



Math 1342.050 DC Introductory Statistics

Course Syllabus: Spring 2024 Ore City High School

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

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Office	Monday	Tuesday	Wednesday	Thursday	Friday	Online
Hours	9:00 – 11:00	10:00 – 11:00	9:00 – 10:50	9:00 – 11:00	Online TEAMS and Appointment	Everyday

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.

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.

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.

Course Description: This is an elementary course in statistics, designed to meet the needs of nursing, business, education and behavioral science students. Included are the following topics and their applications in various fields: frequency distributions, probability, random sampling, central tendency, dispersion, normal distribution, binomial distribution, sampling distributions, confidence intervals, hypothesis testing, Chi square, analysis of variance (ANOVA, and linear regressions analysis).

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.

College 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 engagement opportunities including textbook assignments, discussion forums,, and/or online homework problems will be worth 100 points or 25% of your final grade. A Midterm and Final Exam will contribute 150 points each or 75% of the final grade.

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

Midterm Exam	37.5%	150 points	“A”	90 – 100 %	360 – 400 points
Homework/Classroom Engagement	25%	100 points	“B”	80 – 89 %	320 – 359 points
<u>Final Exam</u>	<u>37.5%</u>	<u>150 points</u>	“C”	70 – 79 %	280 – 319 points
Total:	100%	500 points	“D”	60 – 69 %	240 – 279 points
			“F”	Below 60%	Below 240 pts

Make-up exams will not be given unless the student has coordinated with the instructor prior to the exam. Late work for whatever reason will incur a penalty unless otherwise indicated by 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



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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 with statistics functions is required. TI-83/84 is preferred. A free online TI-83 will

be available in Blackboard for 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 will 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.

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.

Communications:

Emails and phone messages will be responded to with 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 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, but mainly Blackboard course 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. Check your Blackboard messages daily.

Institutional/Course Policy:

There will be no cell phone usage in the classroom. Students will be warned if caught using a phone during class. A student will be removed from class if the disruption continues. An appropriate mask or face covering will be worn at all times in the classroom. Students violating this policy will be immediately sent to Student Services for relocation into another class more suited to their needs.

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 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 adjust this) timeline at any point in the term. This will be discussed on a weekly basis.

There is a pdf of your textbook on our homepage free for download as well as sectional videos, discussion board participation and blackboard messages. Please read all my blackboard messages and communicate with me using it rather than my NTCC email. Your midterm homework from our textbook is some of the practice problems at the end of each of chapters 1, 2, 3 and 4 as given below. Your final homework and examination come from chapters 6 – 9.

Chapter 1 -- Page 49; Problems (9, 18, 27, 36, ..., 90)

Chapter 2 -- Page 125; Problems (9, 18, 27, 36, 45, ..., 117)

Chapter 3 -- Page 215; Problems (9, 18, 27, ..., 72)

Chapter 4 -- Page 281; Problems (5, 10, 15, ..., 35)

Midterm Homework & Exam Due: February 6th, 2024

Chapter 6: Page 384; Practice (7, 14, 21, 28, 35, ... , 84)

Chapter 7: Page 422-423; Practice (1, 2, 3, 4, 5, 6)

Chapter 8: Page 473; Practice (1, 2, 3, 4, ... ,12)

Chapter 9: Pages 534-537; Practice (5, 10, 15, 20, ... , 50)

Final Homework & Exam Due: March 5th, 2024