device. A notebook is not required because the physical textbook will the location of all note taking.

5.3. **Supplies.** Internet, notebook for MML homework exercises (suggested, not required), and extra writing tools

6. Schedule

6.1. **Academic Calendar.**

- First Day: 8/23/2021
- No Class: 9/6/2021 (Labor Day)
- Last Day to Withdraw: 11/14/2021
- Fall Break (No Class): 11/24/2021 to 11/28/2021
- Final Exam: 12/15/2021 from 9:00 am to 10:50 am

6.2. **Exam/Project Dates (Tentative).**

- Exam 1: Friday, 9/17/2021
- Project 1: Sunday, 9/26/2021
- Exam 2: Friday, 10/15/2021
- Project 2: Sunday, 10/31/2021
- Exam 3: Monday, 11/12/2021
- Project 3: Sunday, 12/05/2021

6.3. **Content Coverage.** Here is the tentative daily schedule:

Week	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	08/22/21	08/23/21	08/24/21	08/25/21	08/26/21	08/27/21	08/28/21
		TECH		0.3/0.4		1.2	
2	08/29/21	08/30/21	08/31/21	09/01/21	09/02/21	09/03/21	09/04/21
		1.3		1.4		1.6	
3	09/05/21	09/06/21	09/07/21	09/08/21	09/09/21	09/10/21	09/11/21
		NO SCHOOL		1.7		1.8	
4	09/12/21	09/13/21	09/14/21	09/15/21	09/16/21	09/17/21	09/18/21
		1.9		1.10/1.11		EXAM 1	
5	09/19/21	09/20/21	09/21/21	09/22/21	09/23/21	09/24/21	09/25/21
		1.13		1.14		2.2	
6	09/26/21	09/27/21	09/28/21	09/29/21	09/30/21	10/01/21	10/02/21
	PROJECT 1	2.3		2.4		2.5	
7	10/03/21	10/04/21	10/05/21	10/06/21	10/07/21	10/08/21	10/09/21
		2.6		2.7		2.9	
8	10/10/21	10/11/21	10/12/21	10/13/21	10/14/21	10/15/21	10/16/21
		2.10	NO SCHOOL	2.11/2.12		EXAM 2	
9	10/17/21	10/18/21	10/19/21	10/20/21	10/21/21	10/22/21	10/23/21
		2.13		2.14		2.16	
10	10/24/21	10/25/21	10/26/21	10/27/21	10/28/21	10/29/21	10/30/21
		2.17		3.2		3.3	
11	10/31/21	11/01/21	11/02/21	11/03/21	11/04/21	11/05/21	11/06/21
	PROJECT 2	3.5		3.6		3.7	
12	11/07/21	11/08/21	11/09/21	11/10/21	11/11/21	11/12/21	11/13/21
		3.8		3.9/3.10		EXAM 3	
13	11/14/21	11/15/21	11/16/21	11/17/21	11/18/21	11/19/21	11/20/21
	WITHDRAW	3.11		3.13		3.14	
14	11/21/21	11/22/21	11/23/21	11/24/21	11/25/21	11/26/21	11/27/21
		3.15		NO SCHOOL	NO SCHOOL	NO SCHOOL	
15	11/28/21	11/29/21	11/30/21	12/01/21	12/02/21	12/03/21	12/04/21
		3.16		4.2/4.3		4.3/4.4	
16	12/05/21	12/06/21	12/07/21	12/08/21	12/09/21	12/10/21	12/11/21
	PROJECT 3	4.7/4.8		LOGIC		SETS	
	12/12/21	12/13/21	12/14/21	12/15/21	12/16/21	12/17/21	12/18/21
		FINALS	FINALS	FINALS	FINALS	FINALS	

7. METHOD OF EVALUATION

7.1. Assessment Categories:

(1) Exams [Weight 20%]
   (a) There will be at least **3** exams throughout the semester.
   (b) Accommodations will be available, please refer to the Office of Access and Accommodations for the method of requesting accommodations.
   (c) Each exam:
      (i) Will be taken in class with the expectation to take 1 hour to complete.
      (ii) Don't expect to have open book, open notes, or "cheat-sheets".

    (iii) Aimed to have at least 10 to 15 worked out problems with an addition 2 extra credit problems. (Days before the exam the a good approximation of the number of problems on the exam will be stated.)

(d) Do not expect dropped exams.

