

OnRamps College Algebra

M301, College Algebra Course Syllabus: 2020-2021

| UT Austin Faculty Lead | OnRamps Course Staff | |
|---|--|--|
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1. COURSE DESCRIPTION

In OnRamps College Algebra (Texas Core Curriculum Code 020, TCCN Code Math 1314), students deepen their critical thinking skills and develop their ability to persist through challenges as they explore function families: Linear, Absolute Value, Quadratic, Polynomial, Radical, Rational, Exponential, and Logarithmic. Students analyze data algebraically and with technology while developing their knowledge of properties of functions, matrices and systems of equations, and complex numbers. The pedagogy of the course, Inquiry-Based Learning, encourages students to take an active role in the construction of their learning. This learning will be accomplished by abstraction, generalization, problem-solving, and modeling.

A. Course Pre-requisites

- a. Successful completion of high school-level Algebra 1 course, and
- b. Recommended: Successful completion of high school Geometry or Concurrent Enrollment with Geometry

B. Course Learning Outcomes

By the end of this course, you will have a deeper and more connected understanding of the following:

- a. Function Families: Linear and Absolute Value Functions; Quadratic and Cubic Functions; Polynomial, Rational, and Radical Functions; Exponential and Logarithmic Functions
- b. Function Compositions, Transformations, and Inverses
- c. Matrices and Systems of Equations and Inequalities
- d. The Complex Number System
- e. Modeling, Data Analysis, and Function Regression
- Sequences, Series, and the Binomial Theorem







C. Course Format and Procedures

This course uses Inquiry-Based Learning (IBL), a pedagogy designed to engage students in the educational process. Inquiry-Based Learning is a student-centered methodology, which emphasizes the importance of the active construction of learning. Therefore, students are expected to pose questions, make decisions, design plans and experiments, discuss, collaborate, communicate results, and provide justified answers and explanations when engaged in the inquiry process.

Characteristics of an IBL classroom:

- Students work together in groups to explore various mathematic concepts.
- Instructor listens to student conversation to monitor creation of mathematical ideas.
- Students present work on the document camera. This helps facilitate classroom discussion, closure to a problem, and allows for the Instructor to pose extension questions to the class.
- If a misconception occurs across the classroom the Instructor may choose to bring the class back together and pose leading questions to guide the discussions in the correct direction.

Overall Goals:

- The overall goal is to have students "do" mathematics that is, to have students engage in thinking about the connectedness that exists between various basic areas of mathematics.
- Students should work to provide rigorous arguments at different levels that support the development of these connections.
- The hope is that students will more deeply understand the discipline of mathematics and the fact that if one does not ask "why" when engaging in "doing" mathematics, then the processes experienced are strictly mechanical.

D. University Course Staff

- a. *UT Austin Faculty Lead* A UT Austin faculty member who designs and oversees delivery of the OnRamps college distance course and ensures its alignment to the course as it is delivered at the residential university campus.
- b. OnRamps Course Staff A UT Austin staff member and designee of the UT Austin Faculty Lead who serves as a primary subject-matter expert in the academic discipline of the OnRamps course and provides yearlong support to high school Instructors to ensure the course is delivered with fidelity. As a designee of the UT Austin Faculty Lead, the Course Staff assist with academic







- integrity investigations, sends official University communication to students, and ensures students have access to all course resources and policies.
- c. UT Austin Instructor of Record A UT Austin-appointed staff member who grades or oversees grading of college course work and determines student eligibility and credit award. The UT Austin Instructor of Record also investigates and resolves suspected incidents of academic integrity violations in the distance college course. The UT Austin Faculty Lead, Course Coordinator/Manager, or other UT Austin-appointed staff member may also serve as the UT Austin Instructor of Record.

E. Course Outline

| Unit & Topic | | | |
|----------------------|--|--|--|
| Exam 1 – Units 1 & 2 | | | |
| Exam 2 – Units 3 & 4 | | | |
| Exam 3 – Units 5 & 6 | | | |
| Semester 1 Midterm | | | |
| Exam 4 – Units 7 & 8 | | | |
| Exam 5 – Unit 9 | | | |
| Exam 6 – Unit 10 | | | |
| Semester 2 Final | | | |

2. COURSE REQUIREMENTS

A. Required Materials and Devices

a. Canvas Learning Management System. On Ramps provides an online learning environment in Canvas Learning Management System (LMS) for all students in this class. You will have access to two (2) Canvas courses for the purpose of the dual-enrollment experience: the OnRamps high school course and the OnRamps college course. You are expected to access Canvas weekly for assignments, guizzes, and exams. You will get many of your assignments and turn in your college work in Canvas. You are responsible for reading course information, including assignment instructions and due dates, that is posted in Canvas. You







are also responsible for frequently checking your Canvas Inbox and viewing course announcements.

