Overview
This online math course teaches the fundamentals of algebra and will prepare you for calculus courses as you progress toward your college degree.

About this course
This online college algebra course equips you with the skills to effectively solve problems using algebraic reasoning. What sets this course apart from a standard algebra course is its strong emphasis on the techniques that are used to solve problems. The goal is not to simply teach you mathematical forms but to help you understand the “whys” behind how you are solving problems. Throughout this course, you will be able to participate in discussions with other students and the professor to help build your conceptual understanding of algebra.

In this course, you will learn about systems of linear equations, rational functions, quadratic functions, logarithmic functions, general polynomial functions, and exponential functions.

Additionally, our college algebra online course uses cutting-edge adaptive technology (the ALEKS learning system). ALEKS is a personalized math tutor that will help you learn each of the skills in our course at your own pace, making it fun to learn algebra online. Our goal is to reduce your “math anxiety” and ensure you walk away feeling confident about math!

This online college algebra course — offered as self-paced or instructor-led— equips you with the skills to effectively solve problems using algebraic reasoning.

Required prior knowledge and skills
To be successful in this course, we recommend English language fluency and computer literacy.

Learning Outcomes

- How to apply algebraic reasoning to solve a range of problems.
- How to identify functions, domains, ranges, intercepts and other critical algebraic concepts
- Skills required for success in future studies in calculus.

Additional Info

Self-paced
Self-paced courses allow students to complete course assignments at their own pace, as long as the course is completed within a year. Self-paced courses are great for:

- Students who want to start right away
- Students who are self-directed and can set and stick to a plan for completing the course
- Students who may want to either go faster or slower than the instructor-paced version
Instructor-led courses have a structure with weekly assignment due dates, as well as an instructor guiding a student through the curriculum and content. Instructor-led courses are great for:

- Students who prefer a structured timeline with established due dates for assignments
- Students who enjoy interaction with other students, who will be completing assignments at the same time
- Students who are taking their first course online, and may benefit from greater guidance

This course satisfies 3 credit hours toward the Mathematical Studies (MA) General Studies requirement at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied to their degree requirements prior to transferring the credit.

Creator

Adrian Sannier
Adrian Sannier was the Chief Academic Technology Officer for EdPlus at ASU and a Professor of Practice in the School of Computing, Informatics, and Decision Engineering at Arizona State University. He was part of the ASU team pursuing an ambitious program of general education reform that Inside Higher Education called "ground zero for data-driven teaching in higher education," combining Big Data, social networking, and evidence based instruction to drive better student outcomes at scale.

Previously, Sannier was Senior Vice President for Product at Pearson, the world’s largest education company, where he helped forge a partnership between ASU Online and Pearson. Under the agreement, Pearson provides ASU with technology, content, and services to support ASU’s twin goals of access and excellence. While at Pearson, Sannier also led the product teams responsible for Learning Studio, Tapestry, Equella, and #OpenClass. Sannier has been an outspoken evangelist for the increased use of technology in Education. In 2012 The Chronicle of Higher Education named Sannier one of the “12 Tech Innovators Who Are Transforming Campuses”.

Dr. Sue McClure
Sue McClure is a lecturer in the School of Mathematical and Statistical Sciences at Arizona State University. Educated at Ball State University, Purdue University, and Indiana University, Sue has acquired years of experience teaching courses ranging from high school mathematics to college calculus. Her efforts in the Mathematics Department at Angola High School helped rank the school as one of Indiana’s finest high
schools, and her interest in educational technologies has led Sue to explore and integrate personalized learning through adaptive mathematics and online education into her courses at Arizona State University.