

Introductory Statistics – MATH 1342.991 HY

Course Syllabus: Fall 2022

"Northeast Texas Community College exists to provide personal, dynamic learning experiences empowering students to succeed."

Instructor: Amanda Ysasi

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Office	Monday	Tuesday	Wednesday	Thursday	Friday	Online
Hours		As needed	6-7:20 by TEAMS			Email

This syllabus serves as the documentation for all course policies and requirements, assignments, and instructor/student responsibilities.

Information relative to the delivery of the content contained in this syllabus is subject to change. Should that happen, the student will be notified.

Course Description: This is a first course in statistics with topics that span collection, analysis, presentation and interpretation of data, and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals and hypothesis testing. Three hours credit.

Prerequisite(s): 1) TSI Not Complete – Multiple Measures Placement with Corequisite Model *or* 2) TSI Complete Status

Student Learning Outcomes:

1342.1 Explain the use of data collection and statistics as tools to reach reasonable conclusions.

1342.2 Recognize, examine and interpret the basic principles of describing and presenting data.

1342.3 Compute and interpret empirical and theoretical probabilities using the rule of probabilities and combinatorics.

1342.4 Explain the role of probability in statistics.

1342.5 Examine, analyze and compare various sampling distributions for both discrete and continuous random variables

- 1342.6 Describe and compute confidence intervals.
- 1342.7 Solve linear regression and correlation problems.

1342.8 Perform hypothesis testing using statistical methods.

Core Curriculum Purpose and Objectives:

Through the core curriculum, students will gain a foundation of knowledge of human cultures

and the physical and natural world; develop principles of personal and social responsibility for living in a diverse world; and advance intellectual and practical skills that are essential for all learning.

Courses in the foundation area of mathematics focus on quantitative literacy in logic, patterns, and relationships. In addition, these courses involve the understanding of key mathematical concepts and the application of appropriate quantitative tools to everyday experience.

Program Student Learning Outcomes:

Critical Thinking Skills

CT.1 Students will demonstrate the ability to 1) analyze complex issues, 2) synthesize information, and 3) evaluate the logic, validity, and relevance of data.

Communication Skills

CS.1 Students will effectively develop, interpret and express ideas through written communication.

Empirical and Quantitative Skills

EQS.1 Students will manipulate numerical data or observable facts by organizing and converting relevant information into mathematical or empirical form.

EQS.2 Students will analyze numerical data or observable facts by processing information with correct calculations, explicit notations, and appropriate technology.

EQS.3 Students will draw informed conclusions from numerical data or observable facts that are accurate, complete, and relevant to the investigation.

Evaluation/Grading Policy: Students will complete assignments on Pearson's MyLab Math program. There will be 3 exams and a comprehensive final exam. There will be projects throughout the semester.

Assignments/Quizzes	15%
Exams	45%
Projects	20%
Final Exam	20%

Course Structure and Overview:

This is a sixteen-week hybrid course where students are required to access graded activities on the Blackboard. Students are required to complete online homework, as well as other assignments. It is very important students keep up with course materials and assignments. Students are expected to watch instructional videos, read course e-book, and complete online assignments located in Blackboard by assigned due dates. It is the student's responsibility to check Blackboard for important information and announcements regarding the course. <u>Students should be working on course material via</u> <u>Blackboard every week</u>. Do not wait until the last minute to complete and submit assignments in case of technology issues.

Assignments:

• All homework assignments and quizzes will be found on MyMathLab, which is accessed through Blackboard.

• Due dates for all assignments and quizzes can be found on the calendar at the top of the MyMathLab course home page. Most homework and quiz assignments will be due on Mondays at 11:59 p.m.

• Homework and quiz problems have a limit of 3 attempts. You may re-work the problem up to 3 times to learn the concept and get the problem correct. However, be aware that the computer will generate a new problem for each attempt.

• The last grade earned for each homework assignment, or quiz will be posted for the assignment's final grade.

• Projects will be posted on Blackboard. You will have several days to complete. Make sure you watch the project introduction video and email when you have questions.

• There will be a penalty of 25% for each assignment that is turned in late.

• Any assignment or quiz not submitted will receive a grade of zero.

Exams:

• All exams are online on MyMathLab.

• Each exam will be available on MyMathLab at scheduled times. Please check Blackboard and your MyMathLab calendar for the dates.

