#### **Basic Course Information**

Semester	SPRING 2019	Instructor Name	Eric Lehtonen	
Course Title & #	MATH 091 INT. ALGEBRA	Email	Eric.lehtonen@imperial.edu	
CRN#	11054	Webpage (optional)		
Room	20103	Office	2763	
Class Dates	2/11/19-6/11/19	Office Hours	MWF 10:00-11:00	
Class Days	MWF	Office Phone #	(760)355-6522	
Class Times	11:15-12:50	Office contact if	(760)355-6155	
		student will be out	(619)517-3742	
Units	5	or emergency		

### **Course Description**

#### **COURSE/CATALOG DESCRIPTION:**

Concepts dealing with integration applications, methods of integration, infinite series, plane analytic geometry, parametric equations, and polar coordinates.

#### **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. Write the equations of lines and planes in three dimensions (ILO2)
- 2. differentiate and integrate vector-valued functions (ILO2)
- 3. use rectangular coordinates to set up and evaluate double and triple integrals (ILO2)
- 4. find partial derivatives of functions of two or more independent variables. (ILO2)
- 5. apply the chain rule for functions of more than one variable. (ILO1, ILO2)

#### **Course Objectives**

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

Demonstrate a broad understanding of the basic operations with vectors in various coordinate spaces and a variety of 3-dimensional figures.

- 2. Demonstrate their knowledge of vectors to differentiation and integration of vector-valued functions.
- 3. Demonstrate the use of functions of several variables and apply techniques to relevant situations.
- 4. Demonstrate an understanding of double and triple integrals and the ability to solve problems when dealing with applications of multiple integrations.
- 5. Evaluate and demonstrate knowledge of diverse topics in vector analysis.
- 4. demonstrate and understanding of functions and relations, including one to one functions.
- 5. demonstrate and understanding of logorithmic and exponential functions and their graphs.
- 6. classify and graph ellipses, parabolas, and hyperbolas.
- 7. demonstrate an understanding of sequences and series and their operations.

#### **Textbooks & Other Resources or Links**

Text: Stewart: CALCULUS, 8<sup>TH</sup> ED. ISBN 978-1-285-74155-0

## **Course Requirements and Instructional Methods**

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

<u>Out of Class Assignments</u>: 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 <u>and</u> 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 5 tests.	
Quizzes	10%	There will be daily quizzes	

#### **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

- Blackboard 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 <a href="http://www.imperial.edu/index.php?option=com\_docman&task=doc\_download&gid=4516&Itemid=762">http://www.imperial.edu/index.php?option=com\_docman&task=doc\_download&gid=4516&Itemid=762</a>

#### **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 <a href="http://www.imperial.edu/courses-and-programs/divisions/arts-and-letters/library-department/info-lit-tutorials/">http://www.imperial.edu/courses-and-programs/divisions/arts-and-letters/library-department/info-lit-tutorials/</a>

# **Anticipated Class Schedule / Calendar**

# See next page

## CLASS AND TEST SCHEDULE

WEEK 1		WEEK 7		WEEK 13	
FEB 11	Intro, 14.1	MAR 25	16.7	MAY 6	18.5
FEB 13	14.2	MAR 27	REVIEW	MAY 8	REVIEW
FEB 15	HOLIDAY	MAR 29	TEST 2	MAY 10	TEST 4
WEEK 2		WEEK3 8		WEEK 14	
FEB 18	HOLIDAY	APR 1	17.1	MAY 13	19.1
FEB 20	14.3	APR 3	17.2	MAY 15	19.2
FEB 22	14.4	APR 5	17.3	MAY 17	19.3
WEEK 3		WEEK 9		WEEK 15	
FEB 25	15.1	APR 8	17.3	MAY 20	20.1
FEB 27	15.2	APR 10	17.4	MAY 22	20.2
MAR 1	15.3	APR 12	17.5	MAY 24	20.3
WEEK 4		WEEK 10		WEEK 16	
MAR 4	15.4	APR 15	REVIEW	MAY 27	HOLIDAY
MAR 6	REVIEW	APR 17	TEST 4	MAY 29	REVIEW
MAR 8	TEST 1	APR 19	18.1	MAY 31	TEST 5
WEEK 5		WEEK 11		WEEK 17	
MAR 11	16.1	APR 22	BREAK	JUNE 3	REVIEW
MAR 13	16.2	APR 24	BREAK	JUNE 5	REVIEW
MAR 15	16.3	APR 26	BREAK	JUNE 7	FINAL EXAM
WEEK 6		WEEK 12			
MAR 18	16.4	APR 29	18.2		
MAR 20	16.5	MAY 1	18.3		
MAR 22	16.6	MAY 3	18.4		