

# Math 1342.088 Introductory Statistics – Online

Course Syllabus: Spring 2023

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

Instructor: Dr. Leah Reagan

Office: MS - 118 Phone: 903-434-8290 Email: lreagan@ntcc.edu

Office	Monday	Tuesday	Wednesday	Thursday	Online
Hours	10:30 - 11:00	11:30 - 2:00	10:30 - 11:00	10:30 - 11:00	Professor
	1:30 - 3:30		1:30 - 3:30	1:30 – 3:30	checks
					emails and
					TEAMS
					messages
					daily.

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:** Collection, analysis, presentation and interpretation of data, and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals and hypothesis testing. Use of appropriate technology is recommended. Three hours credit.

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

**Student Learning Outcomes:** 

Upon successful completion of this course, students will

- 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:**

A series of online homework problems (OHM Lumen) will be worth 35% of your final grade, online Quizzes will count for 15%, and the Midterm and Final Exams will contribute to 50% of the final grade (25% each). You'll find it broken down below. We will discuss proctoring options closer to the midterm.

Students are required to have access to a computer with high-speed internet, a microphone, a webcam, and appropriate system rights to download and install the necessary software. Please note, the college does not provide this equipment.

Homework via OHM Lumen is graded when submitted. Other assignments including the Midterm and Final Exams are graded within 72 hours **after** the due date.

#### Grade Breakdown:

Online Quizzes: 15% Quizzes after each Module in Lumen

OHM-Lumen Homework: 35% Online homework on Lumen via Blackboard

Midterm Exam: 25% Online exam Final Exam: 25% Online exam

Make-up exams will not be given unless the student has coordinated with the instructor prior to the exam. Lumen OHM homework will require the use of "Late Passes" if not completed by the scheduled due date. Each student has late passes that extend the assignment due date for 48 hours. Students may use more than one late pass per assignment that is past due.

Missed in-class assignments must be made-up in a proctored environment. Any missed work will be made up at the discretion of the instructor. It is the student's responsibility to contact the instructor.

# **Required Instructional Materials:**

Good news: your textbook for this class is available for free online, in web view and PDF format! You can also purchase a print version, if you prefer, via the campus bookstore or from OpenStax on Amazon.com. The free PDF format is available in your Blackboard course.

You can use whichever formats you want. Web view is recommended -- the responsive design works seamlessly on any device. If you buy on Amazon, make sure you use the link on your book page on openstax.org so you get the official OpenStax print version. (Simple printouts sold by third parties on Amazon are not verifiable and not as high-quality.)

Introductory Statistics by OpenStax is licensed under the Creative Commons Attribution License v4.0



Publisher: OpenStax

**Date:** 2018

# **ISBN Number:**

Print: ISBN-10: 1-938168-20-8 Digital: ISBN-10: 1-947172-05-0

www.openstax.org/details/introductory-statistics

**Note:** The NTCC Bookstore link is at www.ntcc.edu.

**Inclusive Access Course**: A discounted textbook fee is added to your student account to cover the cost of the required access code. You will access through Blackboard on the first-class day.

# **Optional Instructional Materials:**

Print copy of the textbook is highly recommended. Research indicates that students learn more and retain it longer from hard copy text.

# **Minimum Technology Requirements:**

Scientific Calculator required. TI-83/84 is preferred. A free online TI-83 will be available in Blackboard for Window PCs.

Below are some technical requirements for using Blackboard that will help your experience in this course.

You will see the NTCC Tech Support email address and phone number below. Please contact them if you run into any technical problems during the semester. Please let your instructor know you are having difficulties as well.

If you need further NTCC technical support services, please contact Austin Baker or Mary Lou Pemberton at:

abaker@ntcc.edu or 903-434-8279; mpemberton@ntcc.edu or 903-434-8270

Blackboard will work on both a Mac and a PC. (Chrome Books are known to have issues with Blackboard.) It is best to access Blackboard through Fire-Fox or Chrome as your web browser. If you have trouble with any of the activities working properly, you might change your web browser as your first solution. The Default Browser in Windows 10 is Edge. This browser does not do well with Blackboard! If you go to Windows Accessories you will find Internet Explorer still on your computer but is not your default browser. If you have any difficulties navigating with Edge, close it and go to Internet Explorer.

