Prerequisites. Please review the CSU Catalog & Schedule (http://apps.clayton.edu/courses/schedule) for a complete list of possible prerequisites. Basic computer skills, such as file management and using email, are expected and will not be taught. Please visit the HUB if help is needed using a computer: http://www.clayton.edu/hub.

Course Description. Math 1113 is a three semester credit hour course that is an intensive study of the basic functions needed for the study of calculus. Topics include algebraic, functional, and graphical techniques for solving problems with algebraic, exponential, logarithmic, and trigonometric functions and their inverses. For students in Math 1113, a grade of C or better is a prerequisite for subsequent math courses at Clayton State University.

Course Content. The following sections will be covered in the course:
- Sections 1.1-1.6: Graphs, Functions, and Models (on your own)
- Sections 2.1-2.5: More on Functions (on your own)
- Sections 3.1-3.5: Quadratic Functions, Equations and Inequalities
- Sections 4.1-4.6: Polynomial Functions and Rational Functions
- Sections 5.1-5.6: Exponential Functions and Logarithmic Functions
- Sections 6.1-6.6: The Trigonometric Functions
- Sections 7.1-7.5: Trigonometric Identities, Inverse Functions, and Equations
- Sections 8.1-8.6: Applications of Trigonometry
- Sections 9.3-9.4: Systems of Equations and Matrices (on your own)
- Sections 10.1-10.4 & 10.7: Conic Sections

Course Learning Outcomes. After successful completion of the course the student will be able to
- Identify the inherent restrictions on the domain of a function and find the range of a function.
- Understand the interconnectedness of various modes of defining a function (numeric, graphical, generalized) and be able to analyze functions from numeric, graphical, and symbolic points of view; shift among them when appropriate; and justify this through inductive or deductive reasoning.
- Shift among verbal, numeric, graphical, and symbolic forms as required for particular situations.
- Solve multi-step problems using inductive, deductive, and symbolic reasoning.
- Use appropriate technology in the evaluation, analysis, and synthesis of mathematical information.
General Education Outcomes.

- **Communication**: Students will gain a knowledge base of basic mathematics. Students will communicate their ideas orally in class discussions and in written form on examinations.
- **Critical Thinking**: Students will apply their knowledge to solve mathematical problems. Students will determine the mathematical question, apply appropriate concepts, and provide evidence of a logical progression of thoughts in order to draw conclusions and solve mathematical problems.

Course Materials. The following materials are required and should be brought to every class meeting:

- **Textbook and MyMathLab**: The textbook is *Algebra and Trigonometry*, 5th ed., by Beecher, Penna, and Bittinger. Students are encouraged to use Price Loch (http://www.priceloch.com) to comparison shop for textbooks and other course related materials. New textbooks purchased from the Loch Shop (http://www.clayton.edu/auxiliaries/The-Loch-Shop) should be shrink-wrapped with a MyMathLab access code. All homework assignments will be completed online though the MyMathLab portal (http://www.pearsonmylabandmastering.com). Refer to the MML Login information sheets for your section that have been provided by your instructor for more information. Please note that students have a trial period during which MyMathLab can be accessed free of charge. The absolute final deadline that students have to fully register using a MyMathLab access code is **Monday, January 25**. The textbook has many examples and explanations which are surprisingly helpful when read in conjunction with the in-class discussions. Students should bring the physical textbook to class or have ready access to the e-book provided in MyMathLab. You are encouraged to read the relevant sections of the textbook in advance of the corresponding in-class discussion.

- **Computer**: Students will use their computers during class and on exams as directed by the instructor. Students should have ready access to a computer that meets faculty-approved hardware and software requirements. More information about these requirements can be found on the ITP Choice page (http://www.clayton.edu/hub/ITP-Choice). It is the student’s responsibility to have a working computer. Students having computer issues should inform their instructor and visit the Hub’s Help Center for support.

- **Math Software**: This course uses free software called Graph. Follow the directions provided on the Graph website (http://www.padowan.dk) under the Download tab. Windows user should choose “Release” and Mac users should choose “Graph on Mac.” Mac users may prefer to install Windows on their machines—please visit the Hub Help Center for help with this. **Students will not be allowed to use hand-held calculators in this course.** Use of software or technology that is not approved by the instructor will constitute Academic Dishonesty.

Grading Policy. The final course letter grade for Math 1113 will be determined by the following grading scale: A >= 90% > B >= 80% > C >= 70% > D >= 60 > F.

- **Homework**: Homework will account for 20% of the overall course grade and will be completed in MyMathLab. The Homework Average will be computed as the average of a student’s homework assignments. Reading the sections of the textbook that correspond to a homework assignment is considered part of the homework assignment. MyMathLab homework is not timed and there are three attempts for each problem. Students are strongly encouraged to work on assignments as the material is being discussed in class. In fact, attempting the homework before it is discussed in class is a good idea.

