

Fall 2011- Math 492

T&TH 11:00-11:50 in RS 13

Instructor: Dr. Catherine Crockett
Office: RS 226
email: catherinecrockett@pointloma.edu
Office phone: 619-849-2723
Office Hours: MW 1-3:30; T Th 3-4; F 11-12 or by appointment

These are the hours I am definitely available. However, you are welcomed to come by my office any time and if I am free, I will help you. If you want to reserve a time, email me to make an appointment.

Textbook: *Introduction to Topology, Pure and Applied* by Colin Adams and Robert Franzosa
Please bring this book to class every day. There will be groups discussions based on items in the book. It is a fairly new book, but the authors have outstanding reputations and have produce a nice blend of topology and applications that is not found in traditional texts.

Course Description: This is “special topics” course on point-set topology and its applications. We will explore topology and its connections with applications such as digital image displays, models of evolutionary proximity in molecular biology, knot theory.

Objective: The overall goal of this course is to give students a broad view of topology and its applications.

Learning Outcomes:

- Student will be able to apply their mathematical knowledge to solve problems.
- Students will communicate effectively orally and in writing.

Grading:

Your grade for the course is based on:

Homework Exercises	350 points
1 Midterm Exam	250 points
Project/ Presentation	250 points
Class participation	150 points
Total	1000 points

Grade scale: Grades are based on the number of points accumulated throughout the course. Approximate minimal percentages required to obtain a given grade are:

Grading Scale in percentages				
	A	B	C	D
+		(87.5, 90)	(77.5, 80)	(67.5, 70)
	[92.5, 100]	[82.5, 87.5]	[72.5, 77.5]	[62.5, 67.5]
-	[90, 92.5)	[80, 82.5)	[70, 72.5)	[60, 62.5)

Homework: You will be assigned individual homework most days. You may work on the homework in groups, but each person is responsible for turning in their own write up of the solution to the problems.

Midterm: Your midterm will be assigned during the seventh week of classes. It will be a take-home exam. More details will follow.

Project/ Presentation: You will select an application (from a choices I will give you), read about it and prepare an oral report and a written review of this article. Your written report and class presentation will serve as your class final.

Attendance: Students are expected to arrive at each class meeting on-time. If you are absent or late you run the risk of making your homework late. Attendance is expected at each class section. In the event of an absence you are responsible for the material covered in class and the assignments given that day. See the Point Loma Nazarene University Catalog for a statement of the university's policy with respect to attendance. Remember that missing more than one and a half week's worth of classes can result in a failing grade.

Academic Honesty: The Point Loma Nazarene University community holds the highest standards of honesty and integrity in all aspects of university life. Academic honesty and integrity are strong values among faculty and students alike. Any violation of the university's commitment is a serious affront to the very nature of Point Loma's mission and purpose. Academic dishonesty is the act of presenting information, ideas, and/or concepts as one's own when in reality they are the results of another person's creativity and effort. Such acts include plagiarism, copying of class assignments, and copying or other fraudulent behavior on examinations.

Academic Accommodations:

While all students are expected to meet the minimum academic standards for completion of this course as established by the instructor, students with disabilities may require academic accommodations. At Point Loma Nazarene University, students requesting academic accommodations must file documentation with the Disability Resource Center (DRC), located in the Bond Academic Center. Once the student files documentation, the Disability Resource Center will contact the student's instructors and provide written recommendations for reasonable and appropriate accommodations to meet the individual needs of the student. This policy assists the University in its commitment to full compliance with Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities (ADA) Act of 1990, and ADA Amendments Act of 2008, all of which prohibit discrimination against students with disabilities and guarantees all qualified students equal access to and benefits of PLNU programs and activities.

Students with learning disabilities who may need accommodations should discuss options with the instructor during the first two weeks of class.

Week	Tuesday	Thursday
1	8/30 No Class	9/1 Introduction, 1.1
2	9/6 1.2,1.2	9/8 No Class, read Ch.0 and do handout
3	9/13 1.3	9/15 1.4
4	9/20 2.1/2.2	9/22 2.3/2.4
5	9/27 3.1/3.2	9/29 3.3
6	10/4 3.4	10/6 4.1
7	10/11 4.1/4.2	10/13 4.2
8	10/18 5.1/5.3	10/20 5.3
9	10/25 6.1	10/27 6.2
10	11/1 6.3	11/3 6.4
11	11/8 7.1	11/10 7.2/7.3
12	11/15 7.4	11/17 12.1.12.2
13	11/22 12.2/12.3	11/24 No Class
14	11/29 12.4	12/1 Project
15	12/6 Project	12/8 Project
Finals week		