Course Syllabus
Calculus Preparation
Math 2AX, Winter 2026

Catalogue description. Group activities designed to review and reinforce fundamental concepts essential for success in Calculus. Linear functions, quadratic functions, polynomials and rational functions; exponentials and logarithms; trigonometry; absolute values. Graphs of functions. To be taken concurrently with Math 2A.

Instructor. Christopher Davis, daviscj@uci.edu, RH 440J

Meetings. TBA

Office Hours. The instructor will hold weekly office hours, either over Zoom or in person. See our course website for details.

Class Website. https://canvas.eee.uci.edu/courses/???

Corequisite. Math 2A.

Textbook. *OpenStax: Algebra and Trigonometry*, 2nd Edition. See here.

Why should I take this class? Calculus is a beautiful subject filled with beautiful new ideas. Functions are the fundamental objects studied in Calculus, and the more comfortable you are with a catalogue of essential functions (including polynomials, trigonometric functions, and exponential functions), the more you will be able to focus on the new ideas introduced in Calculus. Especially helpful is being able to sketch graphs of these essential functions.

Whether it's been years or months since your last math class, Math 2AX will help you become more comfortable with these topics. The material for each week of Math 2AX will be specifically chosen to complement the same week of Math 2A.

Learning Outcomes. The primary learning outcomes for Math 2AX are that students will be able to:
- sketch graphs of basic functions;
- algebraically simplify expressions involving functions, including expressions involving fractions, radicals, and exponents;
- explain the effect of transformations on functions;
- relate trigonometric values to geometric values (the unit circle and right triangles);
- solve a mathematical problem in a clear and well-organized manner, suitable for an exam setting;
- translate a word problem into an equation;
- work with classmates in a supportive environment;

Grading. Grading of Math 2AX is Pass/No Pass. To earn a grade of Pass, students are expected to attend at least 8 of the weekly meetings and to successfully complete at least 8 weekly homeworks, including the *Final Review homework* (in other words, the Final Review homework cannot be one of your dropped homeworks).

Attendance. Attendance will be taken through uploading group worksheets at the end of each class. These worksheets will not be graded, but solutions will be provided after class. The primary goal of Math 2AX is to support you for Math 2A and future math coures. If the attendance requirement is causing difficulties in your schedule, please reach out to the instructor and flexibility will be available. If you are interested in joining the class late, please contact the instructor, and do not worry about missed meetings from the beginning of the quarter.

MyOpenMath Homework. MyOpenMath is a free platform for auto-graded math questions. Weekly homeworks will be based on the previous week's material and will be due on Wednesdays at 11:59pm. These

homeworks are meant to help you recognize the essential material from the previous class. These are low-stakes, open book, unlimited attempt auto-graded assignments. A specific "passing score" will be specified for these homeworks, but you are highly encouraged to aim for a perfect score on each. There is also a *Final review homework* due during Finals week. It is the same format as the other homeworks, but it cannot be one of your dropped homeworks. You are highly encouraged to complete that final assessment before the Math 2A Final exam.

Class Schedule.

Week	Topic
1.	Famous functions and their graphs
2.	Algebraic manipulations. MyOpenMath homework due
3.	Linear functions and piecewise functions. MyOpenMath homework due
4.	Trigonometric functions, values, and identities. MyOpenMath homework due
5.	Composition of functions. MyOpenMath homework due
6.	Exponential functions and logarithms. MyOpenMath homework due
7.	Inverse functions. MyOpenMath homework due
8.	Word problems. MyOpenMath homework due
9.	Curve sketching. MyOpenMath homework due
10.	Recap and summary. Strategies for math exams. MyOpenMath homework due
Finals.	MyOpenMath final review homework due

Ed Discussion. Ed Discussion is an online question-and-answer forum. Ed Discussion can be used for asking for clarification on course material, checking logistical details about the class, finding classmates to work with, etc.

Support from the Disability Services Center. University of California, Irvine is committed to providing a barrier free environment for persons with documented disabilities. If you have any questions about accommodations, please contact the Disability Services Center at 949-824-7494 or register online at https://dsc.uci.edu/.