



ACE Transfer Credit Packet

Your Guide to Earning ACE Credit for StraighterLine Courses

What You Need To Know Before You Start

- Finding out if your college or university will award credit for a course at StraighterLine is a process that you'll have to complete. We've made it easy for you with this comprehensive packet that has everything you'll need to talk with your academic advisor/registrar about earning ACE Credit for your StraighterLine course(s).
- The American Council on Education's College Credit Recommendation Service (ACE CREDIT®) helps adults gain academic credit for courses and examinations taken outside traditional degree programs. ACE CREDIT has evaluated and recommended college credit for all StraighterLine courses. [Click here](#) to view their network of colleges and universities that recognize ACE Credit.
- ACE Credit provides course completers with an Official ACE Transcript stating the course is recommended for 3 or 4 lower-division credits. ACE's Transcript Service enables our students to present a nationally recognized transcript to their college or university in order to earn credit for their StraighterLine course.
- **StraighterLine Partner College Network** – If your college or university is already part of the StraighterLine Partner College Network, the transfer process is even easier. These institutions have formal articulation agreements with StraighterLine. Each institution has identified the course equivalencies and awards of academic credit it will recognize for StraighterLine's courses. [View our Official Partner College Network](#)

Tips on How to Effectively Talk to Your Academic Advisor or Registrar

1

Be familiar with StraighterLine and ACE Credit before talking to your college registrar or advisor.

2

You will want to provide the information in this packet to the advisor/registrar which includes:

- ACE Credit Information and Course Evaluation Process
- Course Description
- Official ACE Credit Recommendation for the course
- Course Syllabus

3

As always, be reasonable and respectful. Your college or university has the final discretion on whether or not to allow the transfer of credit.



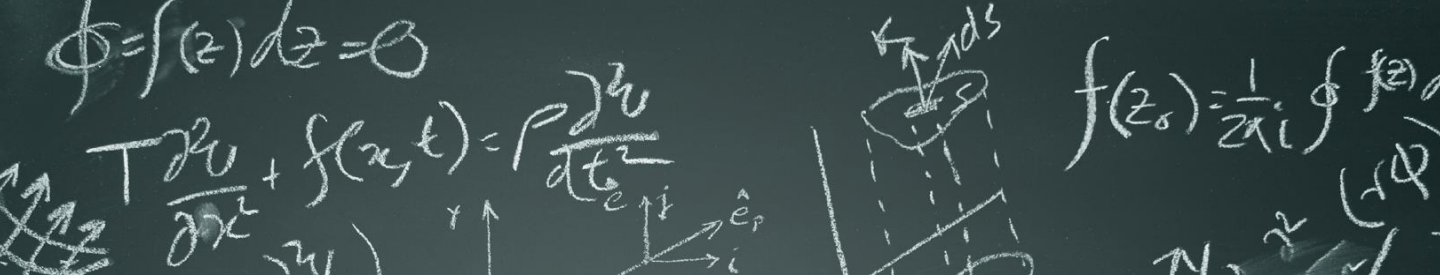
Transferring Credit Through ACE

ACE CREDIT Course Overview

- ACE is the nation's most visible and influential higher education association. It represents the presidents of U.S. accredited, degree-granting institutions, which include two- and four-year colleges, private and public universities, and nonprofit and for-profit entities. It has more than 1,800 member institutions.
- StraighterLine's online courses are directly comparable to those offered by accredited colleges and universities. That's why ACE CREDIT® has through a rigorous process assessed and validated our courses for recommended credit.
- An ACE CREDIT Review is a thorough process and the most widely used course evaluation program that stresses academically sound methods.
 1. Courses and examinations are reviewed by carefully selected teams of faculty evaluators from relevant academic disciplines.
 2. If the content, scope and rigor of the course or examination is equivalent to a college-level course, the teams recommend appropriate college credit.
 3. Students can use these credit recommendations to satisfy general education or degree requirements or to demonstrate knowledge and proficiency in a particular subject.
 4. ACE CREDIT recommendations are used as guidelines by colleges and universities, which make their own decisions about awarding credit.
- StraighterLine also has over 40 accredited partner colleges who have carefully evaluated each course to ensure that they meet their academic standards. These partner colleges accept StraighterLine students' credits through a simple transfer process.

Questions? Contact Us.

