

ASC 092 Beginning Algebra

Course Description: This course is a beginning level algebra course. Topics covered include fundamental operations, fractions, exponents, equations, inequalities, factoring, and graphing. The class does not satisfy college graduation requirements for math.

Credits: 3 semester credits

Prerequisite(s): none.

Delivery Method: Online

Course Objectives/Student Outcomes:

It is expected that students will be able to

- Perform basic algebraic operations using positive and negative numbers, fractions, and exponents.
- Demonstrate an understanding of terms and rules used in algebra.
- Utilize problem-solving strategies to solve problems.
- Simplify expressions & solve equations and inequalities.
- Factor using greatest common factor, factor by grouping, and factor trinomials.
- Plot points, graph linear equations, and find slope of a line.
- Analyze and solve various types of math problems
- Utilize a hand-held calculator when solving algebra problems
- Gain the skills needed to participate in a college algebra course
- Perform basic algebraic operations using positive and negative numbers, fractions, and exponents
- Demonstrate an understanding of terms and rules used in algebra
- Utilize problem-solving strategies to solve problems
- Simplify expressions
- Solve equations and inequalities
- Factor using greatest common factor, factor by grouping, and factor trinomials of the form x^2+bx+c

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Class Schedule: 10:00–10:50 AM MWF

Textbook: Miller, O'Neill, Hyde, Introductory Algebra, 2nd Ed – E-text with ALEKS; ISBN 0077409795

Course Requirements:

Learning algebra is an investment of time. Algebra is learned best by practice, reflect, and practice some more. Understanding the examples provided by the instructor and textbook is a good first step. However, to truly know the material, you should be able to look at a problem, know how to proceed, and carry out the steps WITHOUT ASSISTANCE. The independent practice in the ALEKS learning system provides opportunities for you to get to that point. Passing grades on assessments demonstrate that you have indeed learned the skills taught.

Participation: Students are given points for working in ALEKS for three class periods per week. This participation counts 10% of their grade.

Independent practice and homework: Students will work in the ALEKS learning system on topics to be mastered. The problems for each topic are linked to worked-out explanations, e-textbook material, and video demonstrations. The ALEKS system will periodically assess student learning. This work constitutes 10% of the student's final grade.

Graded assessments: Graded assessments of 10-20 questions are to be taken on the due dates found in the schedule below. Assessment results make up 20% of the student's final grade.

Tests: A midterm exam and a final exam are given. These exams are comprehensive and constitute 60% of the student's final grade.

Tentative Course Outline:

Aug 24- ALEKS Orientation

Aug 26- ALEKS assessment, Start

MYPIE Topics

Sept 7- Assessment 1 sR.1-2 due

Sept 14- Assessment 2 sR.3-4 due

Sept 21- Assessment 3 s1.1-1.2 due

Sept 28- Assessment 4 s1.3-1.4 due

Oct 5- Assessment 5 s1.5 due

Oct. 11- MIDTERM REVIEW due

Oct 12- MIDTERM EXAM

Oct 19- Assessment 6 s1.6 due

Oct 26- Assessment 7 s2.1 due

Nov 2- Assessment 8 s2.2-2.5 due

Nov 9- Assessment 9 s2.6-2.8 due

Nov 19- Assessment 10 s5.1-5.4 due

Nov 30- Assessment 11 s5.5-5.7 due

Dec 7- Assessment 12 s6.1-6.2,6.5 due

Dec 14- FINAL REVIEW due

Dec 15- FINAL EXAM

Relationship to Campus Theme:

This course introduces algebra skills that are used to solve problems in science, technology, business, and social sciences.

Classroom Policies:

- Regular participation is expected. Attendance will be taken and students are expected to be in the lab engaged in course work. Students should also plan to work outside of the class period to prepare for weekly assessments.
- All assessments and exams can be taken on any computer with Internet access.
- Students may work ahead; however, each assessment must be taken on the due date in class. The Midterm and Final exams will also be taken during class.
- Each assessment/test will be available for a limited period of time depending upon the number of questions.

Evaluation:

Grades for the course are calculated as follows: attendance/engagement – 10%, mastery of topics in ALEKS - 5%, homework assignments - 5%, results from assessments - 20%, and results from tests - 60%. Letter grades are assigned using the scale below.

A--90-100%

B--80-89%

C--70-79%

D--60-69%

F--59% or lower

Academic Integrity: The academic community is operated on the basis of honesty, integrity and fair play. It is the expectation that all students, as members of the college community, adhere to the highest levels of academic integrity. This means that:

- Students are responsible for submitting their own work. Student work must not be plagiarized.
- Students must not cooperate on oral or written examinations or work together on evaluated assignments without authorization.