Math 1342.021 DC Introductory Statistics – Hybrid

Course Syllabus: Spring 2025

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

Instructor: Dr. Jackie Johnston

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Office Hours	Monday	Tuesday	Wednesday	Thursday	Friday	Online
	9:30 – 11:00 1:30 – 2:30	9:30 – 11:00 1:30 – 2:30	9:30 – 11:00 1:30 – 2:30	9:30 – 11:00 1:30 – 2:30	TEAMs Meeting by Appointment	TEAMs Meeting by Appointment

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 Blackboard and classroom engagement opportunities (participation) including in-class assignments, which are 10% of final grade; online homework (30%) and quiz problems (20%) via OHM Lumen in Blackboard (Bb) are 50% of your final grade, and Midterm exam (20%) and Final Exam (20%) will contribute to 40%f the final grade.

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:

Participation:	10%	Includes in-class assignments, and/or group work
Homework:	30%	Homework - Lumen OHM via Bb
Quizzes:	20%	Quizzes – Lumen OHM via Bb
Midterm Exam:	20%	In-class
Final Exam:	20%	In-class

100% - 90% = “A”
89% - 80% = “B”
79% - 70% = “C”
69% - 60% = “D”
Below 60% = “F”

Make-up exams will not be given unless the student has coordinated with the instructor prior to the exam.

Lumen OHM homework and quizzes will require the use of "Late Passes" if not completed by the scheduled due date. Each student has 255 last passes that extend the assignment due date for 48 hours. Students may use more than one late pass per assignment that is past due.

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.)

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.

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 recommended. A free online TI-83 will be available in Blackboard for Window PCs.

The TI-84 Online Calculators is available for individual purchase by students through the TI Store. A single license for the TI-84 Online Calculator is $20 per year and the single license for the TI Nspire CX II Online Calculator is $27.50 per year. Both online calculator solutions come with full math functionality. For a full list of specifications and a comparison chart of the various functionalities for each of the online calculator solutions, please click on the appropriate link below.

- TI-84 Plus CE ONLINE Calculator - $20.00 per year for an individual license
- TI-Nspire CX II ONLINE Calculator - $27.50 per year for an individual license.

The link to the TI Store where students can purchase their individual licenses is found below:

TI STORE

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 Student Resources – Technical Support Tab in Blackboard.

Required Computer Literacy Skills:

As a hybrid 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 part of the course, following is a list of expectations and requirements: Students in a hybrid and/or 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 hybrid course where students are required to access graded activities on the Blackboard Learning Management System. A typical class involves general participation by all members in discussions regarding mathematical principles and procedures being studied. 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.

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.

Communications:
Emails, TEAMs, Blackboard and phone messages will be responded to within 24 hours. If you do not receive a response within 24 hours, then the email or phone message was not received. Posts in the Discussion Forum "Questions, Comments, and/or Concerns?" will be monitored by the instructor. Responses by the instructor will be within 72 hours of post. Students are expected to abide by Netiquette rules when communicating online. See this 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 outside of class. 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. Students are always expected to be respectful toward classmates and professor! Review Student Conduct in the Student Handbook. It is the student's responsibility to check Blackboard 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.

Statement Regarding the Use of Artificial Intelligence (AI) Technology:
Absent a clear statement from a course instructor, use of or consultation with generative AI shall be treated analogously to assistance from another person (collusion). Generative AI is a subset of AI that utilizes machine learning models to create new, original content, such as images, text, or music, based on patterns and structures learned from existing data (Cornell, Center for Teaching Innovation). Unauthorized use of generative AI tools to complete an assignment or exam is not permitted. Students should acknowledge the use of generative AI and default to disclosing such assistance when in doubt. Individual course instructors may set their own policies regulating the use of generative AI tools in their courses, including allowing or disallowing some or all uses of such tools. Students who are unsure of policies regarding generative AI tools are encouraged to ask their instructors for clarification. (Adapted from the Stanford University Office of Community Standards-- accessed August 31, 2023)

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 accommodation 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 accommodation. 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 & Hygiene Closet
- Financial Literacy
- Students with Children
- Emergency Aid
- Tutoring

Students may experience stressors that can impact both their academic experience and their personal well-being. These may include academic pressure and challenges associated with relationships, mental health, alcohol or other drugs, identities, finances, etc.

Mental Health Counseling Services are available on campus- in person and online - to all NTCC students at no cost. If you are experiencing concerns, seeking help is a courageous thing to do. You can also contact us directly at counseling-center@ntcc.edu

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.

