

– about me and this course –

Instructor: Keith Foster · Professor of Mathematics · MS Mathematics, U of A

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Office Hours and Email: Office Hours are posted on my website at <http://gkfoster.com>, which will include any updates, which will be posted there. I will also send out an email stating there has been a change. If for any reason I must reschedule an office hour, there will be an announcement under the office hours on that webpage. Check before coming to campus for any announcements. My office is SC 327 but I also teach at the Washington County campus, where I can be found in WCC 104.

E-mail is the best way to reach me outside office hour times since I may not be in the office. I will reply to your email within 24 hours. When you email me, be sure to include the course name in the subject (i.e, subject: "CA8") so I can best answer your email.

Check your email daily!!

Course Objectives:

1. To develop proficiency in algebra by:
 - a. solve equations and inequalities including quadratic equations, radical equations, rational equations, exponential equations, logarithmic equations, systems of linear equations with matrices, quadratic inequalities, and systems of inequalities
 - b. solve application problems using linear, quadratic, exponential, and systems of equations
 - c. analyze functions and/or their graphs including transformations of functions, quadratic functions, rational functions, absolute value functions, exponential functions, logarithmic functions, and polynomial functions
 - d. perform function operations including arithmetic operations, difference quotient, composition of functions, inverse functions, domain and range of functions, and function values
2. To develop problem solving skills

Course Description: An overview of the fundamental concepts of algebra with an emphasis on functions and equation solving. Functions and equations covered will include (but are not limited to) absolute value, square root, polynomial, rational, exponential, and logarithmic. Systems of linear equations and inequalities as well as quadratic inequalities will also be covered. Technology will be used throughout the course to supplement and enhance understanding.

Required Textbook: *College Algebra with Corequisite Support* by Julie Miller & Donna Gerken, McGraw Hill, 1st Edition. This textbook is available in electronic form within ALEKS. You also have the option to purchase a hard copy of the textbook.

Prerequisites/Corequisite:

Corequisite: MATH 0112 (Foundations of College Algebra) - OR -

Prerequisite: MATH 0103 (Intermediate Algebra) or MATH 0214 (Foundations of Algebra: STEM) with a grade of "C" or better – OR - appropriate placement test scores.

Grading for this Course: The numerical grade comes from the following sources:

- ✦ **Unit Exams:** There will be three unit exams, each worth 100 points (total: 300 points)
- ✦ **Homework:** All homework scores (except the Review sections) will count towards your Homework grade and be scaled out of 50 points.
- ✦ **Quizzes:** Periodical quizzes will be graded and scaled to 100 points.
- ✦ **Final Exam:** The *final exam* is worth 200 points and will be comprehensive.

Percentage score will be this numerical grade out of 650 points. A letter grade will be assigned based on the standard percentage scale:

A 90-100
B 80-89.9

C 70-79.9
D 60-69.9

F below 60
FP failure due to non-attendance

Homework/Discussion Policy: You are *expected* to work all homework problems assigned by the due date listed on ALEKS. Since this is a three credit course and is only meets for 8 week class, you are expected to spend around *twelve hours each week* on homework and general overview of topics being covered (spread this time throughout the week). This is considered the norm for a college level course. Homework results are recorded within ALEKS. Details about the due dates for HWs will be emailed soon. It is very important to organize yourself so that you will receive the most credit for these assignments. Discussions will be posted to Canvas periodically, and you are required to participate.

Quiz Policy: Quizzes will be posted periodically on ALEKS. You will have a few attempts on each, before the due date. No partial credit is given on quizzes. Quiz score will be shown after each attempt, but the results can only be review after the due date. Each quiz score is the best score of all attempts for that quiz.

Exam Policy: All exams will be taken on ALEKS and must be proctored. Check the Exam Policy document on the course webpage for details on location options to take the exams and when the exams are available. Notes will *not* be allowed on exams. Only the TI 30XIIS calculator is permitted on the Exams. Once the exam has started, you cannot leave your computer for *any* reason.

You are *required* to show all work for each problem on the provided Test Packet (for those using the testing center options) or on scratch paper (for those using HonorLock). By not showing work, you *will receive a zero* for that problem. Also, I will add partial credit to each exam based on your work shown. Therefore, the better you organize your work, the easier for me to give partial credit.

