Peterson # Math 1D **Summer 2018**

Content - Functions of more than one variable, partial derivatives, multiple integration, vector fields and their applications

Prerequisite Math 1C or equivalent (Preferably with grade of C or better)

Text - Calculus, Early Transcendentals (8th edition), Stewart

Exams - There will be three 100 point midterm exams and one 200 point final exam
There will also be an unspecified number of quizzes during the quarter.

Homework Homework will be assigned every day but will not be collected. The quizzes will be based upon the homework that I assign as well as in class material. The homework I assign is the minimum work that can be done and I strongly suggest that students do more problems than are assigned.

Attendance - Attendance in class is crucial to learning the material. If anyone misses more than two classes without informing me first, they will be dropped from the class. If anyone misses one class during the first week without informing me first, they also will be dropped. If you know you are not going to be in class, call (408) 742-8828 and leave a message. Please do not call the division office or the administration office.

Office Hours - My office hours will be Tuesdays and Thursdays from 3-4 p.m in S43a. Also, if your phone goes off during class, I will ask you to leave. If it happens a second time, you will be dropped from the class.

Date	Section(s)
07/02/18	Functions of more than 1 variable, limits
07/03/18	Partial Derivatives, Increments and differentials
07/05/18	Chain Rule, Directional Derivative
07/09/18	Equations of tangent planes, Extreme values
07/10/18	Lagrange Multipliers
07/11/18	Review
07/12/18	Exam #1
07/16/18	Double integrals and evaluation of Double integrals
07/17/18	Areas and Volumes; Moments and Center of Mass
07/18/18	Moments and Center of Mass; Polar Double Integrals
07/19/18	Triple integrals and their application
07/23/18	Other 3-D coordinate systems; Surface Area
07/24/18	Review
07/25/18	Exam #2
07/26/18	Vector Fields; Line Integrals
07/30/18	Line Integrals; Path Independence
07/31/18	Green's Theorem; Surface Integrals
08/01/18	Divergence Theorem
08/02/18	Stokes' Theorem
08/06/18	Exam #3
08/07/18	Review
08/08/18	No Class
08/09/18	Final Exam

Grade Scale:

85%+	A
70-84%	B
55-69%	C
45-54%	D
<45%	F

Student Learning Outcome(s):

*Graphically and analytically synthesize and apply multivariable and vector-valued functions and their derivatives, using correct notation and mathematical precision.

*Use double, triple and line integrals in applications, including Green's Theorem, Stokes' Theorem and Divergence Theorem.

*Synthesize the key concepts of differential, integral and multivariate calculus.