• Due dates for all exams can be found on the calendar at the top of the MyMathLab course home page. Tentative due dates can also be found on Blackboard. You will need to scroll through the MyMathLab calendar to see all due dates.

• Only one attempt per question is allowed on exams..

• All work must be shown in scratch paper and submitted on Backboard at the end of each exam.

• Make-up exams will not be given unless the student has coordinated with the instructor prior to the exam. Any exam not submitted will receive a grade of zero.

• Final exam is comprehensive and make-up final exams will not be allowed.

IMPORTANT: <u>The Exam 2 and Final Exam are required to be proctored.</u> If you are a dual credit student, you may work with your high school to determine who will proctor the exams. If you are a traditional student, you will use the NTCC Testing Center or an instructor approved proctoring facility. Please email me as soon as possible if you know you will be unable to come

to NTCC during the Testing Center hours of operation.

Important Dates:

Labor Day – Monday September 5 Last Day to Drop with "W" –Tuesday November 15 Thanksgiving Break – Thursday November 24 and Friday November 25

Required Instructional Materials: Pearson's MyLab Math purchased with Inclusive Access **Optional Instructional Materials:** Hardcopy of textbook: Triola, *Elementary Statistics*, 14th Edition ISBN Number: 9780136803201

Minimum Technology Requirements: Graphing Calculator is required. TI-84 is preferred. Access to Microsoft Office or Google (including Excel or Sheets) is required. Microsoft Excel has more functions than Google Sheets.

Required Computer Literacy Skills:

- 1) Communicate via email;
- 2) Saving and reloading saved files;
- 3) Navigate Blackboard to access posted materials and MyMathLab assignments.

Course Structure and Overview:

Work must be shown for each assignment on MyLabMath which must be turned in when requested. It is recommended to work the problems in a spiral notebook so they can be kept together.

Communications:

Emails will be responded to within 24 hours during the week and 48 hours on the weekend. Note on instructor availability: To maintain a healthy work-life balance, I place reasonable limits on the times and days when I do work. Specifically, I do not typically check email or other messages between 8pm and 8am on weekdays, and I do not typically check these at all on weekends. If you send a message during my "off" hours, I will get to it as soon as I am back online. I encourage each of you, as well, to set similar limits on work for family, rest, and personal time.

The college's official means of communication is via your campus email address. I will use your campus email and Blackboard to communicate with you outside of class. Make sure you keep your campus email cleaned out and below the limit so you can receive important messages.

SYNC Meetings:

There will be an optional meeting each week on Wednesdays at 6pm via Microsoft Teams. There will be a link in Blackboard. The meeting is the time that I will be available to you for questions and concerns. I will also go over projects, reviews, and exams. The meeting will be recorded and available for anyone

unable to attend to watch the next day.

<u>Dual Credit students</u>: If you would like to schedule a time to meet with me to discuss questions during the school day, please email me to get that set up. I am usually available from 8-9:20am and 2-3:45pm.

Video Recording of Course Activities

Certain portions of this course may be recorded via video conferencing software to assist students in course material review or later viewing by a student who was not able to attend the live session. The recordings will be made available only to students within the course and will cease to be available upon completion of the course. Students may not retain, reproduce, or share recordings.

Alternate Operations During Campus Closure and/or Alternate Course Delivery Requirements

In the event of an emergency or announced campus closure due to a natural disaster or pandemic, it may be necessary for Northeast Texas Community College to move to altered operations. During this time, Northeast Texas Community College may opt to continue delivery of instruction through methods that include, but are not limited to, online through the Blackboard Learning Management System, online conferencing, email messaging, and/or an alternate schedule. It is the responsibility of the student to monitor NTCC's website (http://www.ntcc.edu/) for instructions about continuing courses remotely, Blackboard for each class for course-specific communication, and NTCC email for important general information.

Additionally, there may be instances where a course may not be able to be continued in the same delivery format as it originates (face-to-face, fully online, live remote, or hybrid). Should this be the case, every effort will be made to continue instruction in an alternative delivery format. Students will be informed of any changes of this nature through email messaging and/or the Blackboard course site.

