SYLLABUS

Edison State Community College
MTH 125 Statistics

Professor:	Brian Shuler, Ed.D
Degree:	Master of Science in Statistics, South Dakota State University, completed 2010
E-mail:	bshuler2@edisonohio.edu
Office/Phone:	N/A
Office Hours:	Mondays and Wednesdays 7:45-8:45 am in room 202 and by appointment face-to-face or in Zoom with 48 hours' notice for Zoom
Textbook:	Introductory Statistics, OpenStax https://openstax.org/books/introductory-statistics/pages/1-introduction
XYZ Course ID:	**54666**
Tutoring Hours:	Mondays and Wednesdays 12:00-1:00 pm (OhioLink); Fridays 8:00-9:00 am (Zoom); Fridays 9:00-11:00 am (OhioLink)

Tentative calendar:

24 August
Introduction
1.1 – Definitions of Statistics, Probability and Key Terms

26 August
1.2 – Data, Sampling, and Variation in Data and Sampling
1.3 – Frequency, Frequency Tables, and Levels in Measurement

31 August
1.4– Experimental Design and Ethics
Stat Labs 1.1 & 1.2

2 September
Quiz 1 (Ch 1) 30 minutes
2.1 – Stem and Leaf Graphs, Line Graphs and Bar Graphs
2.2 – Histograms, Frequency Polygons, Times Series Graphs
Project assignment #1 discussion

7 September
No class- Labor Day

9 September
2.3 – Measurements of the Location of Data
2.4 – Box Plots

14 September
Quiz 2 (Sections 2.1-2.4) 30 minutes
2.5 – Measures of the Center of the Data

16 September
2.6 – Skewness and the Mean, Median, and Mode
Lab 2

21 September
2.7 – Measures of the Spread of the Data
Project assignment #2 discussion

23 September
Quiz 3 (Sections 2.5-2.7) 30 minutes
Project Assignment #3

28 September
Exam 1 (Chp. 1 & 2)

30 September
3.1 – Terminology
3.2 – Independent and Mutually Exclusive Events

5 October
3.3 – Two Basic Rules of Probability
3.4 – Contingency Tables
3.5 – Tree Diagrams and Venn Diagrams

7 October
Quiz 4 (Ch 3) 30 minutes
Stat Lab 3.1 (Section 3.6)

12 October
4.1 **–** Probability Distribution Function (PDF) for a Discrete Random Variable
4.2 – Mean or Expected Value and Standard Deviation
4.3 – Binomial Distribution

14 October
Quiz 5 (Ch 4) 30 minutes
Stat Lab 4.1 (Section 4.7)

19 October
6.1 – The Standard Normal Distribution
6.2 – Using the Normal Distribution
7.1 – The Central Limit Theorem for Sample Means

21 October
7.3 – Using the Central Limit Theorem
Stat Lab 6.2 (Section 6.4)

26 October
Quiz 6 (Ch 6, 7) 30 minutes
Stat Lab 7.2 (Section 7.5)

28 October
Exam 2 (Chp. 3, 4, 6, & 7)

2 November
8.1 – A Single Population Mean using the Normal Distribution (Confidence Intervals)
8.2 – A Single Population Mean using the Student t Distribution

4 November
Quiz 7 (Ch 8) 30 minutes
Project Assignment #4

9 November
9.1 – Null and Alternative Hypotheses
9.2 – Outcomes and the Type I and Type II Errors
9.3 – Distribution Needed for Hypothesis Testing

11 November
No class- Veterans Day

16 November
9.4 – Rare Events, the Sample, Decision and Conclusion
9.5 – Additional Information and Full Hypothesis Test Examples

18 November
Quiz 8 (Ch 9) 30 minutes
Project Assignment #5

23 November
12.1 – Linear Equations
12.2 – Scatter plots
12.3 – The Regression Equation

25 November
12.4 – Testing the Significance of the Correlation Coefficient
12.5 – Prediction

30 November
Quiz 9 (Ch 12) 30 minutes
Project Assignment #6

2 December
Project Assignments #7 discussion
Stats Lab 12.2 (Section 12.8)

7 December
Final Exam (Chp. 8, 9, & 12)

Due date calendar:
All XYZ assignments are due by 9:00 pm on the due date.
All project assignments are due by 11:50 pm with a nine-minute grace period on the due date.
All lab assignments are due at the beginning of class unless otherwise stated.

