Math 31: Precalculus I MPS – Winter 2023
Mon. – Thur. 9:30-11:20am in G-1

Instructor:	Cheryl Jaeger Balm	Email: balmcheryl@fhda.edu
		Office: S-76G
Office hours:	Mondays 12:30-2:00pm in S-43 (math & science tutoring center)	
	Tuesdays 12:30-1:30pm in S-54 (MESA center)	
	Wednesdays 12:30-2:00pm in S-55 (Physical Sciences & Technology Village Space)	
Counselor:	Luis Carillo	Email: carrilloluisalberto@fhda.edu

MPS counseling website: https://www.deanza.edu/mps/our-counselors/index.html
MPS tutoring website: https://www.deanza.edu/mps/mpstutoring/index.html

My goal for you this quarter:

Believe that **you** can excel at math,
no matter what your past experiences have been.

Textbook and Required Materials:
– **Precalculus**, free OpenStax textbook at https://openstax.org/details/books/precalculus-2e
– **Course pack**, available in Canvas or at the De Anza bookstore
– **Scientific calculator** (not graphing), available through MPS if you do not have one

I C U Care principles

Include others as experts – Look beyond the expertise of the teacher to recognize your own **brilliance** and that of your classmates.
Critical consciousness – Understand negative stereotypes and actively work to erase their effects.
Understand how relationships improve learning – Get to know your teacher and classmates!
Culturally relevant resources – Seek out resources that help you see yourself as a **doer** of mathematics.
Assess, activate and build on prior knowledge – Value the prior knowledge you bring to the classroom and build on it to learn new things.
Retain control – Take ownership of your learning!
Expect more – Expect more from yourself and your classmates by rising above any low expectations that others may set for you or that you may have for yourself. Expect more from your teacher to **teach you until you understand**.

Attendance: Regular, punctual attendance at all class meetings is expected of each student. Students absent during the first two weeks of class may be dropped unless they contact the instructor. Each tardy of more than 15 minutes will count as half an absence, as will leaving class more than 15 minutes early without instructor approval. A student may be asked to leave the MPS program if absent the equivalent of 4 times, no matter what the reason(s).

Written homework: Homework from your textbook will be assigned most days. **Do not fall behind!** Complete all homework assignments and ask questions. Homework will be collected 1-2 times per week. Homework due dates will be announced in class and posted in Canvas. Homework assignments will be graded on effort.

In-class work: Many class meeting will include an in-class activity, group work and/or writing prompt. Participation in these activities will be graded.

Quizzes: There will be 7 in-class quizzes. Quizzes dates are indicated on the calendar and in Canvas. Your lowest quiz score will be dropped. There are no make-up quizzes.

Projects: Two projects will be assigned throughout the quarter. More details will be given in class. Project due dates are indicated on the calendar and in Canvas.

Midterm exams: There will be 3 in-class midterm exams. All exam dates are listed on the class calendar and in Canvas. Each of the midterm exams will focus the material covered since the previous test.

Final exam: There will be a final exam on **Tuesday, March 26, 9:15–11:15am**.

Grades will be assigned as follows:

Assignments	Percent		Percent	Grade
Homework	7%		≥ 90	A
In-class work	7%		≥ 80	B
Quizzes (6)	24%		≥ 70	C
Projects (2)	14%		≥ 60	D
Midterm exams (3)	36%			
Final exam	12%			

How to get help: Students may receive tutorial assistance during in-class work time from the instructor and the embedded tutors, as well as from the instructor during office hours. Please come by office hours for help or to talk about your grade. That is what I am there for! Tutors are also available in S-54, S-43 and online. Students are strongly encouraged to make use of the tutorial help to succeed in this class. **Any student whose grade falls below 75% will be required to attend tutoring.**

Other:
– If you have any questions regarding your grade on any assignment, please discuss the matter with me before leaving the room with the graded material. Once the graded material has left the classroom, no grading changes will be made.
– **Cell phone policy**: Cell phones and other devices should be turned off or set to **silent** (not vibrate) and **not visible** throughout class unless you have discussed with me why you need to receive notifications during that class period. This includes during group work activities. If I decide that your phone, laptop, tablet or other device is a distraction to others, I will talk to you about using it in a less distracting manner. If it continues to be a problem, it may be confiscated until the end of that class meeting.
– Disruptive talking and other interruptions during class is not conducive to learning will not be tolerated. Respect your classmates and your instructor!

