

Basic Course Information						
Semester:	Fall 2021	Instructor Name:	Mr. Voldman			
Course Title & #:	Math 190-PreCalculus	Email:	alex.voldman@imperial.edu			
CRN #:	10061	Webpage (optional):				
Classroom:	Online	Office #:	2764			
			Contact via e-mail/zoom M-TH			
Class Dates:	08/16/21-12/8/21	Office Hours:	10:30-11:30			
Class Days:	Online TTH	Office Phone #:	760-355-6299(only via e-mail)			
Class Times:	Online 1-3:00pm	Emergency Contact:	760-355-6155, 760-355-6201 Division Secretary			
Units:	5	Class Format:	Online (S)			

## **Course Description**

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

# 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. (ILO1, ILO2)

## **Course Objectives**

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

- 1. Solve systems of equations and inequalities.
- Solve equations in one variable including polynomial, rational, radical, absolute value, exponential, logarithmic, piecewisedefined functions, trigonometric and inverse trigonometric functions; and solve inequalities in one variable, including polynomial, rational and absolute value 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**

Blitzer, Robert 2017. Precalculus 6th. Pearson ISBN: 978-0134469140.

## **Course Requirements and Instructional Methods**

Homework: There will be ten homework assignments to be taken online within Canvas. You will need to log into Canvas, each module has homework assignment. Homework activities will be part of the grade and will be assessed. The list of recommended problems also will be available for each chapter covered in the course. You are encouraged to work on all the assignments for extra practice.

Discussions: There will be ten discussions to be taken online within Canvas. Please see the tentative schedule (Syllabus) for the dates. There will be no make-up discussions.

Tests: There will be three exams and final to be taken online within <u>Canvas</u>. Please see the tentative schedule (Syllabus) for the dates. There will be no make-up exams. If you miss the exam, the final exam score will be used in its place. Final: The final exam is mandatory(cumulative) for all students.

Out of Class Assignments: The Department of Education policy states that one (1) credit hour is the amount of student work that reasonably approximates not less than one hour of class time and two (2) hours of out-of-class time per week over the span of a semester. WASC has adopted a similar requirement.

#### What if I need to borrow technology or access to WIFI?

To request a loaner laptop, MYFI device, or other electronic device, please submit your request here: <a href="https://imperial.edu/students/student-equity-and-achievement/">https://imperial.edu/students/student-equity-and-achievement/</a>

# **Course Grading Based on Course Objectives**

Grade Distribution						
Discussions	Homework	Exams	Final			
10 discussions @ 10	10 homework activities	3 exams at @ 100	Final (Cumulative)			
points each	@ 30 points each	points each	300 points			

#### Course Grading

10%
30%
30%
30%

900-1000	Α	800-899	В	700-799	C	600-699	D	Below	F
points	(90-100%)	points	(80-80%)	points	(70-79%)	points	(60-69%)	600points	(0-59%)

# **Course Policies**



#### Attendance

- A student who fails to attend the first meeting of a class or does not complete the first mandatory activity of an online class will be dropped by the instructor as of the first official meeting of that class. Should readmission be desired, the student's status will be the same as that of any other student who desires to add a class. It is the student's responsibility to drop or officially withdraw from the class. See General Catalog for details.
- Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences.

#### **Classroom Etiquette**

• Electronic Devices: Cell phones and electronic devices must be turned off and put away during class, unless otherwise directed by the instructor.

#### **Online Netiquette**

- What is netiquette? Netiquette is internet manners, online etiquette, and digital etiquette all rolled into one word. Basically, netiquette is a set of rules for behaving properly online.
- Students are to comply with the following rules of netiquette: (1) identify yourself, (2) include a subject line, (3) avoid sarcasm, (4) respect others' opinions and privacy, (5) acknowledge and return messages promptly, (6) copy with caution, (7) do not spam or junk mail, (8) be concise, (9) use appropriate language, (10) use appropriate emoticons (emotional icons) to help convey meaning, and (11) use appropriate intensifiers to help convey meaning [do not use ALL CAPS or multiple exclamation marks (!!!!)].