- i. URL: https://onramps.instructure.com
- b. OnRamps Portal. You will access the OnRamps Portal throughout the term to view information about your current OnRamps distance college course enrollment(s), including whether you are eligible for the opportunity to earn college credit. request accommodations for your distance college course, and make decisions such as whether you wish to accept or decline college credit, if earned, at the end of the course.
 - i. URL: https://utdirect.utexas.edu/apps/ce/osis/
- c. Email. Email is an official means of communication at UT Austin. OnRamps staff will use email to communicate course, enrollment, and credit information to you. It is your responsibility to keep your email address updated in Canvas and the OnRamps Student Portal at all times. You are expected to check email frequently in order to stay current with OnRamps-related communications, recognizing that certain communications may be time-critical. Failure to check email is not acceptable reason for missed communication or missed deadlines.

B. Assignments & Grading

- College Exams occur roughly once every five weeks and cover one to two units per exam.
- Unit Exercise Assessments are taken on Canvas after each College Exam. Exercise Assessments should be taken outside of class. Students are allowed to use notes on all Unit Exercise Assessments.
- College Homework Assignments are completed on Canvas throughout the academic year. College Homework Assignments are graded based on completion.
- OnRamps Learning Modules will take place in three phases: at the beginning of the year, after your first exam, and at the beginning of the Spring Semester. OnRamps Learning Modules are graded based on completion.
- The OnRamps Orientation is taken once at the beginning of the year. The OnRamps Orientation is graded based on completion.





| Assessment | Description | Frequency | Assignment Type | % Course Grade |
|------------------------------------|--|--|-----------------------------------|----------------------|
| College Exams | Summative exams assessing mastery of course content | 3 Unit Exams and 1 Midterm in the Fall; 3 Unit Exams and 1 Final in the Spring | Canvas Quiz and Handwritten | 75% |
| Unit Exercise Assessments | Assessment of completion and understanding of course Exercises | 3 Exercise Assessments in the Fall; 3 Exercise Assessments in the Spring | Canvas Quiz | 10% |
| College Homework Assignments | Completion of outside- of-class practice | Approximately 1 per week; 12 College Homework Assignments in the Fall and 12 College Homework Assignments in the Spring | Canvas Quiz and Handwritten | 8% |
| Learning Strategies Modules | Completion of Learning Strategies Modules | Learning Strategies Modules launch at the beginning of the school year, after the first exam, and at the beginning of the Spring semester. | Canvas Modules | 5% |
| OnRamps Orientation | Completion of OnRamps Orientation | Once at the beginning of the year | Canvas Modules | 2% |
| Total | | | | 100% |





C. College Course Grading Scale

| Α | 89.50 – 100.00 | |
|---|----------------|---------------------------|
| В | 79.50 – 89.49 | |
| С | 69.50 – 79.49 | |
| D | 59.50 - 69.49 | Minimum Eligibility Grade |
| F | 0.0 - 59.49 | |

- a. The lowest of the four Fall exam scores (Exam 1, Exam 2, Exam 3, Semester 1 Midterm) will be dropped from the college grade. The lowest of the four Spring exam scores (Exam 4, Exam 5, Exam 6, Semester 2 Final) will also be dropped from the college grade.
- b. The lowest two College Homework Assignments from the Fall semester will be dropped from the college grade. The lowest two College Homework Assignments from the Spring semester will also be dropped.
- c. The lowest Exercise Assessment from the year will be dropped from the college grade at the end of the school year.
- d. You must earn a minimum average grade of D on college assignments and assessments during the course eligibility period in order to be eligible for the opportunity to earn college credit. If you do not earn a 59.5 or higher, there may be other ways you can gain eligibility. For more information about eligibility, see Section 3. College Credit below.

3. COLLEGE CREDIT

This is a college course delivered via distance education through a dual-enrollment program, which means you may earn credit for M301 in addition to earning high school credit.

A. Eligibility for the Opportunity to Earn College Credit

You may become eligible for the opportunity to earn college credit in two ways:

- a. Eligibility by Grade. If you meet the minimum eligibility grade on college assignments and assessments completed during the first part of the course, you are determined eligible for the opportunity to earn college credit based on your grade.
- b. Eligibility by Texas Success Initiative (TSI). If you do not meet the eligibility by grade criteria, you may submit proof of scores on certain standardized assessments, as outlined in the table below, to achieve eligibility by TSI.





| Assessment | Subject Area | Minimum Score |
|------------------------------|--------------------------|---------------|
| TSI | Math Section | 350 |
| SAT (March 1, 2016 or later) | Math Section | 530 |
| SAT (before March 1, 2016) | Math Section / Composite | 500 / 1070 |
| ACT | Math Section / Composite | 19 / 23 |

B. College Credit Decision Period

Students with Eligible status may elect to accept or decline any college credit earned during the five-day College Credit Decision Period, which will occur after you receive your final college grade. You will receive an email notification from OnRamps when your Credit Decision Period begins.