Math1342.021 DC Spring 2025 (Subject to Change)

Weeks	Topics	Assignments	Due Dates
Week 1: 1/20/25 – 1/26/26 *1/20/25 – MLK Holiday*	1/21/25: Orientation	**Read through orientation module & complete Syllabus Acknowledgement Agreement & Introduction Discussion Forum**	1/27/25
	Module 1: Sampling and Data (Sections 1.1 – 1.6)	Read textbook & watch videos.	1/27/25
Week 2: 1/27/25 – 2/2/25	Module 1: Sampling and Data (Sections 1.1 – 1.6) - In class assignments/homework examples – 1/28/25	Work on assigned Lumen OHM homework & quiz.	2/3/25
	Module 2: Descriptive Statistics (Sections 2.1 -2.4)	Read textbook & watch videos.	2/3/25
Week 3: 2/3/25 – 2/9/25 *2/5/25 – Spring Census*	Module 2: Descriptive Statistics (Sections 2.1 -2.4) – In class assignments/homework examples – 2/4/25	Work on assigned Lumen OHM homework & quiz.	2/10/25
	Module 2: Descriptive Statistics (Sections 2.5 – 2.7)	Read textbook & watch videos.	2/10/25
Week 4: 2/10/25 – 2/16/25	Module 2: Descriptive Statistics (Sections 2.5 – 2.7) – In class assignments/homework examples – 2/11/25	Work on assigned Lumen OHM homework & quiz.	2/17/25
	Module 3: Probability 3.1 – 3.3 (Sections 3.1 – 3.3)	Read textbook & watch videos.	2/17/25
Week 5: 2/17/25 – 2/23/25	Module 3: Probability 3.1 – 3.3 (Sections 3.1 – 3.3) – In class assignments/homework examples – 2/18/25	Work on assigned Lumen OHM homework & quiz.	2/24/25
	Module 3: Probability (Sections 3.4 – 3.5) Module 4: Discrete Random Variables (Sections 4.1 – 4.3)	Read textbook & watch videos.	2/24/25
Week 6: 2/24/25 – 3/2/25	Module 3: Probability (Sections 3.4 – 3.5) & Module 4: Discrete Random Variables (Sections 4.1 – 4.3) - In class assignments/homework examples – 2/25/25	Work on assigned Lumen OHM homework & quiz.	3/3/25
	Module 5: Continuous Random Variables (Section 5.1)	Read textbook & watch videos.	3/3/25
Week 7: 3/3/25 – 3/9/25	Module 5: Continuous Random Variables (Section 5.1) – In class assignments/homework examples – 3/4/25	Complete assigned homework.	3/11/25
	Review for Midterm Exam.		
Week 8: 3/10/25 – 3/16/25	**3/11/25: Midterm Exam:** Covering sections from Week 1 through Week 8.	**Complete all** assigned homework and quizzes.	3/10/25
	Module 6: Normal Distribution (Sections 6.1 – 6.2)	Read textbook & watch videos.	3/24/25

March 17th through March 21st – Spring Break

Weeks	**Topics**	**Assignments**	**Due Dates**
Week 9: 3/24/25 – 3/30/25	Module 6: Normal Distribution 6.1 – 6.2 – In class assignments/homework examples – 3/25/25	Work on assigned Lumen OHM homework & quiz.	3/31/25
	Module 7: The Central Limit Theorem (Sections 7.1 & 7.3)	Read textbook & watch videos.	3/31/25
Week 10: 3/31/25 – 4/6/25	Module 7: The Central Limit Theorem (Sections 7.1 & 7.3) - In class assignments/homework examples – 4/1/25	Work on assigned Lumen OHM homework & quiz.	4/7/25
	Module 8: Confidence Intervals (Sections 8.1 – 8.3)	Read textbook & watch videos.	4/7/25
Week 11: 4/7/25 – 4/13/25 *4/10/25 – Final Day to Withdraw with a Grade of "W"*	Module 8: Confidence Intervals (Sections 8.1 – 8.3) – In class assignments/homework examples – 4/8/25	Work on assigned Lumen OHM homework & quiz.	4/14/25
	Module 9: Hypothesis Testing with One Sample (Sections 9.1 – 9.3)	Read textbook & watch videos.	4/14/25
Week 12: 4/14/25 – 4/20/25	Module 9: Hypothesis Testing with One Sample (Sections 9.1 – 9.3) – In class assignments/homework examples – 4/15/25	Work on assigned Lumen OHM homework & quiz.	4/21/25
	Module 9: Hypothesis Testing with One Sample (Sections 9.4 – 9.5)	Read textbook & watch videos.	4/21/25
Week 13: 4/21/25-4/27/25	Module 9: Hypothesis Testing with One Sample (Sections 9.4 – 9.5) – 4/22/25	Work on assigned Lumen OHM homework & quiz.	4/28/25
	Module 12: Linear Regression and Correlation (Sections 12.1 – 12.3)	Read textbook & watch videos.	
Week 14: 4/28/25 – 5/4/25	Module 12: Linear Regression and Correlation (Sections 12.1 – 12.3) – 5/5/25	Work on assigned Lumen OHM homework & quiz.	5/11/25
Week 15: 5/5/25 – 5/11/25 *5/8/25 – Last Class Day*	Final Exam Review: 5/6/25	Complete assigned homework.	5/13/25
Week 16: 5/12/25 – 5/15/25	**5/13/25: Final Exam:** Covering sections from Week 5 through Week 8.	**Complete all** assigned homework.	5/13/25

Tentative Course Timeline (*note* instructor reserves the right to adjust this) timeline at any point in the term.