



Intermediate Algebra
MASC105
Southwestern College Professional Studies

COURSE SYLLABUS

I. Course Catalog Description

Intermediate Algebra focuses on algebra skills such as simplifying expressions and solving equations using variables for unknowns. Once students are able to solve problems using basic algebra, they will apply this knowledge to business, consumer, and science contexts. As a result of completing the course, students will be able to solve real-world problems using more sophisticated mathematical tools. This course is designed to prepare students for more advanced courses in algebra, as well as business and science courses requiring the application of algebraic principles.

II. Required and Supplementary Instructional Materials

Aufman, R., Barker, V. and Lockwood, J (2010). *Beginning Algebra with Applications, Multimedia Edition*. 7th Ed. Belmont, CA: Wadsworth Cengage Learning.
Print ISBN: 9780547197968.
WebAssign ISBN: 9781285857732

This ebook is included in the course fees for this class. No additional book purchase is necessary.

III. Learning Outcomes

Learning outcomes describe the knowledge, skills, values, and attitudes that learners gain as the result of a particular learning experience. Southwestern College Professional Studies has learning outcomes specific to each course and each [undergraduate](#) and [graduate](#) program of study, as well as [institution-wide outcomes](#) related to the mission and vision of the college. Outcomes can help learners and instructors focus on the big picture of the learning experience and can help inform potential employers about a graduate's knowledge and skills.

Upon successfully completing this course, the learner will be able to:

1. Add, subtract, multiply, and divide different forms of rational numbers and integers, including decimals, fractions, and percents.
2. Simplify variable expressions, solve expressions for given variable values, and solve related real-world applications.
3. Solve one-variable equations and inequalities and related real-world problems.
4. Graph and solve linear equations and inequalities and related real-world problems.
5. Solve systems of linear equations using the graphing, substitution, and addition methods and apply to real-world problems.
6. Add, subtract, multiply, divide, and factor polynomials and apply to real-world applications.
7. Add, subtract, multiply, divide, and simplify rational and radical expressions and apply to real-world applications.
8. Factor quadratic expressions and solve quadratic equations and related real-world problems.

At the end of the course, learners may vary in their ability to achieve these outcomes. You are more likely to achieve these outcomes only if you attend class and/or online activities as required by the syllabus, complete the requirements for all assignments to the best of your ability, participate actively in class activities and group work as directed, and study diligently for exams.

IV. Course Policies

Students are expected to read and abide by the course policies located in the instructor-specific syllabus in the blackboard course

V. Course Requirements:

Requirements	Number of Assignments	Points Possible	Percent of Grade
Discussions	6	150	10%
Problem Sets	30	300	20%
Unit Tests	5	750	50%
Final Exam	1	300	20%
Total Points		1500	100

VI. Course at a Glance:

Unit	Reading & Preparation Activities	Graded Work Due
1	<ul style="list-style-type: none"> Read <i>Beginning Algebra with Applications</i>, Chapters 1-4 View video lectures for Chapters 1-4 	<ul style="list-style-type: none"> Unit 1 Discussion Assignment 1.1: Problem Set Assignment 1.2: Problem Set Assignment 1.3: Problem Set Assignment 1.4: Problem Set Assignment 1.5: Problem Set Assignment 1.6: Unit 1 Test
2	<ul style="list-style-type: none"> Read <i>Beginning Algebra with Applications</i>, Chapter 5 View video lectures for Chapter 5 	<ul style="list-style-type: none"> Unit 2 Discussion Assignment 2.1: Problem Set Assignment 2.2: Problem Set Assignment 2.3: Problem Set Assignment 2.4: Problem Set Assignment 2.5: Problem Set Assignment 2.6: Unit 2 Test
3	<ul style="list-style-type: none"> Read <i>Beginning Algebra with Applications</i>, Chapter 6 and Appendix, "Intersect," pp. 657-658 View video lectures for Chapter 6 	<ul style="list-style-type: none"> Unit 3 Discussion Assignment 3.1: Problem Set Assignment 3.2: Problem Set Assignment 3.3: Problem Set Assignment 3.4: Problem Set Assignment 3.5: Problem Set Assignment 3.6: Unit 3 Test
4	<ul style="list-style-type: none"> Read <i>Beginning Algebra with Applications</i>, Chapters 7 and 8 View video lectures for Chapters 7 and 8 	<ul style="list-style-type: none"> Unit 4 Discussion Assignment 4.1: Problem Set Assignment 4.2: Problem Set Assignment 4.3: Problem Set Assignment 4.4: Problem Set Assignment 4.5: Problem Set Assignment 4.6: Unit 4 Test
5	<ul style="list-style-type: none"> Read <i>Beginning Algebra with Applications</i>, Chapters 9 and 10 View video lectures for Chapters 9 and 10 	<ul style="list-style-type: none"> Unit 5 Discussion Assignment 5.1: Problem Set Assignment 5.2: Problem Set Assignment 5.3: Problem Set Assignment 5.4: Problem Set Assignment 5.5: Problem Set Assignment 5.6: Unit 5 Test

Unit	Reading & Preparation Activities	Graded Work Due
6	<ul style="list-style-type: none"> • Read <i>Beginning Algebra with Applications</i>, Chapter 11 • View video lectures for Chapter 11 	<ul style="list-style-type: none"> • Unit 6 Discussion • Assignment 6.1: Problem Set • Assignment 6.2: Problem Set • Assignment 6.3: Problem Set • Assignment 6.4: Problem Set • Assignment 6.5: Problem Set • Assignment 6.6: Final Exam

VII. Other Policies and Requirements

Follow this link to the Southwestern College Professional Studies [Standard Syllabus](#) in Blackboard. You may be required to log in.