Basic Course Information

Semester	SPRING 2924	Instructor Name	Eric Lehtonen
Course Title & #	MATH 210 PRECALCULUS	Email	Eric.lehtonen@imperial.edu
CRN#	20410	Webpage (optional)	
Room	2728	Office	2763
Class Dates	2/13/2024-6/06/2024	Office Hours	TR 5PM – 6PM
Class Days	MW	Office Phone #	(619)517-3742
Class Times	6:30-9:00	Office contact if	(760)355-6201
		student will be out	(619)517-3742
Units	4	or emergency	

Course Description

COURSE/CATALOG DESCRIPTION:

Vector valued functions, calculus of functions of more than one variable, partial derivatives, multiple integration, Green's Theorem, Stokes' Theorem, divergence theorem. (C-ID: MATH 230) (CSU/UC)

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.
- 2.

Course Objectives

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

- 1. Perform vector operations
- 2. Determine equations of lines and planes
- 3. Find the limit of a function at a point
- 4. Evaluate derivatives
- 5. Write the equation of a tangent plane at a point
- 6. Determine differentiability
- 7. Find local extrema and test for saddle points
- 8. Solve constraint problems using Lagrange multipliers
- 9. Compute arc length
- 10. Find the divergence and curl of a vector field
- 11. Evaluate two and three dimensional integrals
- 12. Apply Green's, Stokes', and divergence theorems

Textbooks & Other Resources or Links

 Text Stewart, James. 2015. Multivariable Calculus. 8th Brooks/Cole. ISBN: 978-1305266643. Determine equations of lines and planes

Course Requirements and Instructional Methods

Calculator: The TI-30 or equivalent scientific Calculator. Graphing Calculators are not permitted.

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.

Course Grading Based on Course Objectives

Final Exam	30%	There will be a comprehensive final	
Tests	60%	There will be 4 tests.	
Special assignments	10%	TBA	

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.
- Regular attendance in all classes is expected of all students. A student whose continuous, unexcused absences exceed the number of hours the class is scheduled to meet per week may be dropped. For online courses, students who fail to complete required activities for two consecutive weeks may be considered to have excessive absences and may be dropped.
- 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

- <u>Food and Drink</u> are prohibited in all classrooms. Water bottles with lids/caps are the only exception. Additional restrictions will apply in labs. Please comply as directed.
- <u>Disruptive Students:</u> Students who disrupt or interfere with a class may be sent out of the room and told to meet with the Campus Disciplinary Officer before returning to continue with coursework. Disciplinary procedures will be followed as outlined in the General Catalog.
- <u>Children in the classroom:</u> Due to college rules and state laws, no one who is not enrolled in the class may attend, including children.

Academic Honesty

• <u>Plagiarism</u> is taking and presenting as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to 'cite a source' correctly, you must ask for help.

• <u>Cheating</u> is defined as fraud, deceit, or dishonesty in an academic assignment, or using or attempting to use materials, or assisting others in using materials that are prohibited or inappropriate in the context of the academic assignment in question.

Anyone caught cheating or 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 School 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.

Additional Help – Discretionary Section and Language

- <u>Blackboard</u> support center: http://bbcrm.edusupportcenter.com/ics/support/default.asp?deptID=8543
- <u>Learning Labs</u>: There are several 'labs' on campus to assist you through the use of computers, tutors, or a combination. Please consult your college map for the Math Lab, Reading & Writing Lab, and Study Skills Center (library). Please speak to the instructor about labs unique to your specific program.
- <u>Library Services:</u> 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, 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. We now also have a fulltime mental health counselor. For information see <a href="http://www.imperial.edu/students/stu

Student Rights and Responsibilities

Students have the right to experience a positive learning environment and due process. For further information regarding student rights and responsibilities, please refer to the IVC General Catalog available online at http://www.imperial.edu/index.php?option=com_docman&task=doc_download&gid=4516&Itemid=762

Information Literacy

Required Language: Imperial Valley College is dedicated to helping students skillfully discover, evaluate, and use information from all sources. Students can access tutorials at http://www.imperial.edu/courses-and-programs/divisions/arts-and-letters/library-department/info-lit-tutorials/

Anticipated Class Schedule / Calendar

CLASS AND TEST SCHEDULE

WEEK 1		WEEK 7		WEEK 13		
FEB 13	Intro, 12.1,12.2	MAR 26	14.7	MAY 7	TEST 3	
FEB 15	12.3,12.4	MAR 28	14.8	MAY 9	16.1,16.2	
WEEK 2		WEEK 8		WEEK 14		
FEB 20	12.5,12.6	APR 2	HOLIDAY	MAY 14	16.3,16.4	
FEB 22	13.1,13.2	APR 4	HOLIDAY	MAY 16	16.5,16.6	
WEEK 3		WEEK 9		WEEK 15		
FEB 27	13.1,13.2	APR 9	REVIEW	MAY 21	16.7	
FEB 29	13.3	APR 11	TEST 2	MAY 23	16.8	
WEEK 4		WEEK 10		WEEK 16		
MAR 5	REVIEW	APR 16	15.1,15.2	MAY 28	REVIEW	
MAR 7	TEST 1	APR 18	15.3,15.4	MAY 30	TEST 4	
WEEK 5		WEEK 11		WEEK 17		
MAR 12	14.1,14.2	APR 23	15.5,15.6	JUNE 4	REVIEW	
MAR 14	14.3,14.4	APR 25	15.7	JUNE 6	FINAL EXAM	
WEEK 6		WEEK 12			T	
MAR 19	14.5	APR 30	15.8			
MAR 21	14.6	MAY 2	REVIEW			