(e) It is important to email prior to the start of the exam if unable to attend the exam. It is better email before the start of the exam, rather than after the exam. I necessary email the day before of any concerns, I will work with you to accommodate.

(f) Advice:

    (i) Historically, poor performance on exams are due to miscommunication on shown work.

        (A) The work done for each problem is more important than the final answer.

        (B) Each problem involves multiple topics covered throughout the lectures prior to the exam. The goal of the exam is to assess understanding, as many of those topics as possible.

        (C) Each questions should be answered like it is a presentation for the class.

        (D) Practice for this process of answering is done through the Turn-In assignments.

    (ii) One week before the exam is assigned, expect to receive an outline of the exam. With this outline attempt to create a mock exam. With the mock exam construct a test taking environment and attempt the mock exam (I will not be creating this mock exam, but I am willing to help). The idea is that, by treating the mock exam as a real exam will hopefully alleviate some of the pressure of the actual exam.

    (iii) Questions on the exam may not be something you have seen before, this aims to assess understanding and not memorization.

(2) Projects [Weight 20%]

  • General Information:
    – 3 Projects
    – Each project will have several days to complete.
    – It is encouraged to use what ever resources necessary to complete the project.

  • Submission Procedure:
    – Each project will be opened weeks before due date.
    – All work will be submitted through Blackboard Test.
    – Equation editor(s) will be required for some problems.
    – Spreadsheets may also be used for submissions.

(3) My Math Lab (MML) Homework Sets [Weight 20%]

(a) Every section that we will cover throughout the semester will have an associated homework set done in MML. However, in order to attempt any homework assignment a pre-week quiz must be completed. These pre-week quizzes will not count towards overall grade.

(b) There will be at least 3 dropped assignments at the end of the semester.

(c) Outside of required accommodations from the Office of Access and Accommodation, there will be no extensions or make-ups for these homework sets. Why?

    (i) There will be several drops at the end of the semester; life happens, if unable to complete an assignment it is safe to count it as a dropped assignment.

    (ii) Throughout this semester we will be covering almost too much content, extending an MML homework set can cause a student to fall behind.

    (iii) It is not uncommon for me to push due dates. Through constructive communication via Discord or Email, it is possible to alleviate stresses where ever possible.

(d) It is okay to seek help from office hours and learning commons to complete MML homework sets.

(4) Turn-Ins [Weight 10%]

(a) The purpose of the Turn-Ins is to put pencil to paper with very little consequence on correctness. Furthermore, the purpose of the Turn-Ins is to practice how to answer questions on the Exams throughout the semester.

(b) Another purpose of the Turn-Ins is to be a source of questions to ask during office hours or lecture.

(c) There will be at least 3 drops at the end of the semester.

(d) The due dates on these assignments are suggestive; HOWEVER, waiting until the last minute degrade the intention of the assignment.

(e) You can find the Turn-In at the end of each section that we cover.

(f) Turn-Ins will be submitted to Blackboard via Blackboard Assignment.

(g) How to submit:

    (i) Turn to the last pages of the covered section.

    (ii) Write out solutions for each of the problems to the best of your ability. Some questions are open questions to promote reflective thoughts.

    (iii) Use a physical scanner located throughout the campus (copy machines) or your favorite scanning app on smart devices. My favorite scanning app is Office Lens.

    (iv) CAUTION: When scanning Turn-Ins make sure the result is a single pdf file. Please do not submit a pdf file for each page.

    (v) Please come to office hours if the submission process is confusing or ask during class. After submitting an assignment you should receive an email. It is common for Blackboard to freeze up, clicking multiple times can result into multiple submissions.

(5) Attendance and Participation [Weight 10%]

(a) I will attempt to record attendance, there will be at least 3 drops. Thus, there will be no make-ups or extensions.

(b) I will attempt to record participation through Learning Catalytics. There will be at least 3 drops; thus, there will be no make-ups or extensions.

(6) Final Exam [Weight 20%]

(a) Test on everything covered throughout the semester (Cumulative Exam).

(b) Constructed to be completed during a 2 hour time limit on the scheduled Final Exam day.

(c) I plan to construct the Final Exam with about 20 questions, with 2 extra credit questions.

(d) I plan to construct the Final Exam similar to twice the amount of a regular exam.