- **Tests**: There will be three tests, each worth 20% of the overall course grade. Test #1 will cover material from Chapters 1, 2, and 3 and will be administered during class on **Monday, February 1**. Test #2 will cover material from Chapters 4 and 5 and will be administered during class on
Friday, February 26. Test #3 will cover material from Chapters 6 and 7 and will be administered during class on Wednesday, April 6. The dates of the tests will not change but your instructor reserves the right to move certain sections if that material has not been covered by the scheduled test date. Students who miss a test will receive a grade of zero (0) on that test. Students may be allowed to take a test earlier than the scheduled date if permission is requested via email at least one week prior to the test.

- **Final Exam.** The Final Exam is worth 20% of the overall course grade. The Final Exam will cover material from Chapters 8 and 10 and will be administered on Monday, May 9, 10:15am-12:15pm, in UC-420. Students who miss the Final Exam will receive a grade of zero (0) on the test. Students may be allowed to take the Final Exam earlier than the scheduled date if permission is requested via email at least one week prior to the exam.

- **Midterm Grades.** The midterm grade for the course will be issued via the DUCK by Monday, February 29. The midterm grade will reflect about 50% of the overall course grade. Based on this grade, the student may choose to withdraw from the course by Friday, March 4 and receive a W. Any student who wishes to pursue this option must fill out an official withdrawal form, available in the Office of the Registrar, no later than the date designated on the official Academic Calendar (http://www.clayton.edu/calendar) for the semester in question. Withdrawal information can be found on the Registrar’s website: http://www.clayton.edu/registrar.

- **Bonus Points.** Students who complete the homework for Sections 9.3 & 9.4 with a score of at least 95% will receive 3 bonus points added to their homework average. Students with three or fewer unexcused absences will be allowed to replace their lowest grade on Test #1, #2, or #3 with the grade on the Final Exam.

**Course Policies.**

- **Attendance.** Attendance is mandatory for all scheduled class meetings. Attendance will be taken daily, usually at the beginning of class. Unless prior approval has been obtained, students who arrive after class starts or before class ends will be issued an unexcused absence. In the event of an unexpected instructor absence or university closure, students should check their email for further instructions.

- **Excused Absences.** The student is responsible for providing satisfactory evidence to the instructor to substantiate the reason for absence. The student should make every effort to inform the instructor via email before the student misses a class. In such cases where this is not possible, the student will have one week to provide verifiable documentation and request an excused absence.

- **Electronic Messages.** The instructor’s email address is ChristopherRaridan@clayton.edu. Use only your CSU email account when corresponding with your instructor. Email from another account will not be answered. Students should check their CSU email accounts often, at least once a day. Do not send time-sensitive information via email; instead, speak with the instructor directly. A delivered email does not relieve a student of the responsibility of informing the instructor in person about some concern. Voice mail or email messages to the instructor are usually returned within two business days (that is, not counting weekends or holidays).

- **Email Etiquette.** Any email sent to the instructor should include in the subject heading the student’s first and last name as well as the course and section number. Failure to do so may result in a delayed response (or no response at all) to an email. Remember to act professionally when sending email to the instructor.

- **Cellphones.** Students are required to mute or silence their cellphones and put them away when the instructor is present in the classroom. Failure to do so will constitute Academic Dishonesty.
Student Resources.

- **The Instructor.** The student’s primary resource is their instructor. The instructor holds regular office hours, which are listed on this syllabus, outside the instructor’s office, and on the instructor’s website.

- **Appointments.** Students should make an appointment via email to meet with the instructor, even during office hours. This will ensure that the instructor does not already have someone else scheduled. Typical office appointments are for 15 minutes so a student should arrive at the appointment prepared to ask questions.

- **Class Notes and Videos.** Class notes and videos are located in Dropbox. The notes and videos for Chapters 1-5 are located in the Math 1111 (College Algebra) Dropbox: [https://www.dropbox.com/sh/n2j0gnx9v7rbn0m/AAA_zCm6CO_Riojg4kRzted7a?dl=0](https://www.dropbox.com/sh/n2j0gnx9v7rbn0m/AAA_zCm6CO_Riojg4kRzted7a?dl=0).
The notes and videos for (most of) Chapters 6-10 are located in the Math 1112 (Trigonometry and Analytic Geometry) Dropbox: [https://www.dropbox.com/sh/a5wga3wahibe0ig/AAAKkLd9dBO_wX0Gv0aWtSaoa?dl=0](https://www.dropbox.com/sh/a5wga3wahibe0ig/AAAKkLd9dBO_wX0Gv0aWtSaoa?dl=0).
Other information related to the class can be found on the course website: [http://www.clayton.edu/faculty/craridan/courses/math-1113](http://www.clayton.edu/faculty/craridan/courses/math-1113).

