## **STA 2122 TR**

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<b>Office:</b> AI – 375	<b>Office Hours:</b> (1:00 - 2:00) MW, (3:30 - 4:30) MW, (1:00 - 2:00) T, (3:30 - 4:30) TR

#### **Course Objectives**

Upon successful completion of this course students will be able to:

- Apply your working knowledge of the basic concepts used in statistics;
- Interpret statistics used in journal articles in your field;
- Demonstrate your familiarity with interpreting the output of the statistical software package;
- Build upon this foundation for further work in statistics.

## **Textbook**

1) We will be using Interactive Statistics\*, 2nd edition, Michael Sullivan, III and George Woodbury 2<sup>nd</sup>, 2018

MyLab - 9780135240090

MyLab + Guided Notebook - 9780135219874

Guided Notebook alone - 9780134722405

2) Students are required to purchase the companion **<u>Guided Notebook</u>** to Interactive Statistics.

#### Exam coverage

**Exam 1**: Statistical Thinking and Concepts. Descriptive Statistics. Basic Probability (Chapters 1, 2, 3 and 5)

**Exam 2**: Discrete Random Variables. Binomial Distribution. Continuous Random Variables. Normal Distribution. Sampling Distributions. Central Limit Theorem (Chapters 6, 7 and 8)

Exam 3: Confidence intervals. Hypothesis testing (Chapters 9 and 10)

Final Exam: Cumulative

**Calculator:** Students may only use standard/basic or scientific calculators.

#### Drop Date: March 18, 2019

Any student whose name appears on the class list after this date will receive a letter grade for the course.

#### Make-up policy:

All assignments are due as indicated. If some unforeseen emergency arises that prevents you from taking an exam, documentation must be provided (i.e., a summons for jury duty, letter on Physicians letterhead stating explicitly why student could not hand in assignment/take exam, etc).

## **Course Communication**

Contact me via Canvas mail or directly at bekkerl@fiu.edu

**Online assignments:** include Interactive Assignments, Online Homework, Chapter Quizzes and Chapter Exams.

All assigned homework, quizzes and tests except the Final Exam must be completed on MyStatLab (integrated with Canvas).

Attention: To proceed to the next chapter HW the previous one has to be accomplished with at least 80% score. The same prerequisite is set up for every Quiz and Test - corresponding chapter(s) HW has to be accomplished with at least 80% score.

**Exams:** There will be scheduled three online chapter exams and cumulative Final Exam in class.

## **Grading Policy:**

Course Requirements	Weights
Interactive Assignments and Online Homework	10 %
Quizzes	20 %
Exam 1	15 %
Exam 2	15 %
Exam 3	15 %
Final Exam	25 %

If your average HW score exceed 90%, 10 extra points will be added to your final course score.

The following scale will be the basis for assigning final grades.

Grade	Range	Grade	Range	Grade	Range
Α	Above 90	В	80 - 83	С	70 -73
A-	87 - 89	<b>B-</b>	77 - 79	D	60 - 69
<b>B</b> +	84 - 86	C+	74 - 76	F	< 59

**Classroom Policies:** 

<u>Classroom attendance is a necessary part of this course.</u> All students who have no more than 3 unexcused absences will be rewarded by 10 extra points added to your final exam score.

During the lecture you are not allowed to use any computers, IPADS, cell phones, etc.

# **Course Calendar**

Assignment name	Date DUE	Sections covered
Introduction	01/08/19	
IA 1.1, 1.2, 2.1, 2.2	01/10/19	Terminology, Types of Data: Qualitative and quantitative , Types of observational studies, Level of measurement
HW 1.1, 1.2, 2.1, 2.2, IA 3.1, 3.2	01/15/19	Bar graph, Pie chart, Shape of the distribution, Dot plot, Histogram
Quiz Ch.1, Quiz Ch.2	01/17/19	
HW 3.1, 3.2, IA 3.4, 3.5	01/22/19	Measures of Central Tendency, Measures of Dispersion
HW 3.4, 3.5, IA 5.1, 5.2	01/24/19	Percentiles, Box plots
Quiz Ch.3	01/08/19	
HW 5.1, 5.2, IA 5.3, 5.4	01/29/19	Probability, sample space, union, intersection, complementary events
HW 5.3, 5.4, IA 6.1	01/31/19	Additive and Multiplicative Rules, Conditional probability, independent and dependent events
Quiz Ch E. Test 1	02/05/19	Online
Quiz Ch.5, Test 1	02/03/13	
HW 6.1, IA 6.2, HW 6.2	02/07/19	Discrete Random variable, Binomial Random variable
IA 6.3, HW 6.3, IA 7.1	02/12/19	Poisson Random variable
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Quiz Ch.6	02/14/19	
HW 7.1, IA 7.2	02/19/19	Continuous Random variable, Normal Distribution
HW 7.2, <i>IA 8.1</i>	02/21/19	
Quiz Ch.7	02/26/19	
HW 8.1 <i>, IA</i> 8.2	02/28/19	Sampling distribution for Mean, for Proportion
HW 8.2, IA 9.1	03/05/19	Confidence Interval

Quiz Ch.8	03/07/19	
Test 2	03/19/19	Online
IA 9.2, HW 9.1	03/21/19	Confidence Interval for Proportion, for population Mean
HW 9.2, IA 10.1	03/26/19	Test of Hypothesis terminology
Quiz Ch.9	03/28/19	
HW10.1, IA 10.2B	04/02/19	
HW10.2B, IA 10.3	04/04/19	Test of Hypothesis for Proportion P
HW 10.3	04/09/19	Test of Hypothesis for Mean
Quiz Ch.10	04/11/19	
Test 3	04/16/19	Online
Review	04/18/19	
Final Exam	04/00/19	

## **Academic Integrity/Honesty:**

Any form of cheating or academic dishonesty is strictly forbidden in this class. Any student found responsible for academic misconduct will be subject to the Academic Misconduct procedures and sanctions, as outlined in the Student Handbook:

## **Signature:**

By enrolling in this class you are agreeing to be governed by the policies of this syllabus. You are also stating that you are aware that this syllabus and our accompanying course calendar schedule is subject to change as needed to accommodate unforeseen issues that arise during the term. These changes will be announced in class, or posted in Canvas, so it is important that you read the posted announcements daily.