7.2. **How to Calculate Grade:** Create a spreadsheet (Excel File) similar to the following:

MML	%	Turn-Ins	%	Exams	%	Projects	%	Final	%	Attend./Partic.	%
Section 1.3	89	Week 1	100	Exam 1	75	Project 1	87	Final	87	Day 1 Attend.	100
										Day 1 Partic.	100
⋮	⋮	⋮	⋮	⋮						⋮	⋮
% Ave W/ drops		% Ave W/ drops		% Ave		% Ave.		% Ave		% Ave W/ drops	

Apply the weights:

Category	%	Weight	% times Weight
Final		20	
Exam		20	
Projects		20	
MML		20	
Turn-Ins		10	
Attend./Parti.		10	
		Grade->	

Example. This is an example on how to calculate:

- The values used is based on averaging the MML, Turn-Ins, and Attend./Parti. with the dropped assignments. That is, if the list of percentages for the MML homework sets is:

$$\{90, 91, 90, 90, 100, 85, \emptyset, 82, \emptyset, \cancel{76}, 98, 76, 84, 98, 93, 85, 95, 100, 89, 98, 89, 76, 98, 91, 100, 99\}$$

then with the drops we have:

$$\{90, 91, 90, 90, 100, 85, 82, 98, 76, 84, 98, 93, 85, 95, 100, 89, 98, 89, 76, 98, 91, 100, 99\}$$

then the average is about:

$$91.17$$

However, if you didn't calculate with drops then you have the incorrect average:

$$83.58$$

- Consider the following outcomes:

Category	List of ALL scores in Percent Form
Final	$\{83\}$
Exams	$\{95, 84, 93\}$
Project	$\{87, 88, 98\}$
MML	$\{90, 91, 90, 90, 100, 85,$ $0, 82, 0, 76, 98, 76,$ $84, 98, 93, 85, 95, 100,$ $89, 98, 89, 76, 98, 91, 100, 99\}$
Turn-Ins	$\{90, 80, 70, 90, 90, 80,$ $90, 80, 100, 100, 80, 90,$ $80, 80, 70, 70\}$
Attend./Parti.	$\{83, 97, 85, 81, 83, 93,$ $85, 80, 80, 88, 84, 95,$ $81, 77, 80, 80, 75, 80,$ $99, 83, 92, 94, 92, 87, 0, 0\}$

- With the drops:

Category	%	Weight	% times Weight
Final	83	20	1660
Exam	90.6666	20	1813.332
Project	91.0	20	1820
MML	91.1739	20	1823.478
Turn-Ins	86.9231	10	869.231
Attend./Parti.	85.9565	10	859.565
	Totals	100	8845.606
		Grade:	$\frac{8845.606}{100} = 88.45606$

Which means an 88.45606% in the class which would be a B.

Example. What if...

Category	%	Weight	% times Weight
Final	?	20	
Exam	59	20	1180
Project	65	20	1300
MML	55	20	1100
Turn-Ins	80	10	800
Attend./Parti.	80	10	800
	Totals	100	5180
		Grade:	51.8%

What is needed on the final in order to pass the course?

Solution. As you will see at the bottom a 70% is a C which is the majority requirement for courses that holds this course as a prerequisite. Currently, this "what if..." states a 51.8% if the final was not taken. What grade is needed on the final to get a 70% overall grade? For this we solve a linear equation:

$$20x + 5180 = 7000$$

where 20 is the weight of the final exam with respect to the overall grade, 5180 is the total points so far received, and 7000 is the desired outcome (since $\frac{7000}{100} = 70$). Subtracting 5180 from both sides yields

$$20x = 1820.$$

Dividing 20 from both sides yields

$$x = \frac{1820}{20} = 91.$$

This means that at 91% on the final will pass the course with a letter grade of C.

7.3. **Grade Scale.**

A: 90% to 100%
B: 80% to 89%
C: 70% to 79%
D: 60% to 69%
F: 59% or less

I do round.

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8. ACADEMIC HONESTY

As members of the College of DuPage community, we share a commitment to the highest standards of learning and ethical behavior. The College and its faculty strive to build meaningful and productive relationships with our students. The expectation of honesty and effort is the foundation of that relationship. Academic dishonesty damages the learning partnership built between student and faculty and is considered a serious breach of the principles of learning and growth. Violations of the Code of Academic Conduct will be dealt with appropriately and may become part of a student's educational record. Please don't risk it! For further information about the expectations, please review the Code of Academic Conduct found at the following website: Code of Academic Conduct.