30 August
XYZ Intro
XYZ 1A (1.1-1.2)

6 September
XYZ 1B (1.3-1.4)
XYZ 2A (2.1-2.2)
Project assignment #1

9 September
Stat Labs 1.1 & 1.2

13 September
XYZ 2B (2.3-2.4)

14 September
Lab 2

20 September
XYZ 2C (2.5-2.6)

27 September
XYZ 2D (2.7)
Project assignment #2
Project assignment #3

4 October
XYZ 3A (3.1-3.2)

11 October
XYZ 3B (3.3-3.4)
XYZ 3C (3.5)

12 October
Stat Lab 3.1

18 October
XYZ 4A (4.1-4.2)
XYZ 4B (4.3)

19 October
Stat Lab 4.1

21 October
Stat Lab 6.2

25 October
XYZ 6 (6.1-6.2)

1 November
XYZ 7 (7.1, 7.3)

2 November
Stat Lab 7.2

8 November
XYZ (8.1)
XYZ 8B (8.2)
Project assignment #4

22 November
XYZ 9A (9.1-9.4)
XYZ 9B (9.5)
Project assignment #5

29 November
XYZ 12 (12.2-12.5)

1 December
Project assignment #6

3 December
Stat Lab 12.2 ***(in Blackboard)***

9 December
Project assignment #7

Calculators: A TI-84 is recommended for this class. The TI-Nspire is also allowed.

Grading Scale: 90-100 A, 80-89 B, 70-70 C, 60-69 D, Below 60 F

Grade Allocation: 8% XYZ; 8% Labs/Activities; 11% Project; 8% Quizzes; 65% Exams

All assessments are percentage-based, out of 100%. While the XYZ assignments, labs, quizzes, and exams differ in point values, the assessed grade will be out of 100%. Each category will be the average of the individual assessments within the respective category.

XYZ: Problem sets for each section will be delivered online at xyzhomework.com. These assignments may not be submitted after the due date.

You must communicate any need for a due date extension before the due date passes and have documentation for the need when you communicate the need to me or by a date and time that I otherwise designate. Except for any circumstance that I acknowledge as extenuating, I ***will not*** grant a due date extension to anybody who fails to abide by this requirement. Abiding by this requirement does not necessarily mean that I will grant the extension, though.

Class Attendance: Class attendance and regular completion of homework in XYZ are crucial to success in this class. A student who misses class is expected to study the content missed and ask questions as needed.

You know the beginning and ending dates of the semester. Therefore, absence because of vacation is not acceptable. All missed assessments due during class time as a result of vacation will have a grade of zero (0).

Lab Activities: Lab activities are to be completed during class time unless otherwise stated. All labs are out of 100 percentage points.

I do not accept the completion of classroom assignments outside of class time unless otherwise stated. If you provide documentation of a legitimate reason for your absence, I ***may*** offer you an accommodation to the relevant assignment(s). Otherwise, absence during a lab activity results in a grade of zero (0).

Project Assignments: Students will complete seven project assignments based upon data from the United States government. The assignments will be out of 100 percentage points, while each of the first six will account for 1.5 percent of the overall grade, and the seventh, a short essay, will be 2 percent of the overall grade. Late assignments without prior arrangement or proper documentation of a legitimate reason will result in a grade of zero (0).

Quizzes: Students will complete nine quizzes. All quizzes are out of 100 percentage points. The individual point-value of the quizzes will be 50 for all but the chapter 12 quiz, which will be 60.

Exams: Students will complete two periodic exams and one final exam, all of which will be out of 100 percentage points.