For further assistance email advisor@straighterline.com or you can speak to a Student Advisor by calling **877-787-8375** (9am-5pm ET Monday-Friday).



College Algebra

Course Description

Course Name: **College Algebra**

Course Number: **MAT101**

Pass Rate: **70%**

3

college credits



Self-Paced



McGraw Hill

Our popular College Algebra course provides a working knowledge of college-level algebra and its applications. Emphasis is placed upon the solution and the application of linear and quadratic equations, word problems, polynomials, and rational and radical equations. Students perform operations on real numbers and polynomials and simplify algebraic, rational, and radical expressions.

Arithmetic and geometric sequences are examined, and linear equations and inequalities are discussed. Students learn to graph linear, quadratic, absolute value, and piecewise-defined functions and solve and graph exponential and logarithmic equations. Other topics include solving applications using linear systems as well as evaluating and finding partial sums of a series.

Source: [College Algebra Description Page](#)

ACE College Algebra Credit Recommendation



Credit Type:	Course
ACE Course Number:	0002
Organization:	StraighterLine
Location:	StraighterLine, Baltimore, MD.
Length:	48 hours (14 weeks, self-paced).
Dates Offered:	5/1/2008 - Present
Objective:	To provide a working knowledge of college-level algebra and its applications, with emphasis on the solution and application of linear and quadratic equations, word problems, polynomials, and rational and radical equations.
Learning Outcome:	Upon successful completion of the course, the student will understand arithmetic and geometric sequences, linear equations and inequalities, and solving applications using linear systems; be able to evaluate and find partial sums of a series; be able to perform operations on real numbers and polynomials and to simplify algebraic, rational, and radical expressions; and be able to graph linear, quadratic, absolute value, and piecewise-defined functions and solve and graph exponential and logarithmic equations.
Instruction:	Major topics include basic algebraic operations, linear equations and inequalities in one variable, quadratic equations, polynomial and other equations, functions and graphs, operations on functions, analyzing graphs, graphing polynomial functions, graphing rational functions, exponential and logarithmic functions, solving linear systems using augmented matrices, and sequences and series. Methods of instruction include multimedia online presentations, practice problems, review activities, reading assignments, tutoring, and exams.
Credit Recommendation:	In the lower division baccalaureate/associate degree category, 3 semester hours in Math (10/09).

Visit:

<http://www2.acenet.edu/credit/?fuseaction=browse.getOrganizationDetail&FICE=1006628>

to view the ACE Credit Recommendation for all StraighterLine courses.

These are all printer friendly

College Algebra Syllabus

College Algebra

Course Text

Barnett, Raymond A., Michael R. Ziegler, and Karl E. Byleen. *College Algebra*, 8th edition, McGraw-Hill, 2008, ISBN: 9780072867381 [find and buy the text: Straighterline.com/textbooks]

Course Description

This course provides a working knowledge of college-level algebra and its applications. Emphasis is placed upon the solution and the application of linear and quadratic equations, word problems, polynomials, and rational and radical equations. Students perform operations on real numbers and polynomials and simplify algebraic, rational, and radical expressions.

Arithmetic and geometric sequences are examined, and linear equations and inequalities are discussed. Students learn to graph linear, quadratic, absolute value, and piecewise-defined functions and solve and graph exponential and logarithmic equations. Other topics include solving applications using linear systems as well as evaluating and finding partial sums of a series.

Course Objectives

After completing this course, students will be able to:

- Perform operations on real numbers and polynomials.
- Simplify algebraic, rational, and radical expressions.
- Solve both linear and quadratic equations and inequalities.
- Solve word problems involving linear and quadratic equations and inequalities.
- Solve polynomial, rational, and radical equations and applications.
- Solve and graph linear, quadratic, absolute value, and piecewise-defined functions.
- Perform operations with functions as well as find composition and inverse functions.
- Graph quadratic, square root, cubic, and cube root functions.
- Graph and find zeroes of polynomial functions.
- Perform vertical and horizontal shifts and reflections of a basic graph.
- Perform stretches and compressions on a basic graph.
- Transform the graph of a general function.
- Graph quadratic functions by completing the square, using the vertex formula, and using transformations.
- Solve and graph exponential and logarithmic equations.
- Solve systems of linear equations and inequalities.
- Model and solve applications using linear systems.