9. ACCESS AND ACCOMMODATIONS

- As a course policy, I do not accept late work/make up for My Math Lab assignments, attendance, and participation. I am committed to providing fair, equal, and unbiased accommodations. If you believe that your circumstances qualify you for accommodations, please contact the Center for Access and Accommodations at access@cod.edu. Staff from the Center can help you better understand if your situation qualifies you for an accommodation.
- If you are student who is registered with the Center for Access and Accommodations, please send me your Letter of Accommodation as soon as possible.
- Please do not send me personal medical records or similar personal documents.
- Here is a to start the process for accommodations: Center for Access and Accommodations Intake Form
  (https://cod-accommodate.symplicity.com/public_accommodation/).

The College of DuPage is committed to the equitable access of educational opportunities for students with disabilities in accordance with The Americans with Disabilities Act, As Amended and Section 504 of the Rehabilitation Act of 1973. Any student who feels they may need an accommodation on the basis of an illness, injury, medical condition, or disability should contact the Center for Access and Accommodations to determine eligibility for accommodations and to obtain an official Letter of Accommodation. The Center for Access and Accommodations can be reached via email at access@cod.edu. Students may also initiate a request for services by going to www.cod.edu/access and clicking on the green box labeled "complete form to request accommodations." If you are already registered with the Center for Access and Accommodations, please email me your Letter of Accommodation as soon as possible. Please DO NOT send any private health documentation or Doctor's notes to me.

10. WITHDRAW POLICY

Withdrawal from a Class. The final day for a student to withdraw from any course will be equal to 75% of the time for the respective academic session (see the Registration Calendar) through MyAccess or in person at the Registration office, Student Services Center (SSC), Room 2221.

Administrative Withdrawal. After the deadline, students will be required to appeal for late withdrawal and provide appropriate documentation to the Student Registration Services Office for all requests. Students who are granted approval to withdraw by petition will not be eligible for refunds of tuition or fees and will receive a 'W' grade on their transcript. Appeals must be submitted prior to the designated final exam period for 16-week classes and before the last class meeting for all other session classes.

Coronavirus Information. Stay up to date with information provided by the college about alternative withdrawal policies. Coronavirus Information

11. CORONAVIRUS INFORMATION

11.1. **Conronavirus Information.** For up to date information about what the College of DuPage is doing in response of the Coronavirus please visit the website https://www.cod.edu/coronavirus/.
   As of 8/17/2021:

- Due to the highly contagious Delta variant of COVID-19, the Centers for Disease Control and Prevention (CDC) updated their masking guidelines, recommending that fully vaccinated people wear a mask in public indoor settings in areas of substantial or high transmission. Our mask protocol (https://www.cod.edu/coronavirus/mask-protocol.aspx) has been updated for unvaccinated or not fully-vaccinated individuals and for fully-vaccinated individuals.
- The College of DuPage Library is open to employees, students, and the public. For hours of operation, visit the Library's website (https://library.cod.edu/).
- All doors are now unlocked from 5 a.m. to 11 p.m. on days the College is open. Additional staff from areas around the College will be called back to

work, in-person, to ensure appropriate support for the summer and beyond. The Bookstore is also open.
- Those who enter a facility are expected to follow safety guidelines.
- College faculty and staff should continue to work from home to the maximum extent possible.

For information on how we are keeping students safe and support services that are available, view Frequently Asked Questions.

11.2. **What to Expect on Campus.** As of 8/17/2021:
- Individuals who are unvaccinated or not fully vaccinated for COVID-19 are required to wear a facemask covering their mouth and nose while inside campus buildings and when outside on College property.
- Individuals who are fully vaccinated for COVID-19 are required to wear a facemask covering their mouth and nose while inside campus buildings. COD's mask protocol outlines exceptions to the protocol, which include actively eating and drinking.
- All screening will be eliminated at the main campus and centers and employees no longer need supervisor approval to enter the College.
- Maintain social distancing. Stand six feet apart when meeting, talking or standing in line.

While regular classroom cleaning will be followed and hand sanitizer will be available, students are encouraged to bring their own wipes for cleaning their space and their own hand sanitizer.