If you do not make a decision During the Credit Decision Period, OnRamps will determine course credit as follows:

- C or above. You earned credit and will be issued a UT Austin transcript unless you decline credit in the OnRamps Portal.
- D. You earned credit but will not be issued a UT Austin transcript unless you accept credit in the OnRamps Portal.
- F. You did not earn credit and will not be issued a UT Austin transcript.

C. College Transcript

If you earned and accepted college credit, you may request an official UT Austin transcript through the UT Austin Office of the Registrar in June 2021. You will receive an email notification from OnRamps when your transcript is available.

4. POLICY INFORMATION

A. Students with Disabilities

If you receive high-school accommodations related to a disability under the Individuals with Disabilities Education Act (IDEA) or Section 504 of the Rehabilitation Act, you may also receive certain accommodations in your OnRamps college course. Accommodations in an OnRamps course must follow accommodations in your Individual Education Plan or







504 Individual Accommodation Plan and be allowable under the university assessment practices. Accommodations are individualized and based on need and disability.

You must make your need for accommodations known to OnRamps Course Staff prior to the due date for an assignment in order to access accommodations for that assignment. You are strongly encouraged to provide information about your need for accommodations during registration at the beginning of the course or immediately following changes to your Individual Education Plan or 504.

B. Academic Integrity

OnRamps students are subject to the University's academic integrity policies. Academic integrity is honesty in your academic work. Each student in the course is expected to abide by the University's Student Honor Code:

"As a student of The University of Texas at Austin, I shall abide by the core values of the University and uphold academic integrity."

This means that work you produce on assignments and exams is all your own work, unless it is assigned as group work. The UT Austin Instructor of Record or your high school Instructor will make it clear for each assignment or exam whether collaboration is allowed. Refer to Section 2, Part B: Assignments and Grading for further details about assignment types in your course.

You are responsible for understanding UT Austin's Academic Honesty Policy which can be found here: https://deanofstudents.utexas.edu/conduct/academicintegrity.php You must respond to email requests from OnRamps staff for investigations of potential academic integrity violations. If you fail to respond to email requests about potential academic integrity violations from OnRamps staff, you may receive an academic disciplinary action.

More information about academic integrity may be found in the OnRamps Orientation in Canvas.

C. Student Code of Conduct

As a participant in the UT Austin OnRamps program, you are expected to uphold a high standard of integrity and ethical behavior. This includes using UT Austin resources in an appropriate, ethical manner for the purpose of learning. Prohibited behavior includes:

- Unauthorized use of institutional technology and services
- Providing false or misleading information about an academic record







Engaging in violent or disruptive conduct, including hazing, stalking, or behavior that impedes, interferes with, or disrupts any University teaching, research, administrative, disciplinary, public service, learning, or other authorized activity.

Failure to abide by the student code of conduct may result in an academic sanction or removal from the course. For more information about standards of behavior, refer to The University of Texas catalog, Chapter 11, Student Discipline and Conduct: http://catalog.utexas.edu/general-information/appendices/appendix-c/studentdiscipline-and-conduct/

D. FERPA

All students in OnRamps are college students and subject to the federal Family Educational Rights and Privacy Act (FERPA). As a participant in the UT OnRamps program, it is important that you understand these rights as they apply to you.

Under FERPA, university staff may not share information regarding a student's college coursework or academic standing (grade point average, academic transcript, academic probation, or discipline records).

Exceptions:

- 1. If the student signs a waver stating that FERPA-protected information may be released to the student's parent/guardian, university staff may share the FERPAprotected information with the parent/guardian.
- 2. If university staff share FERPA-protected information with high school staff, including the high school Instructor, and the student is under 18 years of age, then the high school staff may share that information with the student's parent or guardian.
- 3. If university staff suspect a student presents a significant risk of harm to self or others, university staff may disclose FERPA-protected information with a student's parent/guardian, high school Instructor, principal, or other appropriate authority to ensure the safety of the student and/or other individuals.

For more information about FERPA, refer to The University of Texas catalog, chapter 9, Educational Records: https://catalog.utexas.edu/general- information/appendices/appendix-c/educational-records/

