## MAT 167, Principles of Statistics, Fall 2015, 30474 M/W 2:00pm – 3:15pm, room D122 Elizabeth Godwin

**PREREQUISITE:** MATH 137, Intermediate Algebra

**TEXT:** Elementary Statistics, 12th edition by Triola

MyStatLab: godwin02237

Also required: TI-83 or TI-84 calculator

Office Hours: M 5:00 – 6:00 pm W/F 11:00 – 12:00 noon and F 9:00 - 10:00 am in Room C206

or by appointment

Email egodwin@trcc.commnet.edu, Phone (860)- 215-9452

**C**OURSE

**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 AND TWO POPULATIONS

AND CONFIDENCE INTERVALS.

**MEASUREMENTS:** 2 tests 100 points each 200

quizzes see below 100
HW in MSL see below 100
Written homework see below 100
Final exam 100 points 100

Final grade = (total points earned/600) \*100

Grade equivalents: A 93-100, A- 90-93, B+ 87-89, B 83-86, B- 80-82, C+ 77-79, C 73-76, C- 70-72, D+ 67-69. D 63-66. D- 60-62, F below

60, N if the student completed less than 60% of work.

**Attendance:** Your attendance in the classroom, participation in classroom work/projects and

preparation for each class is required and is essential to success in the course. If you are unable to attend class then I expect you to email me before if possible but afterwards at the very least. This is for your protection. If something happens then you will have written documentation. There will be no makeups for tests, quizzes and written homework assignments. If you are not in class on these days or do not complete them in time then you will get a 0. If an unusual circumstance arises and

you provide adequate documentation then I will consider allowing a makeup.

**Homework and Quizzes:** 

Your homework and quizzes will all be completed in MyStatLab. This is a required part of the course. I will be assigning problems that go with problems in the book that are to be completed in MyStatLab. Additionally, I will be assigning quizzes in MyStatLab for you to complete during a specific time period. Also, there is a possibility that some tests will be given in MyStatLab depending on how the

weather cooperates with classes.

**Support Services**: Tutorial services, peers, or meeting with me for extra help during office hours.

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Class Cancellation: In case of inclement weather, check the college website for class

cancellations or call 860-215-9000 for recorded message on the college

phone.

## **Plagiarism and Academic**

Honesty: At TRCC, we expect the highest standards of academic honesty. The

Board of Trustees' Proscribed Conduct Policy prohibits cheating on

examinations, unauthorized collaboration on assignments, unauthorized access

to examinations or course materials, plagiarism.

#### Disabilities

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	
<b>Matt Liscum</b> (860) 383-5240	<ul> <li>Physical Disabilities</li> <li>Sensory Disabilities</li> <li>Medical Disabilities</li> <li>Mental Health Disabilities</li> </ul>
Chris Scarborough (860) 892-5751	<ul><li>Learning Disabilities</li><li>ADD/ADHD</li><li>Autism Spectrum</li></ul>

MyCommNet Alert: MyCommNet 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. All students are encouraged to sign up for myCommNet Alert. A tutorial is available on the Educational Technology and Distance Learning Students page of the web site. http://www.trcc.commnet.edu/div\_it/educationaltechnology/Tutorials/myCommNe tAlert/MIR3.html

Digication: All students are required to maintain an online learning portfolio in Digication that uses the college template. Through this electronic tool students will have the opportunity to monitor their own growth in college-wide learning. The student will keep his/her learning portfolio and may continue to use the Digication account after graduation. A Three Rivers General Education Assessment Team will select and review random works to improve the college experience for all. Student work reviewed for assessment purposes will not include names and all student work will remain private and anonymous for college improvement purposes. Students will have the ability to integrate learning from the classroom, college, and life in general, which will provide additional learning opportunities. If desired, students

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### will have the option to create multiple portfolios

**Homework:** The problems in MyMathLab will come from these sections.

# **Chapter 1 Introduction to Statistics**

- 1-1 Review and Preview
- 1-2 Statistical and Critical Thinking
- 1-3 Types of Data
- 1-4 Collecting Sample Data

## **Chapter 2 Summarizing and Graphing Data**

- 2-1 Review and Preview
- 2-2 Frequency Distributions
- 2-3 Histograms
- 2-4 Graphs that Enlighten and Graphs that Deceive

## **Chapter 3 Statistics for Describing, Exploring and Comparing Data**

- 3-1 Review and Preview
- 3-2 Measures of Center
- 3-3 Measures of Variation
- 3-4 Measures of Relative Standing and Boxplots

### **Chapter 4 Probability**

- 4-1 Review and Preview
- 4-2 Basic Concepts of Probability
- 4-3 Addition Rule
- 4-4 Multiplication Rule: Basics
- 4-5 Multiplication Rule: Complements and Conditional Probability
- 4-6 Counting

#### **Chapter 5 Discrete Probability Distributions**

- 5-1 Review and Preview
- 5-2 Probability Distributions
- 5-3 Binomial Probability Distributions
- 5-4 Parameters for Binomial Distributions

#### **Chapter 6 Normal Probability Distributions**

- 6-1 Review and Preview
- 6-2 The Standard Normal Distribution
- 6-3 Applications of Normal Distributions
- 6-4 Sampling Distributions and Estimators
- 6-5 Central Limit Theorem

#### **Chapter 7 Estimates and Sample Sizes**

- 7-1 Review and Preview
- 7-2 Estimating a Population Proportion
- 7-3 Estimating a Population Mean

#### **Chapter 8 Hypothesis Testing**

- 8-1 Review and Preview
- 8-2 Basics of Hypothesis Testing
- 8-3 Testing a Claim about a Proportion
- 8-4 Testing a Claim about a Mean

# **Chapter 9 Inferences from Two Samples**

- 9-1 Review and Preview
- 9-2 Two Proportions
- 9-3 Two Means: Independent Samples
- 9-4 Two Dependent Samples (Matched Pairs)

#### **Chapter 10 Correlation and Regression**

- 10-1 Review and Preview
- 10-2 Correlation
- 10-3 Regression