

Global Freshman Academy Precalculus Course Syllabus

Course Overview

Welcome to GFA Precalculus! We have designed an engaging, supportive, and personal learning experience for you that will help you successfully complete a core requirement for many global universities. In this course you will prepare for calculus by focusing on quantitative reasoning and functions. As you begin the course you should already have a strong understanding of algebraic skills such as factoring, basic equation solving, and the rules of exponents and radicals. You will concentrate primarily on linear, exponential, logarithmic, polynomial, rational, and trigonometric functions.

Content in this course will be adaptive, allowing you to achieve mastery in a certain concept before moving on to the next. Utilizing the ALEKS learning system, students in this personalized, self-paced course will be instructed on the topics they are most ready to learn while also providing individualized coaching as they move through each topic.

This 3-credit hour course satisfies the Mathematical Studies (MA) general studies requirement at Arizona State University. This course may satisfy a general education requirement at other institutions; however, 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.

Course Learning Objectives

Upon successful completion of this course you will be well prepared to do the following things regarding linear, exponential, logarithmic, polynomial, rational, and trigonometric functions:

- Describe the behavior and properties of such functions
- Solve problems involving such functions
- Understand and apply such functions to real-world problems
- Begin your study of calculus

Recommended Prior Knowledge

To be successful in this course, we recommend English language fluency and computer literacy. In addition, we recommend knowledge of College Algebra.

If you are concerned that you may lack knowledge in some areas of College Algebra, we invite you to join the course anyway. The ALEKS learning and practice software will help you identify preliminary topics of study to achieve readiness for more advanced learning. If your Initial Knowledge Check score is concerning, we will discuss other options that may be available to you.

Online Course Requirements

This is an online course. Course content and learning activities can be found within the edX platform. All course interactions will utilize Internet technologies. It is your responsibility to read the information about the course, to watch the videos within the course, and to do the course work.

Personalized Coaching

We have an experienced and knowledgeable coaching staff to help you during your learning journey. Every coach is experienced in mathematics, proficient with the software that you will be using, and skilled in working with students.

You are encouraged to interact with the coaches when needed by posting your questions using the "Message Your Coach" link within the ALEKS learning and practice software. In addition, you are encouraged to interact with your peers in discussion forum conversations and to use the discussion area to ask any questions that you may have.

The course orientation videos will provide you with important information about the coaching experience, so please ensure you watch them carefully.

The following link will take you to the course orientation materials: Course Guide

Computer Requirements

Due to limitations in VPN Internet connectivity at non-United States locations, students registering for this course may experience timed outages that are beyond the control of Arizona State University. We do not recommend that you take this course for credit if you must use VPN to connect.

Success in this course requires a reasonably modern browser on a laptop or desktop computer as well as a robust and stable Internet connection. Smart phones and tablets are not compatible with the proctoring requirement for the final exam.

If you are interested in taking this course for credit, you will need to install the required proctoring software and supporting computer hardware described here: <u>Software Secure</u> <u>Proctoring Information</u>

Course Communications

Communication will take place in the Coaching Center (Newsfeed), in discussion boards, and through announcements.

Additional information about communication channels can be found in the Course Guide materials available here: <u>Course Guide</u>

Course Time Commitment

You have up to one year to complete this course for academic credit. The course shell will become inactive after May 7, 2018, and you will no longer have access to your course progress. Please plan your goals accordingly. During this year, you are encouraged to work through the course at a pace that suits your needs.

The work of this course is equivalent to a university-level 15-week course (one semester), although there is no requirement that the course be completed in one semester.

Tips for Completing this Course Successfully

- Carefully review the navigation and orientation videos to ensure you understand how the course is designed for your success.
- As you begin your work in the ALEKS learning and practice software, be sure to allow 60 minutes or more to complete the Initial Knowledge Check. This is your only opportunity to demonstrate what you already know about College Algebra as you begin the course. Doing your best on the Knowledge Check ensures that ALEKS can place you at the correct level as you begin your work in Precalculus.
- Always have paper and pencil available to take notes and work through problems.
- Use a scientific calculator or a graphing calculator if you wish. Be sure to use only the approved types of calculators shown on the provided list. You do not need to buy a personal graphing calculator since a graphing calculator will be provided online by ALEKS when one is required as you work through the lessons in the course.
- Calculators with QWERTY keyboards or those that perform symbolic algebra, such as the Casio FX2, Casio 9970Gs, TI-89, TI-92, or TI-nspire CAS, should not be used in this course and cannot be used during the exam. Cellular phone calculators and online calculators should not be used in class and are not permitted during an exam.

- Use the ALEKS learning and practice software in the course to help learn and retain the concepts of Precalculus at a pace that suits your needs.
- If you have a question, post it using the "Message Your Coach" link in the ALEKS learning and practice software. Your coach will respond in the Coaching Center with advice and support.
- Complete each of the objectives to at least 90% mastery.

Taking the Final Exam

- You must be ID Verified prior to taking the final exam if you wish to be eligible for credit following the final exam.
- You may upgrade to ID Verified status at any time during the course.
- After you are ID Verified and achieve 90% proficiency in each of the objectives in the course, you will be invited to take a proctored practice exam in preparation for the final exam. Taking more than one practice exam will better prepare you for the final exam.
- To take the final exam, you will need a web cam and microphone that are compatible with your computer and the proctoring software. You will also need a reliable and robust Internet connection. It is required that you take the practice exam in a proctored setting before taking the final exam to ensure that your system will work.
- You may use pencils, paper, and your scientific or graphing calculator during the proctored practice exam and the proctored final exam.
- You may not use any notes, cell phones, other websites except those white-listed, or help from others as you take the proctored practice exam and the proctored final exam.
- As an ID Verified student, once you pass the final exam with an A, B, or C grade and we have confirmed that your proctoring process was successful (you did not violate academic integrity policies), you will have the opportunity to purchase academic credit from Arizona State University.

Course Grading

Final grades for this course are based on the number of points you earn on the ID Verified final exam. There is no extra credit available. No grade will be assigned to exam scores that are less than 70%. There will be $n_0 + r_0 - r_0$ added to grades.

The grading scale is shown here:

- A = 90% or higher
- B = 80% to 89.99%
- C = 70% to 79.99%

Academic Integrity

The highest standards of academic integrity are expected of all students at all times. For more information, see <u>http://provost.asu.edu/academicintegrity</u> and <u>https://www.edx.org/edx-terms-service</u>

Student Support

The link that follows here will take you to edX's Frequently Asked Questions for Students page: <u>https://www.edx.org/about/student-faq</u>

Disabled students are encouraged to contact our accommodations and accessibility team as soon as possible to ensure we are meeting your needs for success. Please email <u>gfa@asu.edu</u> and we will connect with you.

Subject to Change Notice

All materials are subject to change. It is your responsibility to stay in touch with announcements, connect with your instructor and coaches through the discussion boards, review the course site regularly, and communicate with other students.

This syllabus should not be considered final and may change as the course progresses. The instructors reserve the right to modify it to meet the needs of the class.