NTCC Academic Honesty/Ethics Statement:

NTCC upholds the highest standards of academic integrity. The college expects all students to engage in their academic pursuits in an honest manner that is beyond reproach using their intellect and resources designated as allowable by the course instructor. Students are responsible for addressing questions about allowable resources with the course instructor. Academic dishonesty such as cheating, plagiarism, and collusion is unacceptable and may result in disciplinary action. This course will follow the NTCC Academic Honesty and Academic Ethics policies stated in the Student Handbook. Refer to the student handbook for more information on these subjects.

ADA Statement:

It is the policy of NTCC to provide reasonable accommodations for qualified individuals who are students with disabilities. This College will adhere to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations as required to afford equal educational opportunity. It is the student's responsibility to request accommodations. An appointment can be made with the Academic Advisor/Coordinator of Special Populations located in Student Services and can be reached at 903-434-8264. For more information and to obtain a copy of the Request for Accommodations, please refer to the special

populations page on the NTCC website.

Family Educational Rights and Privacy Act (FERPA):

The Family Educational Rights and Privacy Act (FERPA) is a federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education. FERPA gives parents certain rights with respect to their children's educational records. These rights transfer to the student when he or she attends a school beyond the high school level. Students to whom the rights have transferred are considered "eligible students." In essence, a parent has no legal right to obtain information concerning the child's college records without the written consent of the student. In compliance with FERPA, information classified as "directory information" may be released to the general public without the written consent of the student makes a request in writing. Directory information is defined as: the student's name, permanent address and/or local address, telephone listing, dates of attendance, most recent previous education institution attended, other information including major, field of study, degrees, awards received, and participation in officially recognized activities/sports.

Tentative Course Timeline (*note* instructor reserves the right to make adjustments to

<u>Week</u>	Topics	Assignments	
Week 1: 8/22/22	Ch. 1 Introduction to Statistics and	Syllabus Acknowledgement,	
	data	MLM Orientation and	
	1-1, 1-2, 1.3	assignments	
Week 2: 8/29/22 Ch. 2: Summarizing and Graphing		MLM online assignment	
	Data	Project I: Statistical Graphs	
	Sections: 2.1, 2.2, 2.3, 2.4		
Week 3: 9/5/22	Ch. 3 Describing, Exploring, and	MLM online assignment,	
	Comparing Data	Project I: Statistical Graphs	
	Sections 3-1, 3-2,		
Week 4: 9/12/22	Ch. 3 Describing, Exploring, and	MML online assignment	
	Comparing Data	Review and Exam 1 – Ch. 1, 2, 3	
	Section 3-3		
Week 5: 9/19/22	Ch. 4 Probability	MML online assignment	
	Sections 4-1, 4-2, 4-3	Project II - Probability	
Week 6: 9/26/22	Ch. 4 Probability and Ch. 5 Discrete	MML online assignment	
	Probability Distributions	Project II - Probability	
	Sections 4-4, 5-1		
Week 7: 10/3/22	Ch. 5 Discrete Probability	MML online assignment	
	Distributions	Ch. 4, 5 Review	
	Section 5.2	Project II - Probability	
Week 8: 10/10/22	Proctored Exam 2: Ch. 4, 5 Exam	Proctored Exam 2: Ch 4, 5	
		Project II - Probability	

this timeline at any point in the term Course Schedule: (Subject to Change)

Week 9: 10/17/22	Ch. 6 Normal Probability Distributions Sections 6.1, 6.2, 6-3	MML online assignment
Week 10: 10/24/22	Ch. 6 Normal Probability Distributions Sections 6-4, 6-5, 6-6	MML online assignment Exam 3 Review-Ch. 6
Week 11: 10/31/22	Ch. 7 Estimating Parameters and Determining Sample Sizes Sections 7-1, 7-2	MML online assignment Exam 3 – Ch. 6
Week 12: 11/7/22	Ch. 8 Hypothesis Testing Sections 8-1, 8-2, 8-3	MML online assignment
Week 13: 11/14/22	Ch. 10 Correlation and Regression Sections 10-1, 10-2	MML online assignment Exam 3 Review Ch. 7, 8, 10
Week 14: 11/21/22	Exam 3 Ch. 7, 8, 10	MML online assignment Exam 3 Ch. 7, 8, 10
Week 15: 11/28/22	Final Exam Review	MML online assignment
Week 16: 12/5/22	Final Exam	Proctored Final Exam