- **Center for Academic Success.** The Center for Academic Success (CAS) is located in Edgewater Hall, Suite 276. In particular, students can obtain tutoring from peer-tutors, either through drop-in sessions or one-on-one appointments. A complete description of CAS services can be found on their website: [http://www.clayton.edu/cas](http://www.clayton.edu/cas).

- **Disability Resource Center.** Students with disabilities who require accommodations need to register with the Disability Resource Center (DRC) in order to obtain these accommodations. Students registered with DRC who are seeking accommodations for this course should make an appointment with the instructor early in the semester to discuss specific accommodations. The instructor must be given a copy of the accommodations letter provided by the DRC. The DRC staff can be contacted by phone at (678) 466-5445 or via email at disabilityservices@clayton.edu.

- **Operation Study.** The faculty and staff of Clayton State University expect and support high motivation and academic achievement. Look for Operation Study activities and programs that are designed to enhance your academic success.

- **Counseling and Career Services.** Students may obtain help with education, career, and personal concerns from a staff of professional counselors and career advisors. For information about Counseling Services, please visit [http://www.clayton.edu/counseling](http://www.clayton.edu/counseling), and for information about Career Services, please visit [http://www.clayton.edu/career](http://www.clayton.edu/career).

**University Policies.** A complete list of university policies can be found in the current Academic Catalog by visiting [http://www.clayton.edu/publications](http://www.clayton.edu/publications).

- **Student Conduct.** For the health, safety, and general well-being of all students, faculty, and staff, student must abide by the policies set forth in the Clayton State University Handbook ([www.clayton.edu/Portals/46/docs/student-handbook.pdf](http://www.clayton.edu/Portals/46/docs/student-handbook.pdf)) and the Basic Undergraduate Student Responsibilities as listed in the current Clayton State University Academic Catalog ([www.clayton.edu/Portals/5/BasicUndergraduateStudentResponsibilities.pdf](http://www.clayton.edu/Portals/5/BasicUndergraduateStudentResponsibilities.pdf)).

- **Academic Dishonesty.** Any type of activity that is considered dishonest by reasonable standards may constitute academic misconduct. The most common forms of academic misconduct are cheating and plagiarism. All instances of academic dishonesty will be reported to the Office of Student Conduct. Should the student be found guilty of any academic misconduct, a final letter grade of F will be assigned for the course.
• **Disruptive Behavior.** Behavior which disrupts the teaching-learning process will not be tolerated. Conditions attributed to physical or psychological disabilities are not considered as a legitimate excuse for disruptive behavior. A student who fails to respond to reasonable faculty direction regarding disruptive behavior may be dismissed from the course. A student who is dismissed is entitled to due process and will be afforded such rights as soon as possible following dismissal. If found in violation, a student may be administratively withdrawn and may receive a grade of WF (withdrawal-failing) regardless of the student’s current standing in the course. Examples of disruptive behavior and the appeal procedure are provided at the Disruptive Classroom Behavior Web Page:


• **“No Show.”** Any paid student who has failed to attend class by the deadline posted in the official Academic Calendar (http://www.clayton.edu/calendar) for the term will be identified as a “no show.” The “no show” student will be administratively withdrawn from the class and a grade of W$ will be posted. Any appeals on the decision must be made to the Dean of the student’s major. Please review the No Show Policy: http://www.clayton.edu/registrar/No-Show-Policy.

• **“Three-Strikes.”** A student who has withdrawn or earned a less-than-satisfactory grade (D, F, U, W, W$, or WF) a total of three times in a course at Clayton State University will not be allowed to take the course again. Any appeals on the decision must be made to the Dean of the student’s major.

**Other Information.**

• **Changes to the Syllabus.** The instructor of your course reserves the right to add or delete topics from this course and to adjust due dates as needed. Students will be informed of changes via email or during class.

• **Academic Calendar.** The current Academic Calendar (http://www.clayton.edu/calendar) provides general information concerning university deadlines and holidays.

• **Teacher Education:** The mission of the Teacher Education unit is to prepare professional educators who engage in reflective practice and who are competent, caring, committed, collaborative, culturally responsive, and prepared to teach diverse learners in an ever-changing society. The content of this course syllabus correlates to education standards established by national and state education governing agencies, accrediting agencies, and learned society or professional education associations. For more information about teacher education, including the complete Clayton State University Teacher Education Conceptual Framework and educational correlation matrices, please visit http://www.clayton.edu/arts-sciences/Teacher-Ed.