

North Dakota State College of Science

2024-2025 Syllabus

Fall 2024

Course Information

Course Number: Math 210

Course Title: Elementary Statistics

Credit Hours: 3

Instructor Information

Instructor: Jordan Cieslak Phone: 701-356-2050

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Office Location: Room 200j

Office Hours: N/A

Course Description

An introduction to statistical methods of gathering, presenting, and analyzing data. Topics include probability and probability distributions, confidence intervals, hypothesis testing, and linear regression and correlation. Prerequisite: ACT score, ASC 093 or placement test. (F, S, O) ND:MATH

Textbook and Required Materials

Elementary Statistics, 13th Edition, Pearson Education, Inc., (Addison Wesley), Mario F. Triola – 122012; bundled with MSL access. The ISBN is 9780134763705 for the Elementary Statistics package, including the book and the MSL code.

Learning Goals/Outcomes

Upon completion of this course, the student will be able to:

- 1. Use statistical methods of gathering, presenting, and analyzing data as evidenced by classroom activities (homework and quizzes) and objective tests.
- 2. Work with probability and probability distributions and their applications as evidenced by classroom activities (homework and quizzes) and objective tests.
- 3. Work with confidence intervals and their applications as evidenced by classroom activities (homework and quizzes) and objective tests.
- 4. Work with hypothesis testing as evidenced by classroom activities (homework and quizzes) and objective tests.
- 5. Work with linear regression and correlation and its applications as evidenced by classroom activities (homework and quizzes) and objective tests.

Grading and Evaluation

Grades weightings are as follows:

QUIZZES, NOTES, DAILY WORK: 20% of course grade ASSESSMENTS: Chapter Tests: 65% of course grade Quarter finals/Semester project: 15% of course grade

SCALE: A: > 90%, B: > 80%, C: > 70%, D: > 60%, F: < 60%

Grading Scale

Grading System	Percent
Α	100%-90%
В	89%-80%
С	79%-70%
D	69%-60%

Assessments

Each unit will have 1-2 quizzes and an end of unit test. Each quarter will have a final exam.

Attendance Policy

Students are expected to attend class each day. It is your responsibility to make up any missing work during absences.

Tie to Assessment Outcomes

Math 210 Ties into Liberal Arts assessment by providing data to the Critical Thinking Outcome group

Course/Instructor Expectations

- -Students will come to class prepared to work each day with their Ipads and pens fully charged.
- -If you have difficulty with the classwork please seek help before the next class period from a peer, Mr. Cieslak, or another Math teacher.
- -Email is the preferred method of communication outside of class.

Course Schedule:

Chap. I	Getting Started
Chap. 2	Organizing Data
Chap. 3	Averages and Variation
Chap. 4	Elementary Probability Theory
Chap. 5	The Binomial Probability Distribution
Chap. 6	Normal Distributions
Chap. 7	Introduction to Sampling Distributions
Chap. 8	Estimation
Chap. 9	Hypothesis Testing
Chap. 10	Correlation and Regression

MATERIALS NEEDED:

- -Ipad and Ipad Pencil
- -Folder or Binder for notes, returned worksheets and guizzes etc.
- -Some calculators such as the TI-89 are not allowed. If unsure, please check with the teacher.

Academic Integrity

Acts of academic dishonesty, including but not limited to cheating, plagiarism, falsifying research data or results or assisting others to do the same will be cause for sanction up to and including reduction in grade, failure of course or removal from class. Repeat offenses may result in additional sanctions.

Statement on use of Artificial Intelligence (AI)

The use of artificial intelligence, machine learning models, or other AI technologies to complete any assignments or assessments in this course is strictly prohibited. All work submitted must be entirely your own original work. Submitting work generated by AI systems constitutes academic dishonesty and will result in disciplinary action according to college policies. If you have any questions about what constitutes authorized assistance versus unauthorized AI use, please consult with me.

ADA Statement

Any student who feels they may need an accommodation based on the impact of a disability should contact their instructor privately to discuss specific needs. Please contact the Accessibility Coordinator at NDSCS.Accessibility@ndscs.edu or by phone at 701-671-2623 as soon as possible in the semester to discuss possible accommodations.

Equal Opportunity Statement

North Dakota State College of Science is an equal opportunity employer and equal opportunity educator. NDSCS is fully committed to equal opportunity in employment decisions and educational programs and activities. All practices are in compliance with all applicable federal and state laws, for all individuals without regard to age, color, gender identity/expression, genetic information, marital status, national or ethnic origin, physical and mental ability status, public assistance status, race, religion, sex, sexual orientation, familial or parental status, status as a U.S. veteran/service member, or participation in lawful activity off the employer's premises during nonworking hours which is not in direct conflict with the essential business-related interests of the employer.

For more information, refer to the NDSCS College Catalog under <u>Non-Discrimination Statement</u> and Equal Opportunity Policy.

Continuity of Instruction

NDSCS is committed to the continuity of instruction in the event of an emergency disruption that may result in the suspension of activities, including in-person classes at NDSCS. NDSCS is committed to preparing for any significant operational disruption or closure, which could result from flooding, weather, medical emergency, campus evacuation or other emergency.

An emergency closing of the College, campus closure, and/or suspension of in-person classes does not equate into a suspension of instruction. Faculty contract days remain in effect, though the means of instructional delivery may change.

All communications and updates are sent out in official College email and posted at NDSCS.edu Land Acknowledgement Statement

NDSCS acknowledges that we occupy the sacred ancestral lands of the First Nations cultures of North Dakota. Without them, we would not have access to our gathering, dialogue, and learning spaces.

Developed/Revised (Date): October 2024