MAT167_JDeLucia_Spring2013.doc

Syllabus

PRINCIPLES OF STATISTICS
MAT 167
Spring 2013

Class Time and Location: T/R 2:30 – 3:45 Room D122

Instructor: John DeLucia

Office Hours: By Appointment

Phone Number: (860) 889-4659

E-mail: jdelucia@trcc.commnet.edu

Prerequisite: Acceptable placement score or MAT 137.

Required Text: Elementary Statistics, 11th ed., by Mario F. Triola
Publisher: Addison Wesley.

Supplementary Materials: Graphing Calculator (TI-83, 84, or 89 recommended)

Course Description: This course introduces the basic concepts of statistics as they apply primarily to business, the technologies, and the social sciences. The topics include: methods of summarizing data, measures of central tendency and dispersion, correlation and linear regression, basic probability, binomial and normal distributions, hypothesis testing for one or two populations, confidence intervals, and distributions.

Grading Policy: Your grade will be determined in the following manner:

1. *Tests*. There will be four tests given throughout the semester. The tests will be worth 85% of the final grade. Makeup tests will be available if prior arrangements are made with the instructor.

2. *Homework.* Homework will be assigned throughout the semester and I will collect and grade these assignments occasionally. The homework will be worth 15% of the final grade.

Grade	A 93 – 100	B+ 87 – 89	C+ 77 - 79	D+ 67 – 69	F 59 or below
Equivalents:	A- 90 – 92	B 83 – 86	C 73 – 76	D 63 – 66	
		B- 80 – 82	C- 70 – 72	D- 60 – 62	

Attendance: Regular class attendance is expected and attendance is mandatory for all tests.

Support Services: The tutoring center offers free services to all TRCC students. Additionally, the textbook has a web site and supplemental materials.

Disabilities Statement: If you have a disability that may affect your progress in this course, please meet with a Disability Service Provider (DSP) as soon as possible. Please note that accommodations cannot be provided until you provide written authorization from a DSP.

TRCC Disabilities Service Providers Counseling & Advising Office Room A-119	
Matt Liscum (860) 383-5240	• Physical Disabilities • Sensory Disabilities • Medical Disabilities • Mental Health Disabilities
Chris Scarborough (860) 892-5751	• Learning Disabilities • ADD/ADHD • Autism Spectrum

Academic Integrity: You are expected to do your own work on exams, tests, and quizzes. You may receive help and work collaboratively on homework provided you understand the work you submit. I will enforce college policies on academic dishonesty.

Class Cancelation: All students are encouraged to sign up for myCommNet Alert. It is a system that sends text messages and emails to anyone signed up in the event of a campus emergency. Additionally, TRCC sends messages when the college is delayed or closed due to weather. In the event that this class is canceled for a reason other than a full college closing, notification will be made via Blackboard announcement.

Learning Outcomes: After successful completion of this course, the student will be able to:

1. Construct and interpret histograms, stem leaf plots, and frequency tables for sets of data.
2. Find mean, median, mode, range, standard deviation, deciles, and quartiles.
3. Calculate linear correlation coefficient; find equation of regression line and use equation to predict values.
4. Apply the basic rules of addition, multiplication, and counting. Find conditional probability.
5. Construct contingency tables and use to find probabilities.
6. Determine if data satisfies a probability distribution.
7. Know when to use the binomial distribution, standard normal distribution, or a normal distribution as an approximation to a binomial distribution.
8. Know when to apply the Central Limit Theorem.
9. Determine confidence intervals for means and proportions and find sample sizes necessary for statistical analysis.

Tentative Course Outline:

Date	**Sections Covered**
1/24	1.1 – 1.5
1/29	2.1 – 2.3
1/31	2.4 – 2.5
2/05	3.1 – 3.2
2/07	*No Classes – College Professional Day*
2/12	3.3
2/14	3.4
2/19	4.1 – 4.2
2/21	***Test # 1 (Chapters 1, 2, 3)***
2/26	4.3 – 4.4
2/28	4.5
3/05	4.7
3/07	5.1 - 5.2
3/12	5.3
3/14	5.4
3/19	*No Classes – Spring Break*
3/21	*No Classes – Spring Break*
3/26	6.1 – 6.2
3/28	***Test # 2 (Chapters 4, 5)***
4/02	6.3
4/04	6.5
4/09	6.6
4/11	7.1 – 7.2
4/16	7.3
4/18	7.4
4/23	8.1 – 8.2
4/25	***Test #3 (Chapters 6, 7)***
4/30	8.3
5/02	8.4
5/07	8.5
5/09	10.1 – 10.2
5/14	10.3
5/16	***Test #4 (Chapters 8, 10)***

Homework: This is a guide only. Assignments may vary.

Chapter 1:

1.2 p.9 # 5 – 12 all
1.3 p.16 # 5 – 20 all
1.4 p.23 # 5 – 8 all, 21 ,23, 29
Cumulative Review Exercises p. 40 # 3 – 8 all

Chapter 2:

2.2 p.53 # 5, 7, 13 – 16 all, 18, 19, 21
2.3 p.58 # 5 – 8 all, 10, 11, 13
2.4 p.68 # 6, 27
2.5 p.73 # 6, 10
Review Exercises p.76 # 1, 2, 4, 7, 8

Chapter 3:

3.2 p.94 # 5, 9, 11, 15, 16, 17, 21, 24, 29, 31, 33, 34
3.3 p.110 # 5, 9, 11, 15, 16, 17, 31, 33, 36
3.4 p.127 # 5, 7, 9, 10, 13 – 19 odd, 20, 21, 23, 25, 26, 27, 29
Review Exercises p. 130 # 1 – 6 all, 10

Chapter 4:

4.2 p.148 # 7 – 11 odd, 12 – 15 all, 21, 25, 31, 33, 34, 37, 38
4.3 p.157 # 7, 9, 11, 15, 16, 21 – 37 odd
4.4 p.168 # 5 – 15 odd, 16, 21, 22, 23, 27, 29
4.5 p.175 # 5 – 13 odd, 18, 19 – 22 all, 23 – 27 odd, 28, 34
4.7 p.189 # 5 – 19 odd, 25, 27, 33
Review Exercises p.195 # 1 – 10 all

Chapter 5:

5.2 p.214 # 1, 5 – 11 odd, 15 – 21 odd, 25 – 29 odd
5.3 p.225 # 5 – 13 odd, 17 – 21 odd, 29 – 33 odd, 41, 42
5.4 p.232 # 5 – 11 odd, 17, 19
Review Exercises p.241 # 4, 5

Chapter 6:

6.2 p.261 # 9 – 51 odd
6.3 p.272 # 5 – 21 odd, 25, 27
6.5 p.296 # 5, 7, 9, 10, 11, 19
6.6 p.306 # 5 – 15 odd, 23, 25, 27
Review Exercises p.319 # 1 – 4, 7, 9

Chapter 7:

7.2 p.340 # 5 – 27 odd, 37, 39, 41
7.3 p.352 # 5 – 27 odd, 33
7.4 p.365 # 5 – 13 odd, 19, 21, 27
Review Exercises p.382 # 1, 4, 5, 9

Chapter 8:

8.2 p.409 # 9 – 39 odd
8.3 p.420 # 5, 9, 13, 17, 21
8.4 p.429 # 5 – 19 odd
8.5 p.439 # 5 – 8 all, 13, 15, 17, 19, 27
Review Exercises p.452 # 1, 2, 3, 5

Chapter 10:

10.2 p.531 # 5 – 23 odd
10.3 p.547 # 5 – 23 odd