©Copyright StraighterLine, 2010 | <http://StraighterLine.com>

- Evaluate and find partial sums of a series.
- Evaluate and find sums of arithmetic and geometric sequences.
- Solve application problems involving arithmetic and geometric sequences and series.
- Solve applications involving the various types of equations and inequalities.

Course Prerequisites

StraighterLine suggests, though does not require, that students take Introductory Algebra or its equivalent before enrolling in College Algebra.

Important Terms

In this course, different terms are used to designate tasks:

- **Practice Exercise:** A non-graded assignment to assist you in practicing the skills discussed in a topic.
- **Graded Exam:** A graded online test.

Course Evaluation Criteria

StraighterLine does not apply letter grades. Students earn a score as a percentage of 100%. A passing percentage is 70% or higher.

If you have chosen a Partner College to award credit for this course, your final grade will be based upon that college's grading scale. Only passing scores will be considered by Partner Colleges for an award of credit.

There are a **total of 500 points** in the course:

Topic	Assessment	Points Available
1	Graded Exam #1	75
4	Graded Exam #2	75
8	Graded Exam #3	75
13	Graded Exam #4	75
Review	Final Graded Exam	200
Total		500

Course Topics and Objectives

Topic	Lesson	Subtopics	Objectives
1	Basic Algebraic Operations	<ul style="list-style-type: none"> • Real Numbers and Polynomials • Rational Expressions • Rational Exponents and Radicals 	<ul style="list-style-type: none"> • Identify and use properties of real numbers. • Simplify algebraic expressions. • Identify and classify polynomial and Radicals expressions. • Perform operations on polynomials. • Factor polynomials. • Write a rational expression in simplest form • Compute rational expressions. • Simplify radical expressions. • Multiply and divide radical expressions.
2	Linear Equations and Inequalities in One Variable	<ul style="list-style-type: none"> • Linear Equations and Applications • Linear Inequalities and Applications • Absolute Value in Equations and Inequalities 	<ul style="list-style-type: none"> • Solve linear equations by using all properties of equality and the rules. • Solve word problems using linear equations. • Solve and graph linear inequalities. • Solve an application using inequalities. • Solve absolute value equalities and inequalities.

Course Topics and Objectives

3	Quadratic Equations	<ul style="list-style-type: none"> ● Factoring and solving Quadratic Equations using Factoring ● Completing the Square ● Quadratic Formula and Applications of the Quadratic Equations 	<ul style="list-style-type: none"> ● Write a quadratic equation in the standard form. ● Solve quadratic equations by factoring. ● Solve quadratic equations by the square root property. ● Solve quadratic equations by completing the square. ● Solve quadratic equations by using the quadratic formula. ● Solve word problems involving quadratic equations. ● Use the discriminant to identify the number of solutions.
4	Polynomial and Other Equations	<ul style="list-style-type: none"> ● Polynomial Equations and Applications ● Equations Involving Radicals and Rational Exponents ● Complex Numbers 	<ul style="list-style-type: none"> ● Solve polynomial equations using the zero factor property. ● Solve rational equations. ● Solve radical equations. ● Identify and simplify complex numbers. ● Add and subtract complex numbers. ● Multiply and divide complex numbers.

Course Topics and Objectives

5	Functions and Graphs	• Rectangular Coordinates and the Graph of a Line	<ul style="list-style-type: none">• Use a table of values to graph linear equations.• Determine when lines are parallel or perpendicular.• Use linear graphs in an applied context.• Identify functions and state their domain and range.• Use function notation.• Write a linear equation in function form.• Use function form to identify the slope.• Use slope-intercept form to graph linear functions.• Write a linear equation in point-intercept form.• Use the function form, the slope-intercept form, and the point-intercept form to solve applications.
---	----------------------	---	--

Course Topics and Objectives

6	Operations and Functions	<ul style="list-style-type: none">• The Algebra and Composition Functions• One-to-One and Inverse Functions	<ul style="list-style-type: none">• Compute a sum or difference of functions and determine the domain of the result.• Compose two functions and find the domain.• Identify one-to-one functions.• Find inverse functions using an algebraic method.• Graph a function and its inverse.• Graph factorable quadratic equations.• Graph the square root, cubic, and cube root functions.• Compute a product or quotient of functions and determine the domain of the result.
---	--------------------------	--	--

