

## MATH 2063 – Introductory Statistics– Sec #09

**Hours Credit:** 3 hours

**Prerequisites:** MATH 1101 or MATH 1111

**Instructor:** Brian Brodsky

**Office:** 106 C Boyd

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### OFFICE HOURS

1:00 – 3:00 pm on Mondays, Wednesdays, and Fridays

### Courses Description

A noncalculus-based introduction to methods of descriptive statistics, probability, discrete and continuous distributions and other fundamental concepts of statistics. Methods for describing sets of data, including descriptive statistics and histograms. Probability of discrete and continuous random variables, including the binomial and normal random variables. Sampling distributions, including the Central Limit Theorem, Hypothesis testing and Confidence intervals for one sample, Simple linear regression.

### Required Text

**Discovering Statistics**, 3<sup>rd</sup> Edition, by Daniel T. Larose

(Caution: The older or international versions may have different sets of exercise problems. You should check the correct assignments with the 3<sup>rd</sup> Edition if you have a different version.)

### Calculators

Use of calculators is permitted (and necessary) for the Exams. About Calculators, go to <http://mathbits.com/MathBits/TISection/Openpage.htm>.

### COURSE ASSESSMENT

**Exams:** In addition to the final exam, there will be 4 in-class exams. Please see the attached course schedule for dates of the exams. Students may be able to reschedule exams if they have informed the instructor at least one class meeting prior to the exam of their situation. Students will not be allowed to make up missed exams.

**Problem Sets:** There will be 8 problem sets to be completed throughout the semester. Please see the attached course schedule for the due dates of these assignments. Please see our CourseDen page for guidelines on completing and submitting these assignments. Problem Set assignments that do not meet these guidelines, and/or are submitted late, will not be accepted for credit.

**Final Exam:** There will be no make-up Final Exam. Students needing accommodations for the final exam must notify the instructor at least one week prior to the scheduled exam date.

## ASSESSMENT GRADING:

### Grade Composition:

- 50%: 4 in-class exams.
- 25%: Problem Sets
- 25%: Final exam.
- $A \geq 90 > B \geq 80 > C \geq 70 > D \geq 60 > F$

## OTHER COURSE INFORMATION

**Exam Replacement:** Students may replace their lowest exam grade, not including the final exam, by completing practice exercises on the board before the start of class. During each class period, a sign-in sheet will be passed around the classroom indicating which practice exercises may be completed for the next class period. The more exercises completed, the better a student's Exam Replacement Grade will be. Students are limited to submitting one practice exercise per class period.

**Extra Credit Opportunity:** Students may earn up to 3 bonus points to their final grade by attending class, asking questions, and actively participating. This extra credit will be the only extra credit opportunity in the course.

**CourseDen:** Course materials will be posted on CourseDen. Please check CourseDen often for updates. You may log in to CourseDen at [www.westga.edu](http://www.westga.edu).

**Mathematics Tutoring Center:** The Mathematics Tutoring Center (MTC) is located in room 205 Boyd. The MTC is open Monday – Friday, and students may get assistance in any of their math courses. No appointments are needed for the MTC.

## COURSE POLICIES AND INFORMATION

### University Policies and Academic Support

Please carefully review the following Common Language for all university course syllabi at the link:

<https://www.westga.edu/UWGSyllabusPolicies/>

It contains important material pertaining to university policies and responsibilities. Because these statements are updated as federal, state, university, and accreditation standards change, you should review the information each semester.

**Academic Honesty:** You are expected to achieve and maintain the highest standards of academic honesty and excellence as described in the Undergraduate Catalog. In short, be responsible and do your own work.

Definitions of academic dishonesty are defined in the student handbook:

[www.westga.edu/handbook/](http://www.westga.edu/handbook/)

### **Disabilities Act/Accessibility for the Course**

If you are a student whom is disabled as defined under the Americans with Disabilities Act and require assistance or support services, please notify me and provide me with a copy of your packet from Student Services. The university will provide you with resources for any audio/visual needs that you may have with the learning management system or course content. Please contact UWG Accessibility Services for more information.

### **Student Conduct**

Students are expected to abide by the guidelines detailed in the university catalog. Respect and courtesy are required of all students while in the classroom.