#### Academic Honesty

Academic honesty in the advancement of knowledge requires that all students and instructors respect the integrity of one another's work and recognize the important of acknowledging and safeguarding intellectual property.

Anyone caught cheating or plagiarizing will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the General Catalog for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to, the following: (a) plagiarism; (b) copying or attempting to copy from others during an examination or on an assignment; (c) communicating test information with another person during an examination; (d) allowing others to do an assignment or portion of an assignment; (e) using a commercial term paper service.

## **Other Course Information**

#### Additional Student Services

- CANVAS LMS. Canvas is Imperial Valley College's main Learning Management System. To log onto Canvas, use this link: Canvas Student Login. The Canvas Student Guides Site provides a variety of support available to students 24 hours per day. Additionally, a 24/7 Canvas Support Hotline is available for students to use: 877-893-9853.
- Learning Services. There are several learning labs on campus to assist students through the use of computers and tutors. Please consult your Campus Map for the Math Lab; Reading, Writing & Language Labs; and the Study Skills Center.
- Library Services. There is more to our library than just books. You have access to tutors in the Study Skills Center, study rooms for small groups, and online access to a wealth of resources.

#### Disabled Student Programs and Services (DSPS)

Any student with a documented disability who may need educational accommodations should notify the instructor or the Disabled Student Programs and Services (DSP&S) office as soon as possible. The DSP&S office is located in Building 2100, telephone 760-355-6313. Please contact them if you feel you need to be evaluated for educational accommodations.



#### **Student Counseling and Health Services**

Students have counseling and health services available, provided by the pre-paid Student Health Fee.

• **Student Health Center**. A Student Health Nurse is available on campus. In addition, Pioneers Memorial Healthcare District provide basic health services for students, such as first aid and care for minor illnesses. Contact the IVC Student Health Center at 760-355-6128 in Room 1536 for more information.

### **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 <u>http://www.imperial.edu/studentresources</u> or click the heart icon in Canvas.



# Anticipated Class Schedule/Calendar

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Date/	Activity, and/or Assignment	Date/	Activity, and/or Assignment
Week		Week	
Week 1		Week 9	
8/17/21	1.1-1.4	10/12/21	6.1-6.2
8/19/21	1.5-1.7	10/14/21	6.3-6.4
Week 2		Week 10	
8/24/21	1.8-1.10	10/19/21	7.1-7.3
8/26/21	1.10	10/21/21	7.4-7.5
Week 3		Week 11	
8/31/21	2.1-2.3	10/26/21	8.1-8.3
9/2/21	2.4-2.7	10/28/21	8.4-8.5
Week 4		Week 12	Exam 3(Ch 6-8) is available online in
9/7/21	3.1-3.3	11/2/21	Canvas from 9 am, November 2 until 9am,
9/9/21	3.4-3.5	11/4/21	November 4.
Week 5	Exam 1(Ch 1-3) is available online in	Week 13	
9/14/21	Canvas from 9 am, September 14	11/9/21	9.1
9/16/21	until 9am, September 16.	11/11/21	9.2-9.3
Week 6		Week 14	
9//21/21	4.1-4.2	11/16/21	10.1-10.3
9/23/21	4.3-4.4	11/18/21	10.4-10.5
		11/22-26	Thanksgiving Break
Week 7		Week 15	
9/28/21	5.1-5.3	11/30/21	Exam IV
9/30/21	5.4-5.5	12/2/21	
Week 8	Exam 2(Ch 4-5) is available online in	Week 16	
10/5/21	Canvas from 9 am, October 5 until	12/7/21	Final exam is available online from 9am,
10/7/21	9am, October 7.	12/9/21	December 7 until 9am, December 9.

Homework (HW) and Discussion(D) Deadlines					
HW1&D1	8/24 at 9 am	HW6&D6	10/19 at 9am		
HW2&D2	8/31 at 9am	HW7&D7	10/26 at 9am		
HW3&D3	9/7 at 9am	HW8&D8	11/2 at 9am		
HW4&D4	9/14 at 9am	HW9&D9	11/16 at 9am		
HW5&D5	9/28 at 9am	HW10&D10	11/30 at 9am		

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