Course Topics and Objectives

7	Analyzing Graphs	<ul style="list-style-type: none"> ● Piecewise-Defined Functions ● Graphs and Symmetry ● Transformations 	<ul style="list-style-type: none"> ● State the domain of a piecewise-defined function. ● Evaluate piecewise-defined functions. ● Graph functions that are piece-wise defined. ● Identify different symmetry types. ● Use symmetry as an aid to graphing. ● Perform vertical and horizontal shifts of a basic graph. ● Perform vertical and horizontal reflections of a basic graph. ● Perform stretches and compressions on a basic graph. ● Transform the graph of a general function.
8	Graphing Polynomial Functions	<ul style="list-style-type: none"> ● Graphing General Quadratic Functions ● Graphing Polynomial Functions ● Applications of Polynomial Functions 	<ul style="list-style-type: none"> ● Graph quadratic functions by completing the square and using transformations. ● Graph a general quadratic function using the vertex formula. ● Solve applications involving quadratic functions. ● Graph polynomial functions. ● Describe the end behavior of a polynomial graph.

Course Topics and Objectives

9	Graphing Rational Functions	<ul style="list-style-type: none">• Asymptotes and Rational Functions• Graphing Rational Functions• Applications of Rational Functions	<ul style="list-style-type: none">• Graph the reciprocal and reciprocal quadratic functions.• Identify horizontal and vertical asymptotes.• Use asymptotes to graph transformations.• Use asymptotes to determine the equation of a rational function from its graph.• Find the domain of a rational function.• Find the intercepts of a rational function.• Graph general rational functions.• Solve applications involving rational functions.
---	-----------------------------	--	---

Course Topics and Objectives

10	Exponential and Logarithmic Functions	<ul style="list-style-type: none">• Exponential Functions• Logarithms and Logarithmic Functions• The Exponential Function and Natural Logarithm	<ul style="list-style-type: none">• Evaluate an exponential function.• Graph exponential functions.• Solve certain exponential equations.• Solve applications of exponential equations.• Write exponential equations in logarithmic form.• Graph logarithmic functions and find their domains.• Solve applications of logarithmic functions.• Evaluate and graph base exponential functions.• Evaluate and graph the natural logarithm functions.• Apply the properties of logarithms.• Use the change-of-base formula.
----	---------------------------------------	---	---

Course Topics and Objectives

11	Exponential and Logarithmic Equations	<ul style="list-style-type: none">• Exponential Equations• Logarithmic Equations• Applications of Exponential and Logarithmic Equations	<ul style="list-style-type: none">• Write logarithmic and exponential equations in simplified form.• Solve exponential equations.• Solve logarithmic equations.• Solve applications involving exponential and logarithmic equations.• Use exponential equations to find the interest compounded in times per year.• Use exponential equations to find the interest compounded continuously.• Solve exponential growth and decay problems.
----	---------------------------------------	---	---

Course Topics and Objectives

12	Systems of Linear Equations in Two Variables	<ul style="list-style-type: none"> ● Solving Systems Graphically and by Substitution ● Solving Systems using Elimination ● Applications of Linear Systems 	<ul style="list-style-type: none"> ● Verify ordered pair solutions. ● Solve linear systems by graphing. ● Solve linear systems by substitution. ● Solve linear systems by elimination. ● Recognize inconsistent systems (no solutions) and dependent systems (infinitely many solutions). ● Use a system of equations to mathematically model and solve applications.
13	Solving Linear Systems Using Augmented Matrices	<ul style="list-style-type: none"> ● Matrices ● Solving Linear Systems using Matrix Equations ● More Applications of Linear Systems 	<ul style="list-style-type: none"> ● State the size of a matrix and identify entries in a specified row and column. ● Form the augmented matrix of a system of equations. ● Recognize inconsistent and dependent systems. ● Model and solve applications using linear systems. ● Solve a system of equations using row operations.

Course Topics and Objectives

14	Sequences and Series	<ul style="list-style-type: none"> • Sequences and Series • Arithmetic Sequences • Geometric Sequences 	<ul style="list-style-type: none"> • Write out the terms of a sequence given the general term. • Determine the general term of a sequence. • Find the partial sum of a series. • Use summation notation to write and evaluate the series. • Solve applications using mathematical sequences. • Find the sum of a geometric series. • Solve application problems involving geometric sequences and series.
15	Review and Graded Final Exam	<ul style="list-style-type: none"> • Course Review 	<ul style="list-style-type: none"> • None