

**Spring 2020 Math 104: College Algebra**  
Section 004 TR 9:40AM-11:10AM Swart 13  
Section 007 TR 11:30AM-1:00PM Swart 13

**Instructor:** Zoubir Benzaid.

**Office:** Swart 238, E-mail: benzaid@uwosh.edu

**Office Hours:** TR 8:30-9:30 and 1:00-2:00 or by appointment.

**Textbook:**

Good news: The textbook for this class is available for free online, in web view and PDF format! You can also purchase a print version, if you prefer, via the campus bookstore or from OpenStax on Amazon.com. You can use whichever formats you want. Web view is recommended. The responsive design works seamlessly on any device. If you buy on Amazon, make sure you use the link on your book page on openstax.org so you can get the official OpenStax print version. (Simple printouts sold by third parties on Amazon are not verifiable and not as high-quality.)

College Algebra from OpenStax, Print ISBN 1938168380, Digital ISBN 1947172123.

[www.openstax.org/details/college-algebra](http://www.openstax.org/details/college-algebra) (Links to an external site.)

**Topics:**

We will cover the following chapters from the book.

Chapter 1: Prerequisites (A quick review)

Chapter 2: Equations and Inequalities

Chapter 3: Functions

Chapter 4: Linear Functions

Chapter 5: Polynomials and Rational Functions

Chapter 6: Exponential and Logarithmic Functions

**How to succeed in this class:**

Read all the assigned sections and all section examples. Work through all the try it yourself examples. Finally the crucial part is to work all the assigned homework problems. If you need extra help please come to my office hours or visit the math tutoring lab for free tutoring.

**Learning Objectives:**

This course provides a review of elementary algebra. It presents Equations and Inequalities, Functions and Relations, Polynomials and Rational Functions, and Exponential and Logarithmic Functions. The goal of this course is to give students

appreciation of mathematics and algebraic tools they need in order to be successful in other mathematics and science courses. It focuses on problem solving, critical thinking and learning basic concepts in Algebra. Upon successful completion of the course, students are expected, but are not limited, to have the ability to do the following.

1. Be able to communicate graphically, numerically, and algebraically in the notation and vocabulary of college algebra.
2. Display a basic understanding of the general concepts of functions, relations, equations, and inequalities.
3. Be competent in working with linear and quadratic functions in theory and application.
4. Be able to show a basic understanding of inverse functions by showing a proficiency in working with their properties.
5. Be able to identify the properties of polynomials of different degrees and rational functions.
6. Have an understanding of how the roots of a polynomial determine its factorization.
7. Display a working knowledge of the definitions and manipulations of exponential and logarithmic functions and equations.
8. Be able to model and predict situations using algebra.

## **Calculator**

A scientific calculator will be needed on some in-class written exams and quizzes, though only the TI-83 or TI-84 will be supported. No cell phone or other electronic device will be allowed to be used as a calculator. No exceptions are made to this policy. So if you forget to bring a scientific calculator, you risk not having one on exams and quizzes.

## **Exams:**

There will be a series of three (3) one-hour exams (60% of the grade), a comprehensive final examination (20% of the grade). Make up exams will only be given for university excused absences. I will let you know about an upcoming test one week before it is administered. You are required to let me know in advance if you are unable to take an exam at the scheduled time.

## **Quizzes and Homework:**

Quizzes (both in class and take home) will be administered weekly. These will compose 20% of your grade. The quiz problems will be almost the same as the assigned homework problems. The lowest two scores will be dropped. Make-up quizzes will not be given.

Homework problems are assigned from each chapter section, however they will not be collected.

## **I WILL ASSUME THAT YOU ARE WORKING EVERY SINGLE HOMEWORK PROBLEM THAT I ASSIGN.**

### **Grade:**

Your grade in the class will be determined as follows: 60% for the 3 one-hour exams, 20% on the comprehensive final exam, 20% for the quizzes.

The grading scale is as follows: A:[90,100], A-:[88,90), B+:[86,88), B:[80,86), B-:[78,80), C+:[76,78), C:[68,76), D+:[64,68), D:[61,64), D-:[58,61), F:[0,58).

### **Canvas website:**

I will maintain a Canvas website for this course. The site will contain the syllabus, homework assignments, solutions to tests, solutions to selected homework problems, miscellaneous lecture notes and links to other interesting Algebra sites.

### **Attendance:**

You will be expected to attend classes regularly. I will be taking attendance daily and will penalize borderline students with an excessive number of absences (4 or more). Students are responsible for all material covered in class.

### **Cell Phones:**

Though they are very useful tools, cell phones can also be a distraction in the classroom. If you find it necessary to use the phone for non course-related activities (e.g. sending or receiving texts or calls), you are asked to leave the classroom, so as to minimize disruption to the classroom environment.

### **Academic Integrity:**

Students are expected to adhere to the highest standards of academic honesty, integrity and respect at UW Oshkosh, and failure to do so can result in either academic or administrative penalties. The main tenet of this is that one should never represent the work of another as their own. See me or consult the Student Discipline Code if you have any questions.

## **General Education:**

Explore Mathematics (XM) Math 104 is an Explore course within the Nature category of UW Oshkosh's University Studies Program. As part of a liberal education, explore courses support a broader understanding of the physical and natural world and develop transferable skills, like problem-solving, which may be utilized in daily and professional life. Math 104 emphasizes the following intellectual and practical skills:

1. Identification and objective evaluation of theories and assumptions.
2. Critical and creative thinking
3. Written and oral communication
4. Quantitative literacy

## **Tutoring Resources:**

Individual tutors may be available free-of-charge through the Center for Academic Resources (CAR) in Dempsey 317, 424-3419. And [www.uwosh.edu/car](http://www.uwosh.edu/car) (Links to an external site.)

## **Students with Disabilities:**

Students with disabilities have the right to accommodation to create equity in their academic pursuit. If you have an accommodation requirement, please submit it within the first week of class. If you think that you need such accommodation, and haven't registered it with the University, Project Success is a good place to start. Project Success is a remedial program for students with language-based learning disabilities attending UW Oshkosh. Email: [projectsuccess@uwosh.edu](mailto:projectsuccess@uwosh.edu)

## **More Resources:**

For a more exhaustive list of the resources UW-O has to offer, please visit: <https://www.uwosh.edu/usp/for-students/resources> (Links to an external site.)