### **IMPORTANT DATES:**

<b><u>First Day of Class:</u></b>	Monday, January 7
<b><u>Drop Ends:</u></b>	Wednesday, January 9
<b><u>Last Day to Withdrawal with W:</u></b>	Wednesday, February 27
<b><u>Last Day of Class:</u></b>	Monday, April 29
<b><u>Final Exam Period:</u></b>	Wednesday, May 1, 8:00 – 10:00 am
<b><u>No classes:</u></b>	Monday March 18 – Friday March 22 (Spring Break) Monday January 22st (MLK)

### **COURSE SCHEDULE**

#### **January**

<b>Monday</b>	<b>Wednesday</b>
07: <ul style="list-style-type: none"><li>• Course Introduction</li></ul>	09: <ul style="list-style-type: none"><li>• 1.2 Introduction to Statistics</li><li>• 1.3 Gathering Data</li></ul>
14: <ul style="list-style-type: none"><li>• 2.1 Graphs and Tables for Categorical Data</li><li>• 2.2 Graphs and Tables for Quantitative Data</li></ul>	16: <ul style="list-style-type: none"><li>• 3.1 Measures of Center</li><li>• 3.2 Measures of Variability</li><li>• <b>Due: Problem Set 1</b></li></ul>
21: <ul style="list-style-type: none"><li>• MLK: No class</li></ul>	23: <ul style="list-style-type: none"><li>• 3.5 Five Number Summary</li></ul>
28: <ul style="list-style-type: none"><li>• Review for Exam 1</li><li>• <b>Due: Problem Set 2</b></li></ul>	30: <ul style="list-style-type: none"><li>• Exam 1</li></ul>

### February

Monday	Wednesday
04: <ul style="list-style-type: none"> <li>• 4.1 Scatter Plots and Correlation</li> </ul>	06: <ul style="list-style-type: none"> <li>• 4.2 Introduction to Regression</li> <li>• 4.3 Regression Analysis</li> </ul>
11: <ul style="list-style-type: none"> <li>• 5.1 Introduction to Probability</li> <li>• 5.2 Combining Events</li> <li>• <b>Due: Problem Set 3</b></li> </ul>	13: <ul style="list-style-type: none"> <li>• 5.3 Conditional Probability</li> </ul>
18: <ul style="list-style-type: none"> <li>• 5.4 Counting Methods</li> </ul>	20: <ul style="list-style-type: none"> <li>• Review for Exam 2</li> <li>• <b>Due: Problem Set 4</b></li> </ul>
25: <ul style="list-style-type: none"> <li>• Exam 2</li> </ul>	27: <ul style="list-style-type: none"> <li>• 6.1 Discrete Random Variable</li> </ul>

### March

Monday	Wednesday
04: <ul style="list-style-type: none"> <li>• 6.2 Binomial Probability Distribution</li> </ul>	06: <ul style="list-style-type: none"> <li>• 6.3 Poisson Probability Distribution</li> </ul>
11: <ul style="list-style-type: none"> <li>• 6.4 Continuous Random Variable and the Normal Probability Distribution</li> <li>• <b>Due: Problem Set 5</b></li> </ul>	13: <ul style="list-style-type: none"> <li>• 6.5 Applications of the Normal Distribution</li> <li>• 6.6 Normal Approximation to the Binomial Probability Distribution</li> </ul>
18: <ul style="list-style-type: none"> <li>• Spring Break: No Class</li> </ul>	20: <ul style="list-style-type: none"> <li>• Spring Break: No Class</li> </ul>
25: <ul style="list-style-type: none"> <li>• Review for Exam 3</li> <li>• <b>Due: Problem Set 6</b></li> </ul>	27: <ul style="list-style-type: none"> <li>• Exam 3</li> </ul>

### April

Monday	Wednesday
01: <ul style="list-style-type: none"> <li>• 7.1 Central Limit Theorem for Means</li> </ul>	03: <ul style="list-style-type: none"> <li>• 7.2 Central Limit Theorem for Proportions</li> </ul>
08: <ul style="list-style-type: none"> <li>• 8.1 Z Interval for the Population Mean</li> <li>• <b>Due: Problem Set 7</b></li> </ul>	10: <ul style="list-style-type: none"> <li>• 8.2 t-Interval for the Population Mean</li> </ul>
15: <ul style="list-style-type: none"> <li>• 8.3 Z Interval for Population Proportion</li> </ul>	17: <ul style="list-style-type: none"> <li>• Review for Exam 4</li> <li>• <b>Due: Problem Set 8</b></li> </ul>
22: <ul style="list-style-type: none"> <li>• Exam 4</li> </ul>	25: <ul style="list-style-type: none"> <li>• Review of Previous Exams</li> </ul>
29: Review for Final Exam	