Calculator Use: Students can only use the TI-30XIIS calculator for this course. All others, including graphing calculators, are *not* permitted. Please be aware that supporting work for any of the processes will be required to earn any credit on any exam. Answers without correct supporting work will not earn any credit. Remember, the use of a calculator should enhance the mathematics, not replace it. The process of obtaining a solution is many times more important for our purposes than the solution itself. I will grade your work as well as your solutions.

– other policies and statements –

Makeup Policy: There will be no make ups on exams, quizzes or homework. I may drop some of the quizzes, depending on the number given. The lowest exam score, or missed exam, may be replaced with the final exam percent score (if higher, of course). Since you will have a good length of time to complete each exam, if you miss taking an exam, you will receive a zero for that exam. Given the amount of time allowed to complete assignments, quizzes and exams, there is *no reason* to miss any exam, quiz or not complete any homework assignment.

Participation Policy: Participation is expected, and lack of participation will invariably prove detrimental to your grade and your learning experience. Regardless of the reason for not being able to access ALEKS, you will be responsible for any missed assignments, material and announcements. *Check your NWACC email daily.*

Attendance is determined on a twice per week basics. If you do not do sufficient amount of work during any of these periods, I will count you as absent. Attendance is recorded in Quickly Attendance within Canvas.

Non-Participation/Census Date Policy: Students who do not meaningfully participate in the course by the state-mandated census date may be assigned a grade of *NP (Non-Participation)* and withdrawn from the course. Students withdrawn for non-participation are *not eligible for reinstatement* and will receive an 80% refund in accordance with institutional policy.

To be considered *participating* and avoid withdrawal, students must *attempt at least one graded activity* before the date NP grades open. An attempt is defined as submitting work that earns a *score greater than zero*. Graded activities include any assignment (HW, quiz, or exam) with a posted deadline (official or unofficial).

Red-Letter Days: All special dates related to this course can be found on the course outline, exam policy document and/or on ALEKS (exams dates, due dates, etc.), if used. Dates related to NWACC policies (drop dates including Administrative, final week dates, etc.) can be found on the NWACC Calendar page. It is the responsibility of each student to know where to find these dates. NWACC Calendar link:
<https://www.nwacc.edu/enrollment/records/importantacademicdates.aspx>.

Academic Dishonesty Policy: For equality purposes, your instructor reserves the right to clear your calculator of unapproved formulas and programs before each exam. No calculator with a CAS (Computer Algebra System) such as TI-89, TI-92, TI-Voyage or comparable utility is allowed in any class. The attempted use of a prohibited calculator or program is academic dishonesty and will result in a score of 0 with no possibility of the score being dropped or replaced. This also applies to all other forms of academic dishonesty including, but not limited to, using formula sheets not provided by instructor or any notes, leaving the room and returning during an exam, copying from someone else's paper, or allowing someone to copy your paper. Further action will be taken according to the policy on Academic Honesty in the current College Catalog.

– more general policies –

Inclement Weather Policy: Decisions on college status during inclement weather are made by the President or the President's designee. Such decisions will be posted on the college web site, at <http://www.nwacc.edu>. The decision might be to move Face-to-Face classes to Remote Streaming (details will be emailed at that time).

OnLine classes are never affected by inclement weather, unless during exam time when the Testing Center must close.

Artificial Intelligence Policy: Artificial intelligence (AI) is a rapidly developing field that has many applications and implications for mathematics and education. AI tools can generate text, images, code, and other forms of content based on user input. Some examples of AI tools are OpenAI, Google Workspace, and Microsoft Bing (Copilot).

- The use of AI tools in this course is not prohibited in assisting you on HW Problems, to gain a better understanding of how the problem should be approached. You should use AI tools only as a study aid, not as a substitute for your own work or understanding. AI tools should never be used on quizzes, since you are testing your understanding in preparation for exams.

If you have any questions or concerns about the use of AI tools in this course, please contact me. I reserve the right to modify this policy at any time, and to take appropriate actions in case of any violations. By enrolling in this course, you agree to abide by this policy and the academic integrity policy and the student code of conduct.

Available Tutoring: Tutoring at the Math Center is offered in room BH 1217. Check their website at <https://www.nwacc.edu/studentsuccess/mathcenter/> for open hours. There are also many online sources (youTube, etc). And don't forget, you can stop by during any of my office hours to get help or email me *anytime*.

