IMPERIAL VALLEY COLLEGE

Note to Instructor: Replace the placeholder text beneath the headings with the appropriate information for your course. Please note that all sections, with the exception of "Other Course Information," are required elements.

Basic Course Information

Semester:	FALL 2002	Instructor Name:	ERIC LEHTONEN
Course Title & #:	M190 PRECALCULUS	Email:	eric.lehtonen@imperial.edu
CRN #:	10061	Webpage (optional):	
Classroom:	2721	Office #:	2763
Class Dates:	8/15 - 12/8	Office Hours:	TR 11:30-12:30
Class Days:	TR	Office Phone #:	(760)355-6522
Class Times:	1:00-3:30	Emergency Contact:	(619)517-3742
Units:	5	Class Format:	LECTURE

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

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.

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Course Objectives

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

1. Solve systems of equations and inequalities.
2. 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.
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.

Textbooks & Other Resources or Links

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

Course Requirements and Instructional Methods

*[*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.

This is a traditional Lecture based class. I will be giving quizzes on CANVAS but only for a small part of the grade.

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Course Grading Based on Course Objectives

Tests - 60%. There will be 4 tests. The dates will be included in the class schedule.
Final - 30%. There will be a **comprehensive final exam.**
Quizzes - 10%. There will be frequent quizzes.

Course Policies

Be honest.

Don't cheat

Other Course Information

No graphing calculators accepted. Only the TI-30 or equivalent .

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.

Anticipated Class Schedule/Calendar

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WEEK 1		**WEEK 10**
8/16 INTR0 1.1,1.2,1.3		10/18 5.1
8/18 1.4,1.5		10/20 5.2
WEEK 2		WEEK 11
8/23 1.6,1.7		10/25 5.3,5,5
8/25 1.8,1.9		10/27 6.1,6.2
WEEK 3		WEEK 12
8/30 2.1,2.2		11/1 6.3,6.4
9/1 2.3,2.4		11/3 6.5
WEEK 4		WEEK 13
9/6		11/8 REVIEW
9/8 2.5		11/10 TEST 3
WEEK 5		WEEK 14
9/13 2.6		11/15 9.1,9.2,9.3
9/15 REVIEW		11/17 9.4
WEEK 6		WEEK 15
9/20 TEST 1		11/21 HOLIDAY
9/22 3.1,3.2		11/23 HOLIDAY
9/27 3.3,3.4		WEEK 16
9/29 4.1,4.2,4.3		11/29 REVIEW
WEEK 8		12/1 TEST 4
10/4 4.4,4.5		WEEK 17