To use TEAMS you must have access to a computer with high-speed internet, a microphone, a Webcam, and appropriate systems rights to download any necessary software. Please note, the college does not provide this equipment.

You can download Blackboard Student for your smart phone from the Play store or the App store.

More information is available for Technology Requirements and Support under the <u>Student Resources</u> – <u>Technical Support Tab in Blackboard</u>.

# **Required Computer Literacy Skills:**

As an online student, you will have a much different "classroom" experience than a traditional student. In order to ensure that you are fully prepared for your online course, following is a list of expectations and requirements: Students in an on-line program should be comfortable with and possess the following skill sets:

- 1. Self-discipline
- 2. Problem solving skills
- 3. Critical thinking skills
- 4. Enjoy communication in the written word

As part of your online experience, you can expect to utilize a variety of technology mediums as part of your curriculum:

- 1. Communicate via email including sending attachments
- 2. Navigate the World Wide Web using a Web browser such as Internet Explorer
- 3. Use office applications such as Microsoft Office (or similar) to create documents
- 4. Be willing to learn how to communicate using a discussion board and upload assignments to a classroom Web site
- 5. Be comfortable uploading and downloading saved files
- 6. Have easy access to the Internet
- 7. Navigate Blackboard, including using the email component within Blackboard. Instructions and tutorials for this are provided in your course.

For more information or technical assistance on using the Learning Management System, please refer to the Home Page, Orientation Module, in the important technical requirement, information and support folder in Blackboard.

# **Course Structure and Overview:**

This is a sixteen-week online course where students are required to access graded activities on the Blackboard Learning Management System. 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 textbook, and complete online assignments located in the Learning Management System, Blackboard by due dates.

# **Communications:**

Emails and TEAMS messages will be responded to with 24 hours. If you do not receive a response within 24 hours, then the email or TEAMS message was not received. Students are expected to abide by Netiquette rules when communicating online. See this link for details: Netiquette Rules.

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

# **Institutional/Course Policy**:

No late work will be accepted without prior approval by the instructor. It is the student's responsibility to check Blackboard and TEAMs for important information/announcements regarding the course. Students should be working on course material via Blackboard every week. Do not wait until the last minute to complete and submit assignments in case of technology issues.

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.

# **Eagle Assist**

At Northeast Texas Community College, we understand that students often need support that extends beyond the classroom. "Eagle Assist" is the place to start when looking for that type of assistance. Our support system is here to help you succeed in both your academic and personal growth. www.ntcc.edu/eagleassist

# **Services provided:**

- · Mental Health Counseling
- · Classroom Accommodations
- NTCC Care Center Food Pantry
- · NTCC Care Center Hygiene Closet
- NTCC Care Center Cook Nook
- · Financial Literacy
- Child Care Assistance
- Emergency Aid

Can't find what you are looking for? Send us a message at <a href="mailto:eagleassist@ntcc.edu">eagleassist@ntcc.edu</a> Mental Health Counseling Services are available to all NTCC students.

• Visit the following page to get your account activated: www.thevirtualcaregroup.com/ntcc

# 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 unless 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 this timeline at any point in the term):

# Math1342.088 Spring 2023 (Subject to Change)

Weeks	<b>Topics</b>	<u>Assignments</u>	Due Dates
Week 1: 1/16/23 – 1/22/23  MLK Holiday – 1/16/23	Orientation	Read through Orientation Module & complete Syllabus Acknowledgement Agreement.	1/22/23
		Complete the "Orientation Assignment" found in Module 1.	1/22/23
Week 2: 1/23/23 – 1/29/23	Module 1: Sampling and Data 1.1 – 1.4	Read textbook & watch videos in Blackboard. Complete assigned Module 1 Homework, & then take the Module 1 Quiz.	HW due: 1/29 Quiz due:
		the Module 1 Quiz.	1/30
Week 3: 1/30/23 – 2/5/23	Module 2: Descriptive Statistics 2.1 – 2.7	Read textbook & watch videos. Complete assigned online Module	HW: 2/05
		2 Homework and take Module 2 Quiz.	Quiz: 2/06
Week 4: 2/6/23 – 2/12/23 & Week 5: 2/13/23 – 2/19/23 (2 weeks on chapter 3)	Module 3: Probability 3.1 – 3.5	Read textbook & watch videos. Complete assigned online Module 3 Homework and take Module 3 Quiz.	HW due : 2/19
(a mond on only or o)		Quiz.	Quiz due: 2/20
Week 6: 2/20/23 – 2/26/23	Module 4: Discrete Random Variables 4.1 – 4.3	Read textbook & watch videos. Complete assigned online Module 4 Homework and take Mod 4	HW due: 02/26
		Quiz.	Quiz due: 02/27
Week 7: 2/27/23 – 3/5/23	Module 5: Continuous Random Variables 5.1	Read textbook & watch videos. Complete assigned online Module 5 Homework. No Mod 5 Quiz.	HW due: 03/05
			NO QUIZ
Week 8: 3/6/23 – 3/12/23	Review for Midterm Exam	Make sure that ALL prior homework is caught up AND complete the Midterm Review Homework.	Review Due: 03/11
	Midterm Exam: Covering all sections from Week 1 through Week 7.	Exam will open at 8 am on 3/11 and close at midnight on 3/12.	Exam open 3/11 to 3/12