Methods of Instruction: Since this is an OnLine course, instruction will take place through readings and completion of assigned problems, which includes Multimedia requirements. I am available during my office hours in person, if you are on campus, or by email anytime. When emailing, *please* state which class you are in in the subject line. All information regarding this course, including notices on Exam and Quizzes, will be emailed to your NWACC account, so check your NWACC email *daily* while in this class. Canvas is not used for this class since we use *ALEKS*. *ALEKS* assignments can be access through Canvas.

Canvas Limitations: Just a reminder, we have limited use for Canvas. However, assignments will be posted on Canvas but can be access directly through *ALEKS*. There may be some Discussion questions on Canvas. All course information will be emailed to your NWACC email account. The most up-to-date grades will in *ALEKS*. Grades will be moved to Canvas, but *ALEKS* has the official grades.

Class Continuation Plan: NWACC reserves the right to enact a class continuation plan in the event of class cancellations due to weather or other emergency events. The instructor will maintain continuity using *ALEKS*, Canvas or other alternate means as determined by the instructor. You will be contacted via your established communications channels with instructions. Students will be expected to continue with assignments. Online classes will continue to operate according to schedule. Consideration may be given for exceptional circumstances. *Note: for online classes, there will be NO cancellation of any class for any reason, including inclement weather.*

If normal means to contact you is interrupted, check for notes on the course webpage.

Other Resources: Free tutoring is available at the Math Center (BH 1217). Other online resources, such as YouTube videos and many websites (use Google to find) can be useful. Also, don't forget to stop by during office hours for any help.

Course Issues: Please contact me first with any questions or concerns with the class. After discussing any concerns with me, if you wish to discuss it further, please contact the math department chair, Meredith Davis at medavis1@nwacc.edu.

NWACC General Policies Link: For additional college wide policies, go to the following website:
<https://nwacc.instructure.com/courses/854631/pages/syllabus-policies>. You're also responsible for these policies.

Remember: Check your email daily!!

Course Schedule: Below is a week-by-week breakdown of course coverage. Schedule is subject to change with email notice given if that were to happen. *Remember: Check your email daily!!*

Week	Dates	Coverage
1	January 12 – 16	<i>Course Intro (via email)</i> Algebra Basics 3.3 - Complex Numbers 3.4 - Solving Quadratic Equations by Factoring 3.5 - Solving Quadratic Equations by Using the Square Root Property 3.6 - Solving Quadratic Equations by Using the Quadratic Formula 4.3 - Rational Equations 4.6 - Radical Equations
2	January 19 – 23	<i>King Day</i> 5.3 - Functions and Relations 5.4 - Linear Equations in Two Variables and Linear Functions 5.5 - Applications of Linear Equations and Modeling
3	January 26 – 30	<i>Exam #1 (Section 3.3 through Section 5.5)</i> 6.1 - Transformations of Graphs 6.2 - Piecewise-Defined Functions 6.3 - Average Rate of Change, Difference Quotient, and Function Behavior
4	February 2 – 6	6.4 – Algebra of Functions and Function Composition 7.1 – Quadratic Functions and Applications 7.2 - Introduction to Polynomial Functions 7.3 - Division of Polynomials and the Remainder and Factor Theorems 7.4 - Zeros of Polynomials 7.5 - Polynomial Inequalities
5	February 9 – 13	<i>Exam #2 (Section 6.1 through Section 7.5)</i> 8.1 - Introduction to Rational Functions 8.2 - Graphs of Rational Functions 9.1 - Inverse Functions
6	February 16 – 20	9.2 - Exponential Functions 9.3 - Logarithmic Functions 9.4 - Properties of Logarithms 9.5 - Exponential Equations and Applications 9.6 - Logarithmic Equations 9.7 - Modeling with Exponential and Logarithmic Functions
7	February 23 – 27	10.6 - Inequalities and Systems of Inequalities in Two Variables 11.1 - Solving Systems of Linear Equations Using Matrices <i>Exam #3 (Section 8.1 through Section 11.1)</i>
8	March 2 – 6	<i>Final Exam – taken by Thursday, March 5</i>

Last Update: January 7, 2026

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