



Discovery Precalculus
M 305G, Preparation for Calculus
Course Syllabus: 2018-19
Group B

| UT Austin Faculty Lead | UT Austin Instructor of Record | Course Coordinators |
|------------------------|------------------------------------|---|
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1. COURSE DESCRIPTION

Using a creative and connected approach, students deepen and extend their knowledge of functions, graphs, and equations from their high school algebra and geometry courses so they can successfully work with the concepts in a rigorous university-level calculus course. This course is designed to push students well beyond “drill and kill” exercises, emphasizing conceptual understanding of mathematical definitions and developing logical arguments with their peers.

This course may be used to fulfill the mathematics component of the university core curriculum and addresses the following three core objectives established by the Texas Higher Education Coordinating Board: communication skills, critical thinking skills, and empirical and quantitative skills.

Mathematics (Texas core code 020)

A. Course Pre-requisites

- Passed Algebra II

B. Course Learning Outcomes

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

1. Functions, Rates, and Patterns
2. Algebra and Geometry
3. Exponential and Logarithmic Functions
4. Trigonometry
5. Limits and Rate of Change of Functions
6. Exploring Other Coordinate Systems
7. Sequences and Series

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.

D. Course Staff

- *UT Austin Faculty Lead* – A UT Austin faculty member who designs the curriculum and pedagogical approach of the OnRamps college course, and who oversees delivery of the alignment of the course with the expectations of the course as it is delivered on the residential campus. The UT Austin Faculty Lead who oversees delivery of the OnRamps distance college course, ensures alignment of the OnRamps course to the course delivered at the residential university campus
- *Course Coordinator* – A UT Austin staff member and designee of the UT Austin Faculty Lead, the Course Coordinator serves as the primary subject-matter expert in the academic discipline of the OnRamps course, and provides yearlong content, pedagogy, technology, and educator excellence support to high school instructors to ensure the course is delivered with fidelity. As a designee of the Faculty Lead, the Course Coordinator may assist with academic integrity investigations, send official University communication to students, and ensure students have access to all course resources and policies.
- *UT Austin Instructor of Record* – A UT Austin-appointed staff member who grades or oversees grading of college course work and who determines student eligibility and credit award. The Instructor of Record also supervises course graders, if any, and investigates and resolves suspected incidents of academic integrity violations in the college course. UT Austin Faculty Lead or Course Coordinator may serve as the UT Austin Instructor of Record

E. Course Schedule Group B

| Approximate Dates | Unit & Topic | | Approximate Dates | Unit & Topic |
|-------------------|-------------------------|--|-------------------|-----------------------|
| 9/21 – 10/5 | Unit 1 Exam | | 1/18 – 2/1 | Unit 4A Exam |
| 10/26 – 11/9 | Unit 2 Exam | | 2/20 – 3/6 | Unit 4B Exam |
| 11/28 – 12/12 | Unit 3 Exam | | 3/15 – 4/6 | Unit 5 Exam |
| 12/5 – 12/19 | Cumulative Midterm Exam | | 4/19 – 5/3 | Unit 6 Exam |
| | | | 4/26 – 5/10 | Cumulative Final Exam |

2. COURSE REQUIREMENTS

A. Required Materials and Devices

- **Canvas Learning Management System.** OnRamps provides an online learning environment in Canvas Learning Management System (LMS) for all students in this class. You will have access to two 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 quizzes and exams. You are responsible for course information, including assignment due dates and instructions, which is posted in Canvas.

URL: <https://onramps.instructure.com>

- **OnRamps Student Portal.** You will also visit the OnRamps Student Portal throughout the term to view and make decisions about your current OnRamps enrollments, including whether you are eligible for the opportunity to earn college credit, the type of credit you wish to receive (Letter Grade or Pass/Fail), and, at the end of the course, whether you wish to accept or decline college credit, if earned.

URL: <https://utdirect.utexas.edu/apps/ce/osis/>

- B. Email.** Email is an official means of communication at UT Austin. Your UT instructor will use this medium to communicate class, enrollment, and credit information. It is your responsibility to keep your email address updated in Canvas and the OnRamps Student Portal at all times. E-mail returned to OnRamps with “User Unknown” is not an acceptable excuse for missed communication. You are expected to check e-mail on a frequent and regular basis in order to stay current with OnRamps-related communications, recognizing that certain communications may be time-critical. Regular e-mail management will also minimize the risk that the inbox will be full, causing the e-mail to be returned to sender with an error. Undeliverable messages returned because of either a full inbox or use of a spam filter will be considered delivered without further action required by OnRamps.

