

**College of Dupage**  
**Math 0465-015: Preparatory Mathematics for General Education**  
**Tuesday, Thursday 4:00 – 6:25 PM**  
**BIC 3539**

**Contact Information:**

Dr. Matt Wechter  
Office: BIC 3530A  
Email: wechterm@cod.edu  
Phone: (630) 942-4405

**Course Objectives and Topic Outline:**

Course description to appear in catalog:

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.

Credit Hours: 5      Lecture Hours: 5      Lab Hours: 0

*Prerequisite:* MATH 0461 Pre-Algebra with a grade of "C" or better, or equivalent or 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

**A. General Course Objectives:**

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

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

**B. 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

## **Course Materials:**

Math Lit – A Pathway to College Mathematics, 2nd ed. by Almy & Foes

The online supplement to the textbook (MyMathLab) WILL be required. The online access will include a virtual copy of the physical textbook.

Scientific calculators may be allowed on certain assignments. If you do not own one, they can be checked out of the COD library. Cellular phones and other web-enabled or two-way communication devices will not be allowed.

## **Classtime:**

Students are expected to attend class and PARTICIPATE. Students are responsible for all material covered in each class, even if they missed that day. Exams will be held during class time.

While in class, students should be respectful of other students as well as the instructor. Students should not distract others with their computers or cell phones. Any distractible cell phone use should be done outside the classroom. All communication between instructor and students will be conducted either through Blackboard or via a COD email account. Make sure you check your COD email regularly.

## **Homework:**

Homework will be assigned for every lesson through the online portal MyMathLab. Students need to spend time to master the material and be prepared for exams. Homework problems often appear on exams.

The due date for each homework assignment will be the day of the exam following the homework. For example, all homework assigned before Exam 1 will have the same due date as the date of Exam 1. All homework assigned after Exam 1 but before Exam 2 will be due on the date of Exam 2. There are no extensions on homework.

Solution guides and online step-by-step solutions should not be overused when doing homework. Students who rely on these resources tend to underperform on exams. When stuck on a problem, take the time to read class notes and the textbook for related examples.

## **Exams:**

There will be three (3) midterms and a cumulative final exam given in the course. Each midterm may cover new as well as old material, so understanding mistakes made in previous units will be beneficial.

The exams will be taken in-class. No new material will be covered on exam days. No cell phones or computers will be allowed at all at a student's desk during the exam. Calculators may be

allowed, depending on the material being tested. The final exam will take place on Tuesday, May 12.

## Projects:

There will be two (2) graded projects that students will need to turn in. Instructions will be given as they are assigned. Students may be allowed to work in groups of no larger than three. Projects turned in after the due date may be accepted with a penalty. Projects may either be turned in physically, or typed solutions can be emailed. If a project write-up is handwritten, it must be physically turned in.

## Attendance Policy:

Students are expected to attend every class and to understand material for classes they miss.

The exam dates will be announced at least a week before each exam. If a student knows in advance they will not be in class that day, they must plan to take the exam on an earlier day in the Testing Center. These situations are planned on an individual basis and the instructor should be notified at least two days in advance. Any exam missed without consulting the instructor beforehand will receive 0 points.

Exams will not be administered after the exam day except in the case a the student has a valid emergency with a valid written note explaining their emergency (at the instructor's discretion). In this case a make-up exam may be given with different questions from the original. Regardless of the emergency, documentation must be provided to the instructor. The student must take the make-up exam within 7 days of the exam date, with the instructor given 24 hours notice of when the student plans on taking it. This is not an ideal situation and should be avoided. Do not miss class!

## Grade Calculation:

Graded Assessment	Percentage of Final Grade
Homework	15%
Projects	12%
Three Unit Exams	17% Each
Cumulative Final Exam	22%

Letter Grade	A	B	C	D	F
Percentage	90% and Up	80% - 89%	70% - 79%	60% - 69%	Below 60%

## Written Style:

Student should practice and use good style when answering problems to receive any partial credit. That means that any answer which requires an explanation should be written in complete sentences, all mathematical notation should be consistent and make sense, and anybody reading the solutions for the first time (namely, the grader) should have no confusion as to both the final answer and the work involved to get there. For example, “ $1 + 1 = 2$ ” is a complete sentence. It has a subject (1+1), a verb (=) and an object (2).

## **Academic Integrity:**

Students should be aware of the Code of Academic Conduct and know the consequences should the code be violated. The document can be found at

[Code of Academic Conduct](#)

If a student is caught violating the code they will receive an automatic zero on that assignment and will be reported through COD's academic integrity reporting system.

## **Center for Access and Accommodations:**

Students who require any type of special accommodations for access and participation in this course must be registered with the Center for Access and Accommodations, SSC 3249. Students with extra exam time accommodations will take their exams in the COD Testing Center. If a student requires a quiz or exam sent to the CAA or the Testing Center, they must notify the instructor beforehand.

## **Withdrawal Policy:**

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 <https://myaccess.cod.edu> or in person at the Registration office, Student Services Center (SSC), Room 2221.

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