Make-up Quiz/Exam Policy: All quizzes and exams are listed on the syllabus and all students are expected to take the assessments on the scheduled day and within the allotted class time unless otherwise stated. **There will be NO re-takes, make-ups or extra credit except for any circumstance that I deem extenuating.** Such a circumstance requires proper documentation before the date of the assessment. Make-ups for assessments given while a student is on vacation are not permissible. The collection of assessments due while a student is on vacation is not permissible. The make-up ***must*** be the during the office hour before the next class. ***This time is 60 minutes, 15 minutes less than the class time for the exams, so make-up exams will have less time allotted than class-time exams.***

Writing Policy: The process of expressing your ideas through writing, results in a deeper understanding and a more thorough learning experience. Writing assignments will, therefore, be used for the solidification and evaluation of learning. The exams, quizzes, homework, and class activities will require that you respond in writing to present a solution, derivation, or proof. All such work whether it uses standard or symbolic writing must be presented in a clear and logical form, and be reasonably free of spelling, grammar, and punctuation errors. All solutions to problems must be supported by appropriate steps to receive credit.

Communication: Students are encouraged to ask questions in class and are urged to seek help from the instructor during office hours. Additionally, the Learning Center in the library has multiple tutors available for extended hours to assist students with all topics in this course. The Learning Center is located in Edison's Piqua Campus Library. It is a free tutoring service that Edison State Community College provides for students. Check the Learning Center's website for hours of operation and tutor schedules, as these change semester to semester.

Testing Your Faith Act Policy: Edison State Community College is committed to providing an environment respectful of students' beliefs. Students are permitted to be absent for up to 3 days each semester based on their faith, religion, or spiritual belief system with no academic penalty. Students must complete the Testing Your Faith Act Accommodations Form, https://www.edisonohio.edu/services-support/registration-records, located in "Forms" and provide a copy to their individual faculty within 14 days from the start of the course. The entire policy can be found in the student handbook at https://www.edisonohio.edu/services-support/student-resources.

Academic Integrity: By participating in this course, you agree that you will refrain from ANY academic dishonesty or deception, such as cheating, copying or plagiarism. Penalties will ensue as deemed appropriate by your instructor as these actions will NOT be tolerated. Incidents may result in loss of credit for work, removal from the course, or a failing grade for the course. Additionally, students are expected to be familiar with and to uphold ALL student rights and responsibilities as outlined in the student handbook (www.edisonohio.edu/handbook).

Classroom Courtesy: Conduct yourself in a manner that is conducive to learning. If you behave inappropriately, you will be removed from the course. All cell phones are to be silenced and out of sight during class time (including during group work activities). In the case of critical phone calls that are expected during class time, the student is expected to notify the instructor prior to the start of class. Students who are consistently late cause disruptions and will be removed from the class.

Other key information that you need to know for my class:

Expect to spend at least three hours outside of class per credit hour per day on this course.
The time that you spend will depend upon your skills on this subject.
As soon as you start to struggle in this course, get help.
If you have concerns at any time, e-mail them to me.
Youtube and Khan Academy have videos on statistics that may be of help to you.
We all have "personal situations," and we must cope with them on a daily basis. I will not allow extra time for assignments for undocumented "personal situations."
Anything that you put in your own handwriting must be large enough, clear enough, and in contrast with the background paper so that I can read it clearly. If I cannot read it, your response is as though it does not exist.
The following concern attitude.
Saying "I'm not good at math/stats" can only hinder you.
Unless otherwise stated, no work shown means no credit received, even if the answer is correct.
I must be able to follow all shown work from the start to the answer to award full credit.
Lack of attendance and participation ***do*** negatively impact your grade.
Apathy and a negative attitude ***do*** negatively impact your grade.
Lack of preparation for class ***does*** negatively impact your grade.
I ***do not*** offer extra credit, and I ***do not*** "curve."

The instructor may alter any part of this syllabus at any time.

XYZ Homework
Student Getting Started Guide
for OER

This course uses online homework through XYZ Homework. You will need to register by following the instructions here. To enroll in this course, you will need the following:

Your Edison eMail Address: _____ (This is your username)
Course ID: ____**54666**_____ (Provided by your instructor)

Register as a New Student

Step 1 Go to **www.xyzhomework.com**

Step 2 Click the Register as a New Student button.

Step 3 Enter the required fields.

Step 4 Log in and Enroll in a New Class

Your 15-day free trial has begun. You may activate your account by making payment directly from your account.

A three-year subscription for XYZ Homework for OER is $45

For questions, email us at: support@xyzhomework.com