C. Classroom Expectations

- **Class participation.** Participation with peers is a critical feature to this course. Presenting your work to and with the class is also a frequent expectation.
- **Behavioral expectations.** You should conduct yourself in a collegial manner with your peers and instructor.
- **Class attendance.** Attendance is critical to the learning in this course. If an absence is expected, then arrangements should be made with the High School Instructor of Record prior to the absence. If an absence is unexpected then students must communicate with the High School Instructor of Record as soon as possible to make arrangements to make up the missed work. If missed assignments are not made up in a timely manner the grade may result in a zero.

D. How to Succeed in this Course

M 305G is designed to help you become a more effective independent learner and problem solver, both essential skills to succeed in college. Here are a few ideas for how to be successful in a college course adapted from the Sanger Learning Center on UT-Austin Campus:

- **Prepare for Success.** Attend class and do your assigned readings and homework. When you miss class, make time to make up your work. Advocate for yourself if you know you will be absent by planning ahead and determining upcoming assignments that you will miss.
- **Time & Goals.** Take time at the beginning of each week to assess your weekly commitments and goals. Allocate time to achieving your goals on a daily basis. Make



sure your goals are SMART: Specific, Measurable, Action-Oriented, Realistic and Time-Bound.

- **Be active.** Engage yourself in the learning process. Accomplish this by asking questions if you do not understand a concept, trying a problem again a different way if you get stuck or forming a study group and working together. Actively studying can take many forms, but one of the most effective methods is reviewing course material weekly and teaching concepts from the course to peers.

E. Assignments & Grading

- Unit Exams occur roughly once a month at the end of each Unit (Unit 4 is assessed twice due to its length). Most exams have two portions: a Canvas portion and a hand written portion.
- The Unit Exploration Assessment is taken on Canvas after the Unit Exam. There will be a one-week window to complete the assessment, and the assessment can be taken outside of class. Students are allowed to use notes and peers on the assessment.
- The OnRamps Orientation is taken once at the beginning of the year. Students will receive a completion grade in the college course.

| Assessment | Description | Frequency | % Course Grade |
|------------------------------|---|---|----------------|
| Unit Exams | Assessment of core skills and foundational understanding for each unit. | Once a Unit (two for Unit 4) | 90% |
| Unit Exploration Assessments | Assessment of key understanding of Explorations for each unit. | Once a Unit (two for Unit 4) | 9% |
| OnRamps Orientation | Modules introducing students to an OnRamps Course. | Once at the beginning of the school year. | 1% |
| Total | | | 100% |

- **Grading Scale**
 - 100-90% = A
 - 89-80% = B
 - 79-70% = C
 - 69-60% = D
 - 59-0% = F
- A cumulative midterm exam may be taken after Unit 3 to replace the lowest exam grade for Units 1, 2, or 3.
- You must earn a minimum average grade of **60** on college assignments and assessments during the eligibility period, which is the first part of the academic term, to be eligible for the opportunity to earn college credit. If you do not earn the minimum grade to be eligible for the opportunity to earn college credit, there are other ways you can gain eligibility. For more information about eligibility, see section **3. College Credit**.



- A cumulative final exam that covers material from Units 4, 5 and 6 may be taken after Unit 6 to replace the lowest exam grade for Exams 4A, 4B, 5, or 6.
- If part of an exam is missed a zero will be given for the missed portion. The students can use the midterm exam to replace the lowest first semester exam grade, and the final exam may replace the lowest second semester exam grade.

3. COLLEGE CREDIT

This is a dual-enrollment course, which means you may earn credit through the UT Austin University Extension for M 305G in addition to earning high school credit. This course is taught via distance by a UT Austin Instructor of Record.

Your High School Instructor of Record is responsible for assigning high school grades and determining high school credit. The UT Austin Instructor of Record is responsible for assigning college grades and determining college eligibility and credit. High school grades may differ from college grades, even on identical assignments, because of differences in high school and college expectations. Your high school grades or work will not contribute to your college grade.

A. Eligibility for the Opportunity to Earn College Credit

You demonstrate eligibility for the opportunity to earn college credit through your grades on your college assignments during the eligibility period, which is the first part of the academic term.

- **Grade-Based Eligibility.** If you meet the minimum eligibility grade of a **60** on college assignments and assessments completed during the first part of the academic term, you are determined eligible for the opportunity to earn college credit based on your grade.
- **Eligibility by Submitting Texas Success Initiative (TSI) Documentation.** If you do not meet the grade-based eligibility criteria, you can submit proof of scores on certain standardized assessments, as outlined in the table on the next page.

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

B. College Credit Process

Throughout the term, you will view information and indicate decisions about your college course in the OnRamps Student Portal (<http://utdirect.utexas.edu/apps/ce/osis>). Access the portal to:

- Register for your course;
- View your eligibility status;
- Select a college credit type (if you are eligible to earn college credit);
- View your final course grade;
- Indicate your decision to accept or decline any college credit earned; and



- Access various enrollment-related resources, tips, deadlines, instructions, and other important information about your college course enrollment.