11.3. **Additional Information.** As of 8/17/2021

11.3.1. *COVID-19 Protocols and Instruction.* The following documents are used to screen and self-report COVID-19 symptoms to help prevent the spread of the virus on campus:
- Coronavirus (COVID-19) Student Self-Reporting Form
  (https://cm.maxient.com/reportingform.php?CollegeofDuPage&layout_id=9)
- Student Concern Form – Communicable Disease
  (https://cm.maxient.com/reportingform.php?CollegeofDuPage&layout_id=10)
- Suspected or Confirmed Exposure
  (https://www.cod.edu/coronavirus/pdf/suspected_confirmed_exposure.pdf)
- Instructions
  (https://www.cod.edu/coronavirus/pdf/instructions.pdf)

11.3.2. *ICCB/College of DuPage COVID-19 Case Reporting.* College of DuPage is keeping track of confirmed cases of students and employees:
- View information on confirmed COVID-19 cases.
  (https://www.cod.edu/coronavirus/case-reporting.aspx)

11.3.3. *If you Experience COVID-19 Symptoms.* If you or a person you know is experiencing symptoms such as fever, cough and difficulty breathing, seek medical care right away. Report your symptoms by filling out the Student Concern Form (https://cm.maxient.com/reportingform.php?CollegeofDuPage&layout_id=10).

For additional questions, contact the Dean of Students Office at (630) 942-2485 or email deanofstudents@cod.edu. Include your name and student ID number in your message.

11.3.4. *Higher Education Emergency Relief Fund (HEERF).* The Department of Education has allocated funds through the Higher Education Emergency Relief Fund (HEERF I, II, III) to College of DuPage. These funds are to support students who are financially impacted by the COVID-19 pandemic. Applications are open to fund students with unmet needs on a first come, first serve basis until funds are exhausted.

> **Q:** How can I use my HEERF funds?
>
> **A:** The HEERF grant funds can be used toward the cost of tuition, books and supplies, food, housing, health care (including mental health care), technology, and/or dependent care.
>
> **Q:** I am enrolled or plan to enroll for Fall 2021. How can I apply for HEERF grant?
>
> **A:** Complete your application online. Your login information to complete the application is the same login information you use for the myACCESS, the student portal and for Blackboard.
> (https://cod.academicworks.com/opportunities/3356)

There is more information at the COD HEERF website
(https://www.cod.edu/coronavirus/heerf.aspx)

11.4. **Mask Protocol.** Wearing a facemask that covers the mouth and nose can help reduce the transmission of the virus responsible for COVID-19 and its variants.

As of 8/17/2021. If someone refuses to comply with COD's mask protocol, according to https://www.cod.edu/coronavirus/mask-protocol.aspx.

- Staff and Faculty: If an employee declines or fails to wear a facemask as required, the employee's supervisor is responsible for addressing the issue with the employee. Employees should refrain from addressing noncompliance or perceived noncompliance directly with other employees, and should instead report issues to their supervisor.
- Students: If a student declines or fails to wear a facemask as required, they should be asked to comply with the protocol, or leave the campus immediately. If they fail to comply or refuse to leave the campus, the College Police should be called to handle the situation, and the student should be reported to the Dean of Student Affairs.
  If the situation occurs in a classroom or other academic setting, it is considered a classroom management issue, and the faculty member should remind the student of the requirement and give the student a chance to comply. If the student refuses to comply, the faculty member should ask the student to leave the classroom or academic setting immediately, and should report the student to the Dean of Student Affairs. If the student refuses to leave the classroom or academic setting, the College Police should be called to handle the situation, and the student should be reported to the Dean of Student Affairs.
- Visitors/members of the Public: If a visitor or member of the public declines or fails to wear a facemask as required, they should be asked to comply with the protocol, or leave the campus immediately. If they fail to comply or refuse to leave the campus, the College Police should be called to handle the situation.

11.5. **Contact Information:**

- For Student Affairs Related Questions
    - Campus Central
    - (630) 942-3000
    - campuscentral@cod.edu
- For Campus Health and Safety or COVID-related Specific Questions
    - Phil Gieschen
    - Coordinator of Risk Management
    - (630) 942-2993
    - giesche@cod.edu

12. Shutdown or Quarantine

If me/I (the instructor) or you (the student) are required to quarantine or the campus shuts down. Here are some (not all) things to consider if a quarantine or shutdown is implemented.

(1) Blackboard Collaborate will be used for remote instruction. If you are required to quarantine notify Access and Accommodations and they will contact me with instructions.

(2) Twitch, in the event Blackboard Collaborate fails to work, I do have a twitch page (twitch.tv/codmccabe).

(3) It is okay to request videos from me on any topic covered in class.

(4) It is possible for the method of administrating exams to change in the event of a campus shutdown. All other methods of assessments will be and are already be tracked electronically.

(5) More information will be provided via Blackboard Announcements in the event of campus shutdown or other events causes the presentation of lecture to change.