## Math 32: Precalculus I Winter 2023

Instructor:John JimenezClass Time:MTWR 01:30-03:45pEmail:jimenezjohn@fhda.eduOffice Hours:MTWR 9:00 – 9:50a

## That this course is a part of the Math Performance Success Program.

#### **Program Mission**

The Math Performance Success (MPS) program established at De Anza Community College in 1999, aims to help all underrepresented students meet their goals by improving student success in math through innovative and collaborative approaches including extended lecture time, in-class tutoring, and embedded counseling services.

### **Program Philosophy**

The MPS program team members are dedicated to the philosophy that any willing student with the proper support and services can succeed in mathematics. Instructors, counselors, and tutors collaborate to help students complete their mathematics requirements. **The MPS program is designed for students who have had previous difficulty with Math.** 

#### Structure

How does an MPS Math Classroom look like?

Students in the MPS program attend math class for two hours a day, approximately 10 hours a week, double the class time compared to a stand-alone math course. This extended instructional time, provides ample time for lecture, class activities, mindfulness, and group work. Tutors are available during the second part of the class to assist students who have questions about the material. Counselors also use the second hour of this class to check-in on students and make sure they are on track in succeeding in the course.

### Important contact information:

Director, STEM Success Program	MPS Counselor/Coordinator
Yvette Campbell, PHD	<ul> <li>Yolanda Johnson</li> </ul>
campbellyvette@fhda.edu	johnsonyolanda@fhda.edu
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Program Coordinator	Tutors
Deepa Yuvaraj	TBA
yuvarajdeepa@fhda.edu	

If you have any questions regarding the program, you can contact myself or anyone listed above. Preferably the counselors.

### **Required Text and Recommended Materials:**

- (Free) Online textbook: Precalculus 2e, Abramson: https://openstax.org/details/books/precalculus-2e
- Calculator: Although not necessary for most of this course, it can sometimes be helpful to have access to some type of graphing calculator. This can be a physical graphing calculator or free online graphing tool such as <a href="https://www.desmos.com/">https://www.desmos.com/</a> or <a href="https://www.wolframalpha.com/">https://www.wolframalpha.com/</a>.
- Access to <a href="https://deanza.instructure.com/">https://deanza.instructure.com/</a>. Canvas is where all the course information will be available. Information regarding grades, lectures, resources, etc.

#### **Goals for Students in the Course:**

- To build a solid foundation for future calculus courses.
- To build confidence in their academic abilities in the math class and beyond.
- Be able to collaborate and discuss mathematics with classmates.
- To gain intuition behind concepts in the course.

#### **Grading:**

Midterm Exams	Homework	Project	Discussions	Final
40 %	35 %	5%	5%	15 %

Grading scale	
90-99.9% A	70-77.9% C
88-89.9 % B+	68-69.9 % D+
80-87.9% B	60-67.9% D
78-79.9% C+	≤ 59.9 F

**Exams 40 %:** Midterm exams will be given throughout the quarter. See the schedule at the end of the syllabus for the dates of the midterms. The lowest midterm score will be dropped.

**Homework 35 %:** Homework will be assigned at the beginning of each lecture week and will be due one week after it is assigned.

**Project 5 %:** There will be one project to enrich your understanding of topics studied in the course and beyond.

**Discussions 5 %:** There will be some informal discussion board topics to build a sense of community.

**Final 15 %:** The final for this course will be a two-hour cumulative exam. The final exam time for this class is on Tuesday 03/28/2023 from 1:45 PM to 3:45 PM.

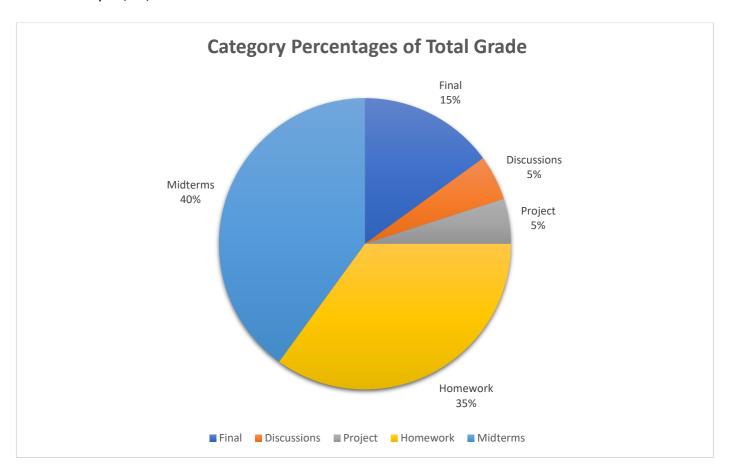


Figure 1: Grade categories for the course as a percentage of total grade.

