

*Rio Hondo College*  
*Math 130 : Statistics*  
*Fall Semester, 2013*

**Instructor:** George Wang

**Prerequisite:** Math 70 with a grade of “C” or better or appropriate skill level as determined by math placement process.

**Class Meeting Time:** Tuesday, Thursday: 9:00 to 11:05 AM

**Classroom:** SC226

**CRN:** 71237

**Number of units:** 4

**Office Hours:** Monday through Thursday: 7:00 AM to 7:30 AM,  
Tuesday and Thursday: 11:05 AM to 12:05 PM, or by appointment.

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**Textbook :** Elementary Statistics, second California edition, Mario F. Triola, 2014.  
Pearson Education, Inc. (ISBN-13: 978-1-256-93644-2)

**Required material:**

Access code to MyStatLab. (You can buy it online or get a bundle with the textbook.)

Graphing calculator : TI-83/TI83-plus/TI-84.

*Cell phones or other electronic devices are not allowed for tests or quizzes.*

**Objective:**

This course emphasizes the use of statistical methods as applied to descriptive statistics and inferential statistics. In studying descriptive statistics, we will learn to read, understand and present data in a well organized way through the use of frequency distribution, graphs, measure of central tendency, measure of variability, correlation and linear regression. In studying inferential statistics, we will learn to make generalizations about a population based on a sample through the use of confidence interval, hypothesis testing, linear regression, Chi-square test of independence, goodness-of-fit test, and one way ANOVA. This course will prepare us in better understanding statistics and better using statistical method in everyday life.

**Student Learning Outcomes: Throughout the semester, your performance on multiple student learning outcomes will be evaluated. These are skills for which all students who successfully complete this course should be able to demonstrate proficiency. The outcomes which will be assessed include—but are not limited to—the following:**

- Given a summary data and a claim that needs to be tested using a t-test, the student will identify the claim, compute the test statistic, and conclude whether to accept or reject the claim. In addition, the student will obtain the relevant p-value for the test and explain what it means given the context of the problem.
- Students critique and interpret data presented in appropriate graphical and/or verbal formats.
- Students strengthen their skills in reading, writing, oral communication, and critical thinking.
- Students can construct and interpret confidence intervals.
- Students develop the ability to evaluate scientific information critically, using analytical reasoning and quantitative skills.

**Grading Policy: Your grade will be determined by the following parts.**

(1) Attendance is mandatory. Your commitment is the beginning of your success.

(2) Homework(10%), Quizzes and worksheets(10%):

You will complete your homework and take quizzes on MyStatLab.com.

We will have some in-class quizzes and worksheets as well.

Go to [www.MyMath Lab.com](http://www.MyMathLab.com) to enroll to: course ID wang46287.

(4) 3 Tests(55%) No make-up tests will be given. If you have any emergency so that You can not take a test on a certain date, contact me in advance.

◆ Test 1 = 15 % Test 2 = 18% Test 3 = 22%

(5) Final Exam(25%) : December 10, Tuesday, 9:00 AM to 11:00 AM.

**Grading:**

- The dates for the tests will be announced in class.

- Guidelines:

Grade  $\geq 90\%$  : A,  $80\% \leq$  Grade  $< 90\%$  : B ,  $70\% \leq$  Grade  $< 80\%$  : C ,  
 $60\% \leq$  Grade  $< 70\%$  : D, Others = F

**Class Meetings: (30 meetings)**

Month										
August(2)	27	29								
September(8)	3	5	10	12	17	19	24	26		
October(10)	1	3	8	10	15	17	22	24	29	31
November(7)	5	7	12	14	19	21	26			
December(3)	3	5	10							

**Very Important Note:**

- (1) *It is not allowed to use cell phone or to read/send text messages in class. If you violate this rule, your grade will be lowered by one level, for example, from C to D. You have to turnoff your cell phone when you enter the classroom.*
- (2) *It is not allowed to use cell phone as a calculating tool. You have to bring a TI-83/84 calculator to class for every meeting.*

