

Modern Topics in Mathematics

Pacific University

Math 165

Spring 2009

Class Time and Location

MWF 8:00 A.M.–8:50 A.M., Price 214. We will meet some days 8:00 A.M.–9:05 A.M. to make up for days that we do not have class.

Instructor Information

Michael Boardman
Price 209, 352-1496
boardman@pacificu.edu
<http://www.math.pacificu.edu/~boardman>
Office hours: MTW 1-1:50, Th 2-2:50

Textbook

For all Practical Purposes, 8th Edition, COMAP, 2009.

Course Description

In the last 100 years, mathematics has had a profound influence on science, technology, economics, and everyday life. Graph theory has allowed for the creation and maintenance of worldwide communication networks. Linear programming has changed the way strategic planners allocate resources. Modern statistical theories are assisting medical researchers to discover links between lifestyles and risks of certain ailments, and furthermore to test potential treatments.

This semester, we will explore mathematics relevant to problems such as:

- A meter reader needs to establish a route that will allow her to read as many meters as possible each day.
- The local telephone company wants to minimize cost of cabling while providing reliable service to customers.
- A manufacturing company wants to maximize its profit under the constraints of limited resources.
- A politician needs to know if his current advertising campaign is effective.

Attendance and Office Visits

I hope and expect to see each of you during the term in my office. I am available to answer questions both in my office hours and at other times. If it is not an office hour and I am swamped, I might ask you to stop by a little later. You are responsible for material presented in class, although there will be no official attendance taken. You will take exams and quizzes in class on the days they are scheduled. The only exception to this is for a Pacific University sanctioned event, at my discretion.

Homework

Each week, there will be a reading assignment and homework from the text. Assigned problems are will be collected weekly and are due at the beginning of class on the due date. No late work is accepted (this means if you are late to class, you will not be able to turn in your homework). Your work should follow these guidelines:

Homework must fulfill the following guidelines:

- All work should be neat and on 8½"x11" paper
- Multiple pages must be stapled before you come to class
- On the first page, clearly write your name, assignment number, and date

Sporadically we will have in-class and take-home projects. You are expected to work with a partner on these projects. Each pair will turn in one project report.

Exams and Quizzes

During the semester, there will be three in-class exams. Many weeks with no exam, there will be a quiz. No makeup quizzes are available. The cumulative final exam is scheduled for **Friday May 15, 8:30am-11:00am**. The final exam must be taken at this time.

Grading

In determining your course grade, coursework is weighted as follows:

Homework and Projects.....	20%
Quizzes	10%
Midterms.....	40%
Final Exam.....	30%

Use the scale below to determine final course grades. This scale may change at the end of the term. If so, the cutoffs will not raise.

Grade	Percentage
A	[92,100]
A-	[90,92)
B+	[88,90)
B	[82,88)
B-	[80,82)
C+	[78,80)
C	[72,78)
C-	[70,72)
D	[60,70)
F	[0,60)

Academic Honesty

Any breach of standards for academic honesty as defined in the Pacific University catalog will be reported to the Dean of the College of Arts & Sciences and will carry a penalty of a grade of F for the course. As outlined in the university catalog, further sanctions may apply.

Learning Support Services (LSS)

Services and accommodations are available to students covered under the ADA. Any student requesting accommodation must contact Edna K. Gehring, Director of LSS, at X2107. Contact should be at the earliest possible point in time.

Important Dates

Feb 16.....	Add/Drop without record
Mar 21–Mar 29....	Spring Break
Apr 13	Last day to Withdraw
Apr 22	Senior Projects Day, no classes. Please attend senior presentations.
May 13	Last Day of Class
May 15	8:30-11:00 am <i>Final Exam</i>