ASC 092 Beginning Algebra

Course Description: This course covers 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

Instructor: Jan Nahinurk
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Office Hours: Tuesday, Thursday 10:00-12:00 PM
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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.

Independent practice: 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 25% of the student's final grade.

Graded quizzes: Graded quizzes of 10-20 questions are to be taken on or before the due dates found in the schedule below. Quizzes are open for a limited amount of time. Two attempts are allowed and the best score is recorded in the grade book. Quiz results make up 25% of the student's final grade.

Tests: A midterm exam and a final exam are given. These exams are comprehensive and constitute 40% of the student's final grade.

Tentative Course Outline:

JAN 12- ALEKS Orientation	MAR 9- QUIZ 6 s1.6 due
JAN 14- ALEKS assessment, Start MYPIE Topics	MAR 14-18- SPRING BREAK
	MAR 23- QUIZ 7 s2.1 due
JAN 26- QUIZ 1 sR.1-2 due	MAR 30- QUIZ 8 s2.2-2.5 due
FEB 2- QUIZ 2 sR.3-4 due	APR 6- QUIZ 9 s2.6-2.8 due
FEB 7- QUIZ 3 s1.1-1.2 due	APR 13 18- QUIZ 10 s5.1-5.4 due
FEB 14- QUIZ 4 s1.3-1.4 due	APR 20- QUIZ 11 s5.5-5.7 due
FEB 23- QUIZ 5 s1.5 due	MAY 2- QUIZ 12 s6.1-6.2,6.5 due
FEB 28- MIDTERM REVIEW due	MAY 9- FINAL REVIEW due
MAR 2- MIDTERM EXAM	MAY 10-13- FINAL EXAMS

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 quizzes.
- All quizzes and exams can be taken on any computer with Internet access.
- Students may work ahead; however, each quiz must be taken on or before the due date. The Midterm and Final exams will be taken during class.
- Each quiz/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 - 25%, results from quizzes - 25%, and results from tests - 40%. 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.

To learn how to avoid plagiarism in your work, review the website from Purdue University, Is It Plagiarism Yet?

Violations of academic principles such as cheating, plagiarism or other academic improprieties will be handled using the guidelines outlined in the Student Handbook on pages 18, 19, and 37.

Disabilities and Special Needs:

If you have a disability for which you need accommodation, contact the Learning Center to request disability support services: phone 701-228-5477 or toll-free 1-888-918-5623.