	Spring Break 3/13/23 – 3/19/2	3	
Week 9: 3/20/23 – 3/26/23	Modules 6: Normal Distribution 6.1 – 6.2	Read textbook & watch videos. Complete assigned online Module 6 Homework and take Mod 6 Quiz.	HW due: 3/26 Quiz due: 3/27
Week 10: 3/27/23 – 4/2/23	Module 7: The Central Limit Theorem 7.1 & 7.3	Read textbook & watch videos. Complete assigned online Lumen Homework.	HW due: 4/2 Quiz due: 4/3
Week 11: 4/3/23 – 4/9/23	Module 8: Confidence Intervals 8.1 – 8.3	Read textbook & watch videos. Complete assigned online Lumen Homework.	HW due: 4/09  Quiz due: 4/10
Week 12: 4/10/23 – 4/16/23	Module 9: Hypothesis Testing with One Sample 9.1 – 9.4	Read textbook & watch videos. Complete assigned online Lumen Homework.	HW due: 4/16  Quiz due: 4/17
71		Read textbook & watch videos. Complete assigned online Lumen Homework.	HW due: 4/23  Quiz due: 4/24
Week: 14: 4/24/23 – 4/30/23	Module 12: Linear Regression and Correlation 12.1 – 12.3	Read textbook & watch videos. Complete assigned online Lumen Homework.	HW due: 4/30  Quiz due: 5/1
Week 15: 5/1/23 – 5/7/23	Review for Final Exam	Complete assigned online Final Exam Review Homework.	Review due: 05/07
Week 16: 5/8/23 – 5/11/23	Final Exam Week Final Exam: Covering sections from Week 8 through Week 15.	Complete all assigned online Lumen Homework. All work due!	Open 5/8 to 5/10

2023 Spring Semester	
Offices Re-open	1/2/2023
Faculty In-Service	1/9/2023 - 1/12/2023

Martin Luther King Day	1/16/2023	
First Class Day (16-week, 1st 8-week, 1st 5-week sessions)	1/17/2023	
Late Registration Ends	1/20/2023	
Last Day to Withdraw with a Grade of "W" (1st 5-weeks)	2/9/2023	
Staff In-Service	2/17/2023 8 AM - 12 PM	
First Class Day (2nd 5-week session)	2/20/2023	
Last Day to Withdraw with a Grade of "W" (1st 8-weeks)	2/28/2023	
Deadline for Spring Graduation Application	3/10/2023	
Spring Break	3/13/2023 - 3/17/2023	
First Class Day (2nd 8-week session)	3/20/2023	
Last Day to Withdraw with a Grade of "W" (2nd 5-weeks)	3/23/2023	
First Class Day (3rd 5-week session)	4/3/2023	
Final Day to Withdraw with Grade of "W" (16-weeks)	4/20/2023	
Last Day to Withdraw with a Grade of "W" (3rd 5-weeks)	4/27/2023	
Last Day to Withdraw with a Grade of "W" (2nd 8-weeks)	4/27/2023	
Last Class Day (16-week session)	5/4/2023	
Final Examinations	5/4/2023 - 5/11/2023	
Spring Graduation	5/13/2023 9 AM & 11 AM	