IMPERIAL VALLEY COLLEGE

## Basic Course Information

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|---|---|---|---|
| Semester: | **Spring 2021** | Instructor Name: | **Mr. Voldman** |
| Course Title & #: | **Math 210-Calculus III** | Email: | alex.voldman@imperial.edu |
| CRN #: | **20803** | Webpage (optional): | |
| Classroom: | **Online** | Office #: | **2764** |
| Class Dates: | **02/15/21-06/8/21** | Office Hours: | **Contact via email/zoom M-TH from 1:30 until 2:30** |
| Class Days: | **TTH** | Office Phone #: | **760-3556299(only via e-mail)** |
| Class Times: | **7:20-9:25** | Emergency Contact: | **760-355-6155, 760-355-6201 Division Secretary** |
| Units: | **4** | Class Format: | **Online (S)** |

## Course 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)]

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

MATH 194 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. 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

- Stewart, James 2015. *Multivariable Calculus* 8th. Brooks/Cole ISBN: 978-1305266643.
- Larson, R., Hostetler, R. and Edward, B 2014. *Calculus* 10th. Brooks/Cole ISBN: 978-1-285-05709-5.

## Course Requirements and Instructional Methods

**Homework**
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**
You will need to log into Canvas, each module has a discussion activity. Participation in the discussion in Canvas is mandatory and will be assessed. Students are expected to be ready for all class discussions.

**Exams**
Purpose: To review the material introduced in class and to evaluate your understanding of the material covered in the course.
There will be three exams and final to be taken online within **Canvas**. Please see the tentative schedule (Syllabus or Canvas) 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 Exam**
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?**
1.  To request a loaner laptop, MYFI device, or other electronic device, please submit your request here: https://imperial.edu/students/student-equity-and-achievement/

## Course Grading Based on Course Objectives

**Grade Distribution**

| Homework | Canvas Discussions | Exams | Final |
|---|---|---|---|
| 10 homework activities @ 30 points each | 10 canvas discussions @ 10 points each | 3 exams at @ 100 points each | Final (Cumulative) 300 points |

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|---|---|
| **Canvas Discussions** | 10% |
| **Homework** | 30% |
| **Exams** | 30% |
| **Final** | 30% |

**Grading Scale:**

| 900-1000 points | A (90-100%) | 800-899 points | B (80-80%) | 700-799 points | C (70-79%) | 600-699 points | D (60-69%) | Below 600points | F (0-59%) |
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## Course Policies

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.

There are many different forms of academic dishonesty.  The following kinds of honesty violations and their definitions are not meant to be exhaustive.  Rather, they are intended to serve as examples of unacceptable academic conduct.

- Plagiarism 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.
- Cheating 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 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.

## Online Netiquette

*[Required Information for web-enhanced, hybrid and online courses:  Describe your policies regarding netiquette.  The below is suggested language and may be modified for your course.]*

- 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

## Other Course Information

## Disabled Student Programs and Services (DSPS)

*[Required language.]* 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.  When campus is open, the DSP&S office is 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

*[Required language.]* 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, but you must make an appointment.  In addition, Pioneers Memorial Healthcare District provides basic health services

for students, such as first aid and care for minor illnesses.  Contact the IVC Student Health Center at 760-355-6128<mark>, or when campus reopens</mark>, visit Room 1536 for more information.

- **Mental Health Counseling Services**.  Short-term individual, couples, family and group counseling services are available for currently enrolled students. Services are provided in a confidential, supportive, and culturally sensitive environment. Please contact the IVC Mental Health Counseling Services at 760-355-6310 for appointments, or <mark>when campus reopens</mark> visit 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 http://www.imperial.edu/studentresources or click the heart icon in Canvas.

## Anticipated Class Schedule/Calendar

| Date/Week | Activity, and/or Assignment | Date/Week | Activity, and/or Assignment | |
|---|---|---|---|---|
| 2/16/21<br>2/18/21 | Sections 12.1<br>Section 12.2 | 4/20/21<br>4/22/21 | Section 14.3<br>Section 14.4 | |
| 2/23/21<br>2/25/21 | Section 12.3<br>Section 12.4 | 4/27/21<br>4/29/21 | Section 14.5<br>Section 14.6 | |
| 3/2/21<br>3/4/21 | Section 12.5<br>Section 12.6 | 5/4/21<br>5/6/21 | Section 14.7<br>Section 14.8 | |
| 3/9/21<br>3/11/21 | **Exam 1 is available online at 9 am, March 9 until 9 am, March 11.** | 5/11/21<br>5/13/21 | **Exam 3 is available online at 9 am, May 11 until 9 am, May 13.** | |
| 3/16/21<br>3/18/21 | Section 13.1<br>Section 13.2 | 5/18/21<br>5/20/21 | Section 15.1<br>Section 15.2 | |
| 3/23/21<br>3/25/21 | Section 13.3<br>Section 13.4 | 6/1/21<br>6/3/21 | Section 15.3<br>Section 15.6 | |
| 3/30/21<br>4/1/21 | **Exam 2 is available online at 9 am, March 30 until 9 am, April 11.** | 6/8/21<br>6/10/21 | **Final exam is available online at 9 a.m. June 6 until 9 am, June 8** | |
| 4/5/21-4/9/21 | **Spring Break** | **Homework (HW) and Discussion(D) Deadlines** | | |
| 4/13/21<br>4/15/21 | Sections 14.1<br>Sections 14.2 | HW1&D1-2/23 at 9am<br>HW2&D2-3/2 at 9am<br>HW3&D4-3/9 at 9am<br>HW4&D4-3/23 at 9am<br>HW5&D5-3/30 at 9am | HW6&D6-4/20 at 9am<br>HW7&D7-4/27 at 9am<br>HW8&D8-5/4 at 9am<br>HW9&D9-5/11 at 9am<br>HW10&D10-6/1 at 9am | |

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