IMPERIAL VALLEY COLLEGE

Basic Course Information

Semester:	**Winter 2024**	Instructor Name:	**Jill Nelipovich**
Course Title & #:	**Math 190 - PreCalculus**	Email:	**Jill.nelipovich@imperial.edu**
CRN #:	**15118**	Webpage (optional):	**Canvas**
Classroom:	**2722**	Office #:	**2768**
Class Dates:	**1/02/24 – 02/02/24**	Office Hours:	**By appointment**
Class Days:	**M-F**	Office Phone #:	**6297**
Class Times:	7:40 – 12:10	Emergency Contact:	**760-355-6201**
Units:	5	Class Format/Modality:	Face-to-face

Course Description

Preparation for calculus: polynomial, absolute value, radical, rational, exponential, logarithmic, and trigonometric functions and their graphs; analytic geometry, polar coordinates. (CSU, UC credit limited. See a counselor.)

Course Prerequisite(s) and/or Corequisite(s)

Appropriate placement as defined by AB705 or, MATH 140 - or equivalent with a grade of "C" or better.

Student Learning Outcomes

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:

1. Demonstrate problem solving strategies by identifying an appropriate method to solve a given problem, correctly set up the problem, perform the appropriate analysis and computation, and share their interpretation of the conclusion or the outcome, using correct grammar or in an oral presentation. This outcome will be assessed through selected exercises on exams throughout the semester.

IMPERIAL VALLEY COLLEGE

Course Objectives

Upon satisfactory completion of the course, students will be able to:

1. Solve equations in one variable including polynomial, rational, radical, absolute value, exponential, logarithmic, piecewise-defined functions, trigonometric and inverse trigonometric functions; and solve inequalities in one variable, including polynomial, rational and absolute value inequalities.
2. Solve systems of equations and inequalities.
3. Demonstrate an understanding of the relationship between functions and their inverses algebraically and graphically.
4. Graph functions and relations in rectangular and polar coordinates. Analyze the graphs of polynomial, rational, exponential and logarithmic functions based on particular characteristics of the function.
5. Apply transformations to the graphs of functions and relations.
6. Analyze the results from equations and/or graphs of functions and relations;
7. Solve applied problems from a variety of disciplines that can be modeled by linear, polynomial, absolute value, rational, radical, exponential and logarithmic functions.
8. Evaluate trigonometric functions of an angle in radians and degrees.
9. Simplify trigonometric expressions.
10. Solve trigonometric equations, triangles and applied problems that can be modeled by trigonometric functions.
11. Identify special triangle and their related angle and side measures.
12. Graph trigonometric functions and their inverse functions and apply changes in period, phase and amplitude to generate new graphs
13. Prove trigonometric identities and use the identities to solve for exact values, simplify expressions and solve trigonometric equations.
14. Classify and graph conic sections.
15. Analyze parametric and polar equations, functions and graphs.
16. Evaluate sequences and series.

Textbooks & Other Resources or Links

Textbook: Blitzer, Robert (2018). Precalculus (6th/e). Pearson. ISBN: 978-0-13-446914-0

Scientific calculators can be used on some exams, but not all. A graphing calculator can be helpful while doing the homework, but they are not allowed on exams

IVC Student Resources

IVC wants you to be successful in all aspects of your education. For help, resources, services, and an explanation of policies, visit http://www.imperial.edu/studentresources or click the heart icon in Canvas.

Updated 6/2023

IMPERIAL VALLEY COLLEGE

Course Requirements and Instructional Methods

1. Have fun
2. Embrace learning
3. I welcome all questions (no matter how "stupid" they may seem. If you have the question – the person next to you probably has the same question. Don't be shy. We are a math family.
4. Focus on learning how to become a math (and science) student -- this requires A LOT of work and dedication.
5. Attend class every day. One missed class can put you very far behind.
6. Become friends with classmates and study regularly. We have tutors at the MESA center and at the
7. Dropping is your responsibility.

Course Grading Based on Course Objectives

Quizzes……15%

Exams (3)……60%

Final Exam……25%

A: $90\% \leq x \leq 100\%$

B: $80\% \leq x < 90\%$

C: $70\% \leq x < 80\%$

D: $60\% \leq x < 70\%$

F: $x < 60\%$

Academic Honesty (Artificial Intelligence -AI)

IVC values critical thinking and communication skills and considers academic integrity essential to learning. Using AI tools as a replacement for your own thinking, writing, or quantitative reasoning goes against both our mission and academic honesty policy and will be considered academic dishonesty, or plagiarism unless you have been instructed to do so by your instructor. In case of any uncertainty regarding the ethical use of AI tools, students are encouraged to reach out to their instructors for clarification.

Course Policies

Do your best.

Use your brain and intelligence, not the 'intelligence' of AI

Show up to class and be present in class

No cell phones in class

Participate in class activities

Form study groups

I do not have formal student hours in the winter session – but I am open every Monday, Wednesday and Friday after class (or before class with prior notice). I can meet on zoom as well.

Updated 6/2023

IMPERIAL VALLEY COLLEGE

Anticipated Class Schedule/Calendar

Date or Week	Activity, Assignment, and/or Topic
01/01/24	Holiday
01/02/24	Introduction, 1.1, 1.2, 1.3
01/03/24	1.4, 1.5, 1.6
01/04/24	1.7, 1.8, 1.9
01/05/24	1.10, 2.1, 2.3, 2.3
01/08/24	2.4, 2.5, 2.6
01/09/24	2.7, 2.8, Review
01/10/24	7:40 – 8:00: Review 8:00 – 10:15: Exam 10:30 – 12:10: 3.1, 3.2
01/11/24	3.2, 3.3, 3.4, 3.5
01/12/24	4.1, 4.2, 4.3
01/15/24	Holiday
01/16/24	4.4, 4.5, 4.6
01/17/24	4.7, 5.1, 5.2
01/18/24	5.3, 5.4, 5.5
01/19/24	6.1, 6.2, Review
01/22/24	7:40 – 8:00: Review 8:00 – 10:15: Exam 10:30 – 12:10: 6.3, 6.4
01/23/24	6.5, 6.6, 6.7
01/24/24	7.1, 7.2, 7.3, 7.4
01/25/24	7.5, 8.1, 8.2, 8.3
01/26/24	8.4, 8.5, Review
01/29/24	7:40 – 8:00: Review 8:00 – 10:15: Exam 10:30 – 12:10: 9.1, 9.2
01/30/24	9.3, 9.4, 9.5
01/31/24	10.1, 10.2, 10.3
02/01/24	Review
02/02/24	7:40 – 9:00: Review 9:00 – 11:15: Final Exam

*****Subject to change without prior notice*****