

Math 321-02

Statistics for the Experimentalists

Spring 2010

Time/Location:

10:00 – 10:50 Herak 301

MWF

Text:

Probability and Statistics for Engineering and the Sciences,
Jay L. Devore, 7th edition

Instructor Contact Information:

Rob Ray, Herak 307B

e-mail: rayr@gonzaga.edu

web site: <http://web02.gonzaga.edu/faculty/rayr/>

Office Hours:

M 2:10 – 3:00

WF 1:10 – 3:00

or by appointment

Math Lab: Located in Herak Center 224, the math lab is free for Gonzaga students. Please see the hours and times posted on the door of 224 Herak Center.

Prerequisite: Math 258 (D or higher).

Grading System:

During the course there will be four in-class examinations, each worth 100 points. There will be a comprehensive final examination worth 200 points. Homework/quizzes will contribute an additional 100 points toward the final grade. Of this total, final grades will be based upon the following percentages:

A	90% - 100%
B	80% - 89%
C	70% - 79%
D	60% - 69%
F	0% - 59%

Pluses or minuses may be attached to these grades at the discretion of the instructor.

Course Content:

Chapter 1	Descriptive Statistics
Chapter 2	Probability
Chapter 3	Discrete Random Variables and Probability Distributions
Chapter 4	Continuous Random Variables and Probability Distributions
Chapter 5	Joint Probability Distributions
Chapter 6	Point Estimation
Chapter 7	Statistical Intervals Based on a Single Sample
Chapter 8	Tests of Hypothesis Based on a Single Sample
Chapter 9	Inferences Based on Two Samples
Chapter 12	Simple Linear Regression and Correlation

Homework:

Assigned homework has the following three purposes: (1) To specify the material students will be responsible for, (2) To provide relevant examples for class discussions and, most importantly, (3) To provide material through which the student can enhance their knowledge of the subject. The homework problems listed in this syllabus will be collected approximately one week after the associated material is covered in class. Students are to keep all of their graded homework in a folder. During the regular class period, time will be devoted to answering questions pertaining to the homework. Mathematics can only be mastered through practice -- that means completing all homework assignments.

Makeup Examinations:

In general, no makeup examinations will be given. If an examination is missed due to illness then (1) the illness must be of sufficient severity to be verified in writing by the University Health Center or by a local physician, and (2) the instructor must be informed prior to the examination. A make-up exam given due to the death or illness of an immediate family member must be verified with documentation. If it is decided that there are sufficient reasons for a makeup examination to be given, the exam will be scheduled during the last week of class and will be more difficult than the original exam.

Attendance:

Six or more absences are sufficient cause for a lowering of the final grade by one letter or assignment of a V-grade. Please come to class on time.

Final Exam:

Tuesday, May 4 1:00 pm - 3:00 pm

Calculators:

You will need a scientific calculator for this course. You will not be allowed to use cell phones or other electronic devices other than calculators. Additionally, there will be no sharing of calculators during a test or a quiz.

My philosophy of instruction:

I want you to pass this course. You *can* learn this material, and I am happy to assist any student who genuinely needs help. That said, **you are the primary agent of your learning**. I cannot learn the material for you; I already learned it many, many years ago. It required a lot of work, and sometimes it was difficult enough that I needed help from other people. Today I am a professor of mathematics. *If I can learn it, you can, too.*

Special Needs:

If you have a documented disability for which you will need special accommodations in this course, you must make arrangements for such accommodations through Disabled Student Services. Until such arrangements are made, no special accommodations should be expected.

Cell Phone/Pagers:

Please turn off your cell phones and pagers before class begins.

Academic Honesty:

It is expected that Academic Honesty as stated in the university student handbook should be honored at all times.

MA321 Statistics assigned homework

Section	Assigned problems
1.1	1c, 1d
1.2	10a, 11
1.3	33, 41, 42
1.4	44, 45, 47
2.1	2, 5, 9
2.2	11, 12, 13a, 13b, 17, 20b, 20c, 21abef, 22, 27abc
2.3	29, 30a, 30b, 30c, 31a, 33a, 33b, 37ab 39ac, 41a (typo on #33) (39c answer should be .1998)
2.4	45, 47, 51, 53, 59, 60, 62, 65
2.5	71, 73, 75, 77a, 79, 83
3.1	7
3.2	11, 13a, b, c, d, 15, 23
3.3	29, 32a, 35, 39 (Find only $E(x)$ and $Var(X)$)
3.4	47, 49a,b, 51a, b, 55, 57, 65a
3.6	79, 81, 83, 85, 87, 89a, 90
4.1	1, 3, 5, 7a, 7b, 7c
4.2	11a-c, e (typo in #11---last line should be with $F(x)$, 13abc, 15ab
4.3	29, 31, 33ab, 35abc, 37ab, 45, 53
5.3	37, 39, 41a, 41b
5.4	46, 47, 48, 51, 53
6.1	1a, 1d, 3a, 7, 11a
7.1	1, 3a, 5 (typo in the answer to 5c. It should be 55, not .55)
7.2	13, 15, 19, 23
7.3	28, 29, 30, 32, 34a, 37a
7.4	42, 43, 44
8.1	1a-e, 3, 5, 7, 10a-d
8.2	15, 16, 18a-e, 19a, 21, 23, 25a, 29a
8.3	35, 37, 39a
8.4	45, 47, 49, 51, 53
9.1	1, 3, 5ab, 7. 8a
9.2	17, 19, 21
9.3	36, 41
9.4	47, 49, 51a
9.5	57abcdg, 61
12.1	7, 9