MATH 104 College Algebra Section 081C Spring 2020

Time & Place: T 5:00 PM- 6:30 PM

Place: C-246

Professor: Dr. Khaled Hussein Office Phone: 920-929-1180

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Office: C-205

Office Hours: MTWR 10:00-11:15 AM; or by appointment.

# **Required Course Materials:**

- Textbook: College Algebra & Trigonometry by Julie Miller and Donna Gerken. You must purchase an ALEKS code (which will give you access to an e-book of Miller and Gerken) at the university bookstore. A paper text book may be purchased but not required. An activation code is required for ALEKS.
- Once you have a acquired the ALEKS access code, go to <a href="www.aleks.com">www.aleks.com</a> and, when prompted, enter the following Class Code: <a href="JPMN3-CNPN9">JPMN3-CNPN9</a>
- A video showing you how to sign into the ALEKS homework system can be viewed at <a href="http://video.mhhe.com/watch/qYN1SRb4hQqVr4KP3s4Mb1">http://video.mhhe.com/watch/qYN1SRb4hQqVr4KP3s4Mb1</a>

#### **ALEKS:**

This acronym stands for Assessment and Learning in Knowledge Spaces. It will make up the majority of the homework in the course. Think of it as an adaptive homework system which does not use multiple choice, so students will have to work out the problems on pencil and paper before submitting answers on the computer.

#### **Prerequisites:**

Math 103 with grade of C or better or placement.

### **Course Description:**

Equations and inequalities; graphs, functions and models; polynomial and rational functions; exponential and logarithmic functions. May not receive credit for both Math 104 and 108.

# **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.

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

## **Topic Covered:**

We will cover the following chapters from the book.

Chapter 1: Equations and Inequalities

Chapter 2: Functions and Relations

Chapter 3: Polynomials and Rational Functions

Chapter 4: Exponential and Logarithmic Functions.

Exams: Two hourly examinations, and a comprehensive Final.

Quizzes: Usually given once a week. They come from previous days

lecture and homework questions. I will throw out the bottom 10% of the scores when determining your final grade. Quizzes cannot be made up.

Homework: The only way to learn mathematics is to work problems. So, with this in

mind, assignments will be given daily and will be done on WebAssign.

Grading: Your grade will be determined according to the following:

Homework	10%	A: [90-100]	A-: [88, 90)	
Quizzes	15%	B+: [86, 88)	B: [80, 86)	B-: [78, 80)
Exams	50%	C+: [76, 78)	C: [70, 76)	C-: [68, 70)
Final Exam	25%	D+: [64, 68)	D: [61, 64)	D-: [58, 61)
		F: [0, 58).		

### **Attendance:**

Attendance is a necessary part of any class. This is especially true for a math class. Students are expected to attend class regularly, take an active part in class discussions and in-class activities, and do the assigned work. If you miss a class, you are responsible for all assignments and announcements made on that day. You are also responsible to be aware of any changes to the syllabus which may be announced in class.

### **Cell Phone Policy:**

Cell phone use for the purposes of texting, email or other social media is not permitted. Cell phones must be turned off and put away during class. If you have an emergency situation that requires you to be contacted quickly, let me know at the beginning of class and an exception may be made.

# **Academic Integrity:**

Academic Integrity is an expectation of each college student. Our campus community members are responsible for fostering and upholding an environment in which student learning is fair, just and honest. Through your studies as a UW-Oshkosh student, it is essential to exhibit the highest level of personal honesty and respect for the intellectual property of others. Academic misconduct is unacceptable. It compromises and disrespects the integrity of our university and those who study here. To maintain academic integrity, a student must only claim work which is the authentic work solely of their own, providing correct citations and credit to others as needed. Cheating, fabrication, plagiarism, unauthorized collaboration and/or helping others commit these acts are examples of academic misconduct, which can result in disciplinary action. Failure to understand what constitutes academic misconduct does not exempt responsibility from engaging in it. For more information, please read <a href="https://www.uwosh.edu/deanofstudents/university-policies-procedures/academic-misconduct">https://www.uwosh.edu/deanofstudents/university-policies-procedures/academic-misconduct</a>

### **General Education:**

Explore Mathematics (XM) Math 104 is an Explore course within the Nature cate- gory 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:

- Identification and objective evaluation of theories and assumptions.
- Critical and creative thinking.
- Written and oral communication.
- Quantitative literacy

#### **Disclosure Statement:**

Students are advised to see the following URL for disclosures about essential consumer protection items required by the Student Right-to-Know Act of 1990: https://uwosh.edu/financialaid/consumer-information/