

## Course Information for Math 32

Welcome to Math 32.

instructor: Jeff Hicks

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office hours: M 4-5 pm, F 2-3 pm, and roaming office hours

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webpage: <https://math.berkeley.edu/~jhicks/classes/spring19math32/courseindex.php>

### Textbook

The textbook for the course is *Precalculus: Prelude to Calculus, 3rd Edition* by Sheldon Axler. It is available from the CalStudent store. You are welcome to read along using an earlier edition if you choose; however exercises will be assigned and graded using the numbering of the 3rd edition, so be sure to have a copy accessible for the purpose of HW.

### Grading

Grades come from four portions: 25% HW and Quizzes, 25% Midterm I, 25% Midterm II and 25% Final.

There are no make up exams, homeworks or quizzes. However your final exam score may be substituted for the lower of either midterm 1 or 2. This allows you to miss one of the two midterms. Furthermore, we will drop your lowest two quiz and homeworks. Grades in this course will be curved. Grades will be maintained on Bcourses.

If you have questions about your grades in the course, please email me and we can schedule a meeting outside of office hours.

### Homework and Quizzes

There will be a short weekly quiz on Wednesday, and weekly homework due on Monday during discussion. There are no make-up quizzes or late homeworks, however your lowest two quiz and homework scores will be dropped.

Homeworks are assigned for your own self evaluation. For this reason, I suggest that you work on a few problems from each assignment without using references (such as solutions manuals, on-line resources, office hours, tutors, or the textbook) so you can gauge your comfort in the material. Remember that the homework is only worth a small portion of your grade in the course and you will not be able to use any outside resources on the exams. The homework load in this course can be high at times, but being able to complete the exercises on your own is necessary to succeed in the course. I encourage you to start the homework early so that you have time to ask questions related to the homework at office hours and discussion.

The purpose of quizzes is to track your progress throughout the semester, and to serve as a place for us to provide you with feedback on your work.

## Exam Information

This course has three exams: two midterms, and a final.

The first midterm is on Feb 27th. The second midterm is on April 12th. The final exam is cumulative and on Wednesday 5/15/19 between 7-10 PM. While there are no make up exams, you are allowed to replace the lower of your two midterm exams with your final exam score. Therefore, it is possible to miss one midterm exam.

Please remember the following for the exam:

- There are no notes, notecards, calculators or phone allowed during the exam.
- Please bring a black or blue pen.
- Full work must be shown for each problem on exams and quizzes to receive credit. On exams, box the solution that you would like us to grade.
- Show up on the hour for the exam, so we may begin the test promptly at 3:10PM.

## Academic Integrity

All work that you submit must be your own. You are welcome to collaborate with peers on your homework, but the final write ups must be done individually. You are also welcome to use outside resources to help with your problem sets, but *you must cite any resources used*. Please remember that the purpose of homework is to help you practice the material, so using additional references for your homework will put you at a disadvantage in the course, and somewhat defeats the purpose of doing the exercises. Copying without properly referencing sources will result in a zero on the assignment, and possibly more serious consequences.

Academic dishonesty of any form is unacceptable, and will be reported to the Center for Student Conduct.

## Accommodations

If you anticipate that you will need accommodations for the course, please let me know, and additionally contact the DSP office during the first weeks of the semester. For accommodations, you must submit a letter of accommodation from the DSP office at least 2 weeks in advance of the date when you will require the accommodation.

## Additional Resources

The Student Learning Center provides a number of resources for Math 32 students. In previous semesters, they have offered an adjunct course supplemental to this course which covers study skills for mathematics. They also maintain drop-in tutoring, which is like an additional set of office hours.

## Syllabus

1/21	M		<i>Academic and Administrative Holiday</i>
1/23	W	0.1	Real Numbers
1/25	F	0.2	Algebra on Real Numbers
1/28	M	0.3	Inequalities, Intervals and Absolute Value
1/30	W	1.1	Functions
2/1	F	1.2	Coordinate Plane and Graphs
2/4	M	1.3	Function Transformations and Graphs
2/6	W	1.4	Composition of Functions
2/8	F	1.5	Inverse Functions
2/11	M	1.6	Graphing Inverse Functions
2/13	W	2.1	Lines and Linear Functions
2/15	F	2.2	Quadratics and Conics
2/18	M		<i>Academic and Administrative Holiday</i>
2/20	W	2.3+2.4	Polynomials
2/22	F	2.5	Rational Functions
2/25	M		Review
2/27	W		<b>Midterm I</b>
3/1	F	3.1	Logarithms as inverses of Exponential
3/4	M	3.2	Power rule for Logarithm
3/6	W	3.3	Product and Quotient Rules for Logarithm
3/8	F	3.4	Exponential Growth
3/11	M	3.5	E and the natural log
3/13	W	3.6	Approximations and area with e and ln
3/15	F	3.7	Exponential Growth revisited
3/18	M	4.1	The Unit Circle
3/20	W	4.2	Radians
3/22	F	4.3	Cosine and Sine
3/25	M		<i>Spring Recess</i>
3/27	W		<i>Spring Recess</i>
3/29	F		<i>Spring Recess</i>
4/1	M	4.4	More Trig Functions
4/3	W	4.5	Trigonometry in Right Triangles
4/5	F	4.6	Trigonometric Identities
4/8	M		Review
4/10	W		Review
4/12	F		<b>Midterm II</b>
4/15	M	5.1	Inverse Trigonometric Functions
4/17	W	5.2	Inverse Trigonometric identities
4/19	F	5.3	Using Trigonometry to compute Area
4/22	M	5.4	The Law of Sine and Law of Cosines
4/24	W	5.5	Double Angle and Half-Angle formula
4/26	F	5.6	Addition and Subtraction Formula
4/29	M	5.7	Transformations of Trigonometric Functions
5/1	W		Additional Topics
5/3	F		Additional Topics
5/6	M		Review / RRR
5/8	W		Review / RRR
5/10	F		Review / RRR
5/15	W		<b>Final Exam</b>