**How can I be successfully in this class?**

1. *Bring your textbook and TI-83/84 to the class.*
2. *Don't miss any class meetings.*
3. *Read the book before you start working on the homework.*
4. *Use MyStatLab wisely, many help features for your study can be found there.*
5. *Get help ASAP from the instructor or tutors at MSC.*
6. *Take notes.(Use the PPT handout.)*
7. *Must do all the homework and quizzes on time. It worth 2 grades.*
8. *Try to form a study group among your classmates.*
9. *Last day to add classes is September 4.*
10. *The last day to drop without a "W" is September 16. The last day to drop a semester length course with a W is October 28.*
11. *Last day for Pass/NoPass petition is September 26.*
12. *Any student with a disability, who believes that he/she may need accommodations in this class, is encouraged to contact the Disabled Student Program and Services as soon as possible to ensure that such accommodations are implemented in a timely manner. The office is located in room SS330 and the telephone number is 562.908.3420.*
13. *I wish you will all have a good and successful experience in learning statistics.*

*Second California edition: Elementary Statistics (Triola)*

ISBN: 978-1-256-93644-2

Tentative schedule, it may change.

	Chapter	Page	Section	Topics
8/27	1	5	2	Statistical Thinking
	1	15	3	Types of Data
	1	23	4	Collecting Sample Data
8/29	2	44	2	Frequency Distributions
	2	54	3	Histograms
9/3	2	60	4	Graphs
	3	80	2	Measure of Center
9/5	3	96	3	Measure of Variation
	3	112	4	Measure of Relative Standing
9/10	3	118	4	Boxplots
				Review
9/12				Test 1:TI83/84

Test 1 : Chapter 1, 2 and 3.

	Chapter	Page	Section	Topics
9/17	4	135	2	Basic Concepts of Probability
	4	149	3	Addition Rule
9/19	4	156	4	Multiplication Rule: Basics
	4	168	5	Complements and Conditional Probability
9/24	4	175	6	Counting
	5	196	2	Probability Distributions
9/26	5	210	3	Binomial Probability Distribution
	5	223	4	Parameters for Binomial Distribution
10/1				Review
10/3	Test 2			Bring TI-83/84

Test 2 : Chapters 4 and 5.

	Chapter	Page	Section	Topics
	NOTE			<i>Sketch the curve and shade the area of interest</i>
10/8	6	245	2	The Standard Normal Distribution
	6	258	3	Applications of Normal Distributions
	NOTE			<i>How to interpret your confidence interval.</i>
10/10	6	272	4	Sampling Distributions and Estimators
	6	284	5	The Central Limit Theorem
10/15	6	297	6	Assessing Normality
	6	305	7	Normal as Approximation to Binomial
10/17	7	324	2	Estimating a Population Proportion
	7	343	3	Estimating a Population Mean
10/22	7	361	4	Estimating a Population Standard Deviation
10/24	8	382	2	Basics of Hypothesis Testing
	8	399	3	Testing a Claim About a Proportion
10/29	8	412	4	Testing a Claim About a Mean
10/31	8	423	5	Testing a Claim About a Standard Deviation

Test 3: Chapter 6, 7, and part of chapter 8..

	Chapter	Page	Section	Topics
	NOTE:			<i>We need to use a sketch to show the p-value.</i>
11/5	9	442	2	Two Proportions
	9	453	3	Two Means: Independent Samples
11/7				Test 3:TI83/84
11/12	9	467	4	Two Dependent Samples
	9	477	5	Two Variances
11/14	11	566	2	Chi-Square Goodness of fit
11/19	11	577	3	Contingency table(Test of Independence)
11/21	10	496	2	Correlation
	10	517	3	Regression
11/26	10	532	4	Prediction interval and variation
12/3	12	601	2	ANOVA
12/5				Review

Test 4: December 10, 2013. 9:00 AM to 11:00 AM.