Math 382 Spring 2014

Time and Place: MWF 1:30-2:45 p.m. (quad 1) RS014

Instructor: Maria Zack, Ph.D.

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Office Number: S222

Office Hours:

Monday	11:00 a.m.-12:00 p.m.
Tuesday	10:30-11:30 a.m.
Wednesday	8:45-9:45 a.m. and 5:00-6:00 p.m.
Thursday	2:30-3:30 p.m.
Friday	8:45-9:45 a.m. and 3:00-4:00 p.m.

These are the hours that I will definitely be available. You can come by my office any time and if I am free I will help you (you can also call me at home if you call **before 8:45 p.m.** 760-753-7861). I keep a sign-up sheet on my office door and you can sign up for any empty time slot (there are slots other than my office hours) if you want to be sure that the time is reserved for you. If you have a question or just want to hang out, come by my office.

Text: *Modern Mathematical Statistics with Applications* (2nd Ed)
Jay Devore and Kenneth Berk
Note: you will be using this same textbook for MTH392

Online Content: We will also be using some software from Acrobatiq which provides an introduction to some key statistical concepts. This is web based so there is nothing for you to buy. I will give you the needed information via email to log in. To build a basic foundation in statistics, working with this software is what you will be doing first in this class.

Content:

A first course in descriptive and infernetial statistics for students with sophisticated mathematics exposure. Topics include applied work in experimental design, sampling distributions, point estimation and hypothesis testing supported by the use of statistical software. In addition, the theoretical basis for these techniques is explored. Prerequisite: Mathematics 274

Learning Outcomes:
- Students will be able to apply their mathematical knowledge to solve problems.
- Students will be able to use technology to solve problems.
- Students will collaborate effectively in teams.

Required Materials:
- A scientific calculator (it does not need to be an expensive one)

Grading:
The components of the grades:

Homework	200
Online homework and projects	100
Exam	300
Final	400
Total Points	1000

Approximate minimal points required to obtain a given grade are:

	A	B	C	D
+		(875, 900)	(775, 800)	(675, 700)
	[925, 1000]	[825, 875]	[725, 775]	[625, 675]
-	[900, 925)	[800, 825)	[700, 725)	[600, 625)

Note that scores of 599 or lower will result in an F.

Homework:
Homework will be assigned each day at the end of class. All homework assigned in a week will be **due in class** the next Wednesday. No late homework will be accepted except by prior arrangement or with a documented emergency. Homework assignments are posted on my office door. The object of the homework is to learn how to do the problems so I expect to see calculations on your homework using the terminology and methods of the class and not just the answer. A random selection (the same for all people) of the problems will be graded on any homework assignment.

Online Homework and Projects:
The material that we will be using from Acrobatiq has a number of quizzes and assignments contained in the software: you will read material and see demonstrations and based on that information you will be asked to engage in some activities or take some quizzes.

Exams:
There is one in-class exam. If you do not take an exam you will receive a zero for it. Late exams may be taken only by prior arrangement or with a documented emergency. I must participate in the decision for you to miss an exam; this means that you need to phone me before missing an exam.

Final:
The final exam date and time is set by the university at the beginning of the semester and may not be changed by the instructor. Because this is a quad class there is limited time for a final. **Your final will come in two parts. The first part will be a few problems which you are required to work independently (they will be due the day of the in-class portion of the final). The in-class portion of the final will be Monday March 3.**

Attendance:
Attendance is expected at each class session. In the event of an absence you are responsible for the material covered in class and the assignments given that day.

Regular and punctual attendance at all classes in which a student is registered is considered essential to optimum academic achievement. Therefore, regular attendance and participation in each course are minimal requirements to be met. There are no allowed or excused absences except when absences are necessitated by certain university-sponsored activities and are approved in writing by the Provost. Whenever the number of accumulated absences in a class,

for any cause, exceeds ten percent of the total number of class meetings, the faculty member has the option of filing a written report to the Vice Provost for Academic Administration which may result in de-enrollment, pending any resolution of the excessive absences between the faculty member and the student…If the date of de-enrollment is past the last date to withdraw from a class, the student will be assigned a grade of W or WF (no grade). There are no refunds for courses where a de-enrollment was processed." (see catalog for full text)

Class Enrollment:
It is the student's responsibility to maintain his/her class schedule. Should the need arise to drop this course (personal emergencies, poor performance, etc.), the student has the responsibility to follow through (provided the drop date meets the stated calendar deadline established by the university), not the instructor. Simply ceasing to attend this course or failing to follow through to arrange for a change of registration (drop/add) may easily result in a grade of F on the official transcript.

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.

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. For more details on PLNU's policy go to:
http://www.pointloma.edu/experience/academics/catalogs/undergraduate-catalog/point-loma-education/academic-policies

A student who is caught cheating on any item of work will receive a zero on that item and may receive an "F" for the semester. See the PLNU Catalog for a further explanation of the PLNU procedures for academic dishonesty.

I do encourage working in groups on homework assignments, but each individual is expected to turn in his or her own write-up of the assignment.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
12-Jan	13-Jan **NO CLASSES**	14-Jan **No Class meeting Work on Acrobatiq Unit 1**	15-Jan **No Class meeting Work on Acrobatiq Unit 1**	16-Jan	17-Jan **No Class meeting Work on Acrobatiq Unit 2**
19-Jan	20-Jan **MLK DAY**	21-Jan	22-Jan Discuss Unit 1 and 2 Start Acrobatiq Unit 3	23-Jan	24-Jan Discuss Unit 3
26-Jan	27-Jan 6.1 Statistics and Dist'n 6.2 Dist'n Sample Mean	28-Jan	29-Jan 7.1 General Concepts 7.2 Point Estimation	30-Jan	31-Jan 8.1 Confidence Intervals
2-Feb	3-Feb 8.2 Large Sample Confidence Intervals	4-Feb	5-Feb 8.3 Normal Intervals Exam Review	6-Feb STUDY SESSION	7-Feb **EXAM**
9-Feb	10-Feb 9.1 Hypothesis Test 9.2 Tests of Pop Mean	11-Feb	12-Feb 9.2 Tests of Pop Mean 9.3 Test of Pop Proportion	13-Feb	14-Feb 9.4 P-Values 9.5 Selecting a Test
16-Feb	17-Feb 10.1 z-Tests for Differences 10.2 Two-sample t-Test	18-Feb	19-Feb 10.3 Paired Data 10.4 Two Proportion Inference	20-Feb	21-Feb 11.1 ANOVA 11.2 Multiple ANOVA
23-Feb	24-Feb 12.1 Linear and Log Regression 12.5 Correlation	25-Feb	26-Feb 12.2 Estimating Parameters 12.3 Inference about Regression	27-Feb	28-Feb **No Class - Work on Take-home part of final**
2-Mar STUDY SESSION	3-Mar **FINAL EXAM**	4-Mar Quad 1 Ends			