The table below describes the college credit process. Throughout the year you will be provided with detailed information and instructions for accessing the portal and indicating your decisions about your college course.

Important Steps and Dates in College Credit Process (2018-2019)

| Step | Action | Dates |
|------|--|--|
| 1 | <p>UT Austin Instructor of Record determines your eligibility for the opportunity to earn UT Austin credit based on grades on college assignments and assessments.</p> <p>Visit the OnRamps Student Portal to find out if you are eligible for the opportunity to earn UT Austin credit.</p> | Jan 15, 2019 8am CT |
| 2 | If you are ineligible for the opportunity to earn UT Austin credit, you may submit TSI documentation for Mathematics to demonstrate college readiness. | Jan 23, 2019 8am CT |
| 3 | UT Austin Instructor of Record reviews TSI documentation and makes final determination of whether you are eligible for the opportunity to earn UT Austin credit. | Feb 1, 2019 8am CT |
| 4 | <p>If eligible for the opportunity to earn UT Austin credit, visit the OnRamps Student Portal to select the type of credit you wish to earn:</p> <ul style="list-style-type: none"> • Letter Grade: You are taking the course for a letter grade, such as A, B, C, or D. If you earn and accept credit for the course, the letter grade you earn will appear on your UT Austin transcript; or • Pass/Fail: You are taking the course for credit only. If you earn and accept credit for the course, "CR" indicating credit earned will appear on your UT Austin transcript. | Fri, Feb 25, 8am CT – Fri, Mar 15, 5pm CT |
| 5 | <p>UT Austin Instructor of Record determines whether to award UT Austin credit based on your grades on college assessments in the course.</p> <ul style="list-style-type: none"> • Letter grade of D- or above or Pass: You earned credit and will be issued a UT Austin transcript if you choose to accept credit. • Letter grade of F or Fail: You did not earn credit and will be automatically dropped from course. You will have no official academic record or transcript for the course at UT Austin. <p>Visit OnRamps Student Portal to find out your final grade and whether you earned college credit. You may elect to decline any credit earned. If you decline credit, you will have no official academic record or transcript for the course at UT Austin.</p> | Mon, May 20, 8am CT – Fri, May 24, 5pm CT |
| 6 | If college credit earned and accepted, request official UT Austin transcript through the UT Austin Office of the Registrar. | Beginning Mon, Jun 10, 2019 |



4. POLICIES AND RESOURCES

A. Students with Disabilities

If you receive high-school accommodations related to a disability, you may also receive accommodations in your OnRamps course. Accommodations in an OnRamps course follow accommodations in your Individual Education Plan or 504 that have been provided by the high school that are allowable in alignment with UT Austin accommodations. Accommodations are individualized and based on your need and disability. You must make your need for accommodations known to the UT Austin Instructor of Record prior to the due date for an assignment in order to use accommodations for that assignment. You are strongly encouraged to provide information about your need for accommodations at the beginning of the course or immediately following changes to your Individual Education Plan or 504.

Possible accommodations that are allowable depending on your need and disability include extended test time, test administration in a reduced-distraction area, utilizing speech software, using a calculator in certain circumstances, or reading test questions aloud (but NOT explaining the questions).

B. Academic Integrity

OnRamps students are subject to the University's academic integrity policies. Each student in the course is expected to abide by the University's 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 Instructor of Record or your high school instructor will make it clear for each assignment or exam whether collaboration is allowed.

Always cite your sources. If you use words or ideas that are not your own (or that you have used in work submitted in a previous class, you must make that clear. Otherwise you will be guilty of plagiarism and subject to academic disciplinary action, including failure of the course.

You are responsible for understanding UT's Academic Honesty Policy which can be found here:
http://deanofstudents.utexas.edu/sjs/acint_student.php

Students are required to respond to e-mail requests from OnRamps staff for investigations of potential academic integrity violations. Failure to respond to e-mail requests about potential academic integrity violations from OnRamps staff may result in academic disciplinary action.

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



C. 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.

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/student-discipline-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, the University Course Staff may not discuss a student's college coursework with the student's parent or guardian. Additionally, University Course Staff do not share information regarding a student's academic standing (GPA, academic transcript, academic warning, academic probation, or discipline records), unless the student signs a waver stating that the student's academic information may be released to the student's parent/guardian if requested.

Exceptions:

1. If University Course staff share information regarding a student's academic coursework or standing 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 if requested.
2. If OnRamps staff suspect a student presents a significant risk of harm to self or others, OnRamps staff may disclose FERPA-protected information, including academic coursework and grades, to 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 on FERPA and how it applies to you please visit the U.S. Department of Education: <http://www2.ed.gov/policy/gen/guid/fpco/ferpa/index.html>