**Assignment submission recommendation:** All assignments will have due dates posted but I will still accept your assignment if it is not completed by the due date. If for some reason you cannot turn in an assignment, turn it in as soon as possible. This is to avoid falling behind with the material which can be detrimental toward your experience in any STEM course.

**Attendance:** This class will be synchronously held via Zoom (link posted in Canvas).

#### You may be dropped from the course if:

- You have multiple missing assignments.
- You do not interact with Canvas regularly to keep up with the course.
- Failure to communicate why you miss a synchronous meeting or miss an assignment deadline.

Note that if for any reason you feel like you may need to drop the course, it is your responsibility to do so.

#### How to Succeed in this Course:

• The Student Success Center tutors and workshops area a great place to start! Watch the <a href="SSC">SSC</a> Welcome Video to learn more.

#### **Tutoring:**

For tutoring through MPS visit <a href="https://www.deanza.edu/mps/mpstutoring/index.html">https://www.deanza.edu/mps/mpstutoring/index.html</a>.

For tutoring through The Student Success go to <a href="http://deanza.edu/studentsuccess">http://deanza.edu/studentsuccess</a> and click to join a Zoom tutoring room during open hours.

**Workshops:** Attend a <u>Skills Workshop</u>, a <u>content-specific math/science workshop</u>, an <u>Accounting chapter review workshop</u>, or a <u>Listening and Speaking workshop</u>.

**Resources:** Join the <u>SSC Resources Canvas site</u> to see content and learning skills links.

**After-hours or weekend tutoring:** See the <u>Online Tutoring</u> page for information about NetTutor (via Canvas) or Smarthinking (via MyPortal).

It is known that students who participate in tutoring, group study, or workshops for three or more hours a week succeed at much higher rates than those who do not. The students who most need the help may reluctant, but if you take the first step in seeking resources you will be glad you did.

• I encourage students to ask me any questions about the course content if they wish! You can reach me from 9:30-10:20a M-Th via <a href="Zoom">Zoom</a>. This is another great place to get help on material related to the course.

**Disability Statement:** If you have a disability related need for academic accommodations or services in this course, you will need to provide me with a Test Accommodation Verification Form (TAV form) from Disability Support Services (DSS) or the Educational Diagnostic Center (EDC). Students are expected to give a two week notice if they are in need of accommodations. For those students with disabilities, you can obtain a TAV form from their DSS counselor (408 864-8753 DSS main number) or EDC advisor (408 864-8839 EDC main number). The application process can be found here: <a href="https://www.deanza.edu/dsps/dss/applynow.html">https://www.deanza.edu/dsps/dss/applynow.html</a>

**Academic Integrity:** If it is suspected that academic dishonesty is taking place on an assignment, the college will be notified and will result in a failing grade on the assignment or a failing grade in the class. For further information on academic integrity please see <a href="https://www.deanza.edu/policies/academic integrity.html">https://www.deanza.edu/policies/academic integrity.html</a>.

# **Tentative Course Schedule:**

Week	Section
1	Graphs
	Linear Equations
	Functions
2	Analyzing Graphs
	Parent functions
	Transformations
3	Combinations of functions
	Inverse Functions
	Math Modeling
	Quadratic Equations
	Synthetic Division
4	Complex Numbers
	Exam 1
	Project 1 Assigned
	Rational Functions
5	Non-linear Inequalities
6	Exponential and Logarithmic Functions
7	Properties of Logarithmic Functions
	Exponential and Logarithmic Functions
	Exponential and Logarithmic Models
	Systems of Equations
8	Multivariable Systems
	Systems of Inequalities
	Exam 2
9	Sequences
	Arithmetic
	Geometric
10	Lines
	Parabolas
11	Ellipses
	Hyperbolas
	Translations of Conic Sections
	Project 1 Due
12	Final Exam in on Tuesday 03/28/2023 from 1:45
	PM to 3:45 PM.

# **Important Dates:**

Date	
Jan 16	Martin Luther King Jr. Holiday – No classes.
Jan 22	Last day to drop without a W.
Feb 17-20	Presidents' Holiday – No classes.
March 3	Last day to drop classes with a W.
March 27-31	Finals Week: Final Exam for this course in on Tuesday 03/28/2023 from 1:45 PM to 3:45 PM.

<b>Course Description:</b> This course cover graphs, solving equations, conic sect		

## **Student Learning Outcome(s):**

- \* Investigate, evaluate, and differentiate between algebraic and transcendental functions in their graphic, formulaic, and tabular representations.
- \* Synthesize, model, and communicate real-life applications and phenomena using algebraic and transcendental functions.

## **Office Hours:**

M,T,W,TH 09:00 AM 09:50 AM Zoom