Academic Integrity: Academic dishonesty will not be tolerated. If a student is found cheating and/or copying on any assignment, test or quiz or violating any other code of academic integrity, they will receive a 0 on the assignment and may receive failing grade for the course and/or be reported to the Dean of the PSME Division. Those caught twice may be expelled from the class with an F.

Disability Statement: De Anza College makes reasonable accommodations for people with documented disabilities. Please notify Disability Support Services (DSS) if you have any physical, psychological or other disabilities, including vision or hearing impairments or ADD/ADHD. DSS is located in RSS 141. Phone number: 408-864-8753. Website: `http://www.deanza.edu/dss/.`

Student Learning Outcomes (aka what I hope you get out of Math 31 mathematically):
– 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.

Important Dates for Winter Quarter 2023:
– Sat., Jan. 20: Last day to add classes.
– Sun., Jan. 21: Last day to drop for a full refund and with no record of grade.
– Fri., Mar. 1: Last day to drop with a "W."

Tentative class schedule (subject to change):

Week	**Monday**	**Tuesday**	**Wednesday**	**Thursday**
Week 1: Jan. 8-12	Introductions; Functions (1.1A)	Function tables & graphs (1.1B); Jigsaw activity	Domain, range & piecewise functions (1.2)	Composition of functions (1.4); **Quiz 1**
Week 2: Jan. 15-19	**NO CLASS**	Transformations of functions (1.5A); Jigsaw activity	Graph transformations (1.5B)	Linear functions (2.1); **Quiz 2**
Week 3: Jan. 22-26	Linear graphs (2.2)	Review	**EXAM 1**	Linear systems (9.1A)
Week 4: Jan. 29 - Feb. 2	Solving linear systems (9.1B); Start Project #1	Absolute value (1.6)	Complex numbers (3.1); Quadratic equations (3.2A)	Vertex form & factoring (3.2B); **Quiz 3**
Week 5: Feb. 5-9	Parabolas (3.2C)	Power functions & polynomials (3.3A)	Graphing polynomials (3.3B & 3.4)	Polynomial division (3.5); **Quiz 4**; **Project #1 due tomorrow (Canvas)**
Week 6: Feb. 12-16	FTA (3.6)	Review	**EXAM 2**	Rational functions (3.7A)
Week 7: Feb. 19-23	**NO CLASS**	Asymptotes (3.7B)	Nonlinear equations	Nonlinear systems (9.3A); **Quiz 5**

Week	**Monday**	**Tuesday**	**Wednesday**	**Thursday**
Week 8: Feb. 26 - Mar. 1	Graphing nonlinear inequalities (9.3B)	Inverse functions (1.7)	Radical functions (3.8)	Ellipses (10.1); **Quiz 6**
Week 9: Mar. 4-10	Hyperbolas (10.2); Start Project #2	Review	**EXAM 3**	Exponents & logarithms (4.3)
Week 10: Mar. 11-15	Log properties (4.5A)	Expanding & condensing logs (4.5B)	Exponential equations (4.6A)	Log equations (4.6B); **Quiz 7**; **Project #2 due tomorrow (Canvas)**
Week 11: Mar. 18-22	Exponential functions (4.1)	Exponential graphs (4.2)	Log functions (4.4)	Review
Week 12: Mar. 25-29		**FINAL EXAM 9:15 - 11:15**		

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:

In-Person	S-43 tutoring center	M	12:30 PM	2:00 PM
In-Person	S-54 MESA center	T	12:30 PM	1:30 PM
In-Person	S-55 PST Village center	W	12:30 PM	2:00 PM