Math 201 APPLIED STATISTICS
Section 091
SUMMER 2020

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Office hours (online): 10:30 – 11:30 am Tuesday and Thursday.

Course Description: An introduction to applied statistics using a statistical computing package such as MINITAB. Topics include: Descriptive statistics, elementary probability, discrete and continuous distributions, interval and point estimation, hypothesis testing, regression and correlation.

Prerequisite: PBIS 187, 188 or 189 or Mathematics 104, 108 or 204 with a grade of C or better.

Textbook, MyStatLab and Calculator:

- *Statistics* 12th or 13th edition, by James McClave & Terry Sincich + *MyStatLab* Access Card
- *MyStatLab* **(required):** *MyStatLab* **includes the textbook as an e-book.** If you purchase a used textbook, you may not get the access code. If you don't have access code, you can purchase it online from http://pearsonmylabandmastering.com/. To purchase online you will need the course ID **gunawardena48161**
- TI-83 or TI-84 Plus calculator is **required**.

MyStatLab:

You will be doing homework problems, quizzes and exams with *MyStatLab*. *MyStatLab* provides step-by-step help to solve problems.

Homework and Quizzes:

Each week you will get a new homework assignment. The homework problems can be worked on until you get them correct with no time limit. There will be a quiz at the end of each chapter. You will have **90 minutes** to complete the quiz and can be taken only once. Please pay attention to the due dates for homework assignments and quizzes.

Course Expectations:

Except in cases of emergency, or unless prior arrangements are made with the instructor, homework, quizzes, and exams are due as indicated on the schedule. With prior instructor consent, or in cases of emergency, late assignments/exams or make-ups may be permitted. Please contact instructor if you have questions or problems.

Exams: There will be two examinations as scheduled below. Exams will have a time limit of 2 hours.

EXAM	TOPICS	DATE
Exam 1	Chapters 2 - 5	July 8-10, 2020
Exam 2	Chapters 6 – 9, 11	August 5-7, 2020

Make-up exams will not be given except when the student has a valid reason for the absence.

Grading Percentage:

Homework	20%
Quiz	20%
Exam 1	30%
Exam 2	30%

Grading Scale:

PERCENTAGE	GRADE	PERCENTAGE	GRADE
90 – 100	A	72 – 74	C
87 – 89	A-	69 – 71	C-
84 – 86	B+	66 – 68	D+
81 – 83	B	63 – 65	D
78 – 80	B-	60 – 62	D-
75 – 77	C+	0 – 59	F

NOTE: Your course grade is the grade shown in Canvass and not the grade shown in *MyStatLab.*

General Goals and Objectives for the Course

The goal of statistics is to gain understanding from data. This course focuses on critical thinking and active learning. Students will be engaged in statistical problem solving and will develop intuition concerning data analysis, including the use of appropriate technology.

Learning Outcomes:

Upon successful completion of the course, students are expected to have the ability to:

- Describe and understand graphical displays of data.
- Describe and understand numerical summaries of data.
- Calculate with technology areas under the normal curve.
- Understand and calculate with technology correlations and regression equations.
- Understand and describe different sampling schemes, and understand the principles of experimentation to establish cause and effect.
- Describe and calculate probabilities using the basic rules.
- Understand and create elaborate probability calculations using trees and Venn diagrams.
- Develop and explain the reasoning behind sampling distributions, including the Central Limit Theorem.
- Understand and calculate the formulas for confidence intervals.
- Understand and calculate the formulas for hypothesis tests.
- Compare and contrast the various t-tests, one- and two-sample, matched pairs, and z-tests for proportions.

ACADEMIC INTEGRITY POLICY:
Integrity is one of the Core Values of UW Oshkosh. All students share with the faculty the responsibility for academic honesty and integrity. The University expects its students to do their own academic work. In addition, it expects active participation and equitable contributions of students involved in group assignments. The following acts of academic dishonesty are not acceptable:

- Cheating: using or attempting to use unauthorized materials, information, or study aids in any academic exercise (e.g. an exam).
- Facilitating Academic Dishonesty: helping or attempting to help another to commit academic dishonesty (e.g. allowing another to copy from your test or use your work).
- Plagiarism: representing the words or ideas of another as one's own in any academic exercise (e.g. failing to cite references appropriately or taking verbatim from another source), whether it is done with the intention of being dishonest or not.
- Fabrication: unauthorized falsification or invention of any information or citation in an academic exercise (e.g. a paper reference).

Cheating on an exam, plagiarizing or any other form of academic dishonesty will be dealt with in accordance with the current UWO Student Discipline Code. The instructor reserves the right to assign a grade of **F** for the course should circumstances warrant.

Students are advised to see the following URL for disclosures about essential consumer protection items required by the Students Right to Know Act of 1990: https://uwosh.edu/financialaid/consumer-information/.