

– 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.

Course Objectives:

1. To develop proficiency in mathematics by:
 - a. perform operations on integers, fractions and decimals using order of operations.
 - b. simplify and evaluate variable expressions
 - c. solve percent and proportion problems
 - d. find the perimeter and area of rectangles
 - e. solve single variable linear equations, inequalities, and related applications
 - f. solve linear systems and applications in two variables
 - g. graph linear equations in two variables
 - h. simplify expressions with integer exponents, perform operations on polynomials, and work with linear and polynomial functions
2. To develop problem solving skills

Course Description: This developmental algebra course is designed to prepare students for the Co-Requisite courses Foundations of College Algebra and College Algebra. Topics include order of operations with integers, fractions and decimals, variable expressions, percent and proportion problems, area and perimeter, linear equations and inequalities, graphing equations of lines, solving systems of linear equations in two variables, exponential properties, polynomial operations, and interwoven modeling and problem solving. Some previous algebra background is recommended.

Prerequisites:

Student has satisfied any of the following:

- Accuplacer Next Generation Math test result with a(n) Quantitative Analysis score greater than or equal to 235.
- ACT test result with a(n) Math score greater than or equal to 14.
- SAT test result with a(n) Math Section score greater than or equal to 350.

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

- ✦ **Knowledge Checks:** All Knowledge Checks will be scaled out of 10 points.
- ✦ **Homework:** All homework scores (except the Review sections) will count towards your Homework grade and be scaled out of 40 points.
- ✦ **Quizzes:** Periodical quizzes will be graded and scaled to 100 points.
- ✦ **Unit Exams:** There will be four unit exams, each worth 100 points (total: 400 points)
- ✦ **Final Exam:** The *final exam* is worth 200 points and will be comprehensive.

Percentage score will be this numerical grade out of 750 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

Knowledge Checks Policy: Knowledge Checks must be taken throughout the course, as assigned (see schedule) with . They will be posted on *ALEKS*. You will be graded on these, but the score will be adjusted to weight more heavily on the attempt being made.

Homework/Discussion Policy: You are *expected* to work all homework problems assigned by the due date listed on *ALEKS*. Since this is a four credit course, you are expected to spend around *eight 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. There will be a few quizzes given in class, as well.

Exam Policy: All exams will be paper exams, taken during class time. Notes will *not* be allowed on exams. Only the TI 30XIIS calculator is permitted on the Exams.

You are *required* to show all work for each. By not showing work, you *will receive a reduced score, maybe a zero, on that problem*. I will give partial credit to each problem, 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 full credit on any problem. 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 knowledge checks, 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). Given the amount of time allowed to complete assignments and quizzes, there is *no reason* to miss any 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 often*.

Attendance is recorded in Qwickly Attendance within Canvas, based on coming to class.

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 (Knowledge Check, 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).

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: Instruction will take place through lectures, readings and completion of assigned problems.

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.

Required Textbook: *Developmental Mathematics: Prealgebra, Beginning Algebra, & Intermediate Algebra* by Julie Miller, Molly O'Neill & Nancy Hyde, McGraw Hill, 2nd Edition. This textbook is available in electronic form within ALEKS. You also have the option to purchase a hard copy of the textbook.

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.

Week	Dates	Coverage
1	January 13 & 15	Course Intro Initial Knowledge Check Integer math, exponents, and order of operations (Unit 1)
2	January 20 & 22	Fractions, Simplify, Multiply / Divide (Unit 2) LCM and LCD (Unit 3)
3	January 27 & 29	LCM and LCD (Unit 3) Fractions Add and Subtract, order of operation (Unit 4) Decimals (Unit 5)
4	February 3 & 5	Decimals (Unit 5) Scheduled Knowledge Check #1 (complete in ALEKS, due 2/8) Review for Exam 1 Exam #1 (non-calculator)
5	February 10 & 12	Variable expressions, evaluating, and simplifying (Unit 6) Solving equations in one variable (Unit 7)
6	February 17 & 19	Solving equations in one variable that involves fractions (Unit 8) Solving multi-step equations (Unit 9)
7	February 24 & 26	Solving multi-step equations (Unit 9) Review for Exam 2 Exam #2
8	March 3 & 5	Solving multivariable formulas for a single variable (Unit 10) Solving linear inequalities and interval notation (Unit 11)
9	March 10 & 12	Scheduled Knowledge Check #2 (complete in ALEKS, due 3/15) Ratios and percentages (Unit 12) Ratios in the real world (Unit 13)
10	March 17 & 19	Ratios in the real world (Unit 13) Review for Exam 3 Exam #3
	March 24 & 26	Spring Break
11	March 31 & April 2	Cartesian coordinates and graphing in two variables equations (Unit 14) Finding x and y intercepts, introduction to slope (Unit 15)
12	April 7 & 9	Finding x and y intercepts, introduction to slope (Unit 15) Scheduled Knowledge Check #3 (complete in ALEKS, due 4/16) Solving systems of linear equations using substitution (Unit 16)
13	April 14 & 16	Solving systems of linear equations using elimination (Unit 17) Solving systems using any method (Units 15-17) Review for Exam 4
14	April 21 & 23	Exam #4 Polynomial Operations (Unit 18)
15	April 28 & 30	Factoring (Unit 19) Review for Final Exam
	May 4 - 8 Finals Week	Final Exam will be given on Tuesday, May 5, 12:30 – 2:30.