North Central State College

MASTER SYLLABUS	2025-2026

A. Academic Division: Liberal Arts

B. Discipline: Statistics

C. Course Number and Title: STAT1010 Probability and Statistics

D. Assistant Dean: Laura Irmer

E. Credit Hours: 3

F. Prerequisites: MATH0084 (Minimum grade of C- required) or qualifying placement test score
OR
Co-requisites: STAT 0086

G. Last Course/Curriculum Revision Date: Fall 2023 Origin date: 06/08/2011

H. Textbook(s) Title:

OpenStax Free Textbook (available for download or view)
Introductory Statistics

- Authors: OpenStax College
- Copyright Year: 2018
- Edition: N/A
- Link: https://openstax.org/details/books/introductory-statistics

Online/Hybrid Courses:
Online Access Code thru Web Assign (E-book included)

- Author: OpenStax
- ISBN 9781337777186

I. Workbook(s) and/or Lab Manual: Access to Microsoft Excel; TI-83 or TI-84 calculator required

J. Course Description: This course provides the student with an overview of probability and statistics. Probability terminology, concepts and rules are emphasized in solving probability problems. Descriptive statistics, including measures of central tendency and dispersion, charts, tables and diagrams are used to summarize data. The student is introduced to the binomial, Poisson, hyper-geometric, normal and t-distributions. Confidence intervals, hypothesis testing, correlation, and linear regression are used to make conclusions concerning population parameters from sample data. This course meets the requirements for Transfer 36 Introductory Statistics TMM010.

K. College-Wide Learning Outcomes:

College-Wide Learning Outcome	Assessments - - How it is met & When it is met
Communication – Written	
Communication – Speech	
Intercultural Knowledge and Competence	
Critical Thinking	
Information Literacy	
Quantitative Literacy	Quantitative Literacy VALUE Rubric, middle of term.

L. Course Outcomes and Assessment Methods:

Upon successful completion of this course, the student shall:

Outcomes	Assessments – How it is met & When it is met
1. Define foundational terms used in statistics and identify characteristics of a well-designed statistical study.	HW, Project, Tests, final exam, early in the term.
2. Collect, organize, and summarize data in tables, charts, and with statistics/parameters.	HW, Project, Tests, final exam Early in the term.
3. Describe the relationship between two variables both visually and numerically.	HW, Project, Tests, final exam Early in the term.
4. Apply the rules and concepts of probability to solve a variety of problems.	HW, Tests, final exam Middle of the term.
5. Apply the binomial, poison, and hyper-geometric discrete probability distributions to solve appropriate statistical problems.	HW, Tests, final exam Middle of the term.
6. Apply the normal distribution to solve appropriate statistical problems.	HW, Tests, final exam Late in the term.
7. Define sampling distributions and generate said distributions to observe the Central Limit Theorem.	HW, Project, Tests, final exam Late in the term.
8. Calculate confidence intervals for means and proportions using the z and t distributions.	HW, Project, Tests, final exam Late in the term.
9. Compute one population tests for means and proportions using the z and t distributions.	HW, Project, Tests, final exam Late in the term.

M. Recommended Grading Scale:

NUMERIC	GRADE	POINTS	DEFINITION
93–100	A	4.00	Superior
90–92	A-	3.67	Superior
87–89	B+	3.33	Above Average
83–86	B	3.00	Above Average
80–82	B-	2.67	Above Average
77–79	C+	2.33	Average
73–76	C	2.00	Average
70-72	C-	1.67	Below Average
67–69	D+	1.33	Below Average
63-66	D	1.00	Below Average
60-62	D-	0.67	Poor
00-59	F	0.00	Failure

N. College Procedures/Policies:

North Central State College believes that every student is a valued and equal member of the community.* Every student brings different experiences to the College, and all are important in enriching academic life and developing greater understanding and appreciation of one another. Therefore, NC State College creates an inclusive culture in which students feel comfortable sharing their experiences. Discrimination and prejudice have no place on the campus, and the College takes any complaint in this regard seriously. Students encountering aspects of the instruction that result in barriers to their sense of being included and respected should contact the instructor, assistant dean, or dean without fear of reprisal.

* *Inclusive of race, color, religion, gender, gender identity or expression, national origin (ancestry), military status (past, present or future), disability, age (40 years or older), status as a parent during pregnancy and immediately after the birth of a child, status as a parent of a young child, status as a foster parent, genetic information, or sexual orientation*

Important information regarding College Procedures and Policies can be found on the syllabus supplement located at:
https://ncstatecollege.edu/documents/President/PoliciesProcedures/PolicyManual/Final%20PDF/14-081b.pdf

North Central State College
SYLLABUS ADDENDUM

Academic Division:	Liberal Arts	**Discipline:**	Mathematics
Course Coordinator:	Sara K. Rollo		
Course Number:	STAT 1010-924	**Course Title:**	Probability and Statistics
Semester / Session:	Fall 2025 – Session A	**Start / End Date:**	8/11/2025 – 10/3/2025

Instructor Information

Name:	Makayla M. Meckes	**Credentials:**	Master of Arts in Mathematics
Phone Number:	(419) 755-4800 ext. 9067	**E-Mail Address:**	mmeckes@ncstatecollege.edu *(Preferred contact method.)*
Office Location:	*Zoom link provided in Canvas.*	**Office Hours:**	*To be determined based on student need/availability.*

I. Topical Timeline (Subject to Change):

STAT1010	Due Friday at 11:59pm	Due Monday at 11:59pm
Week 1 *August 11 – August 18*	**Assignments:** Chapter 1 Homework Chapter 2 Homework **Outcomes/objectives:** Learn an overview of statistics, sampling methods, and types of data Collect, organize, and summarize data in tables, charts, and with statistics/parameters. Determine measures of central tendency and measures of dispersion	**Assignments:** Project Part 1
Week 2 *August 18 – August 25*	**Assignments:** Chapter 1 & 2 Test	**Assignments:** Project Part 2
Week 3 *August 25 – September 1*	**Assignments:** Chapter 12 Homework Chapter 3 Homework **Outcomes/objectives:** Describe the relationship between two variables both visually and numerically Apply the rules and concepts of probability to solve a variety of problems	**Assignments:** Chapter 12 & 3 Test
Week 4 *September 1 – September 8*	**Assignments:** Chapter 4 Homework **Outcomes/objectives:** Apply the binomial, Poisson, geometric, hypergeometric and discrete probability distributions to solve appropriate statistical problems	**Assignments:** Chapter 4 Quiz Project Part 5
Week 5 *September 8 – September 15*	**Assignments:** Chapter 5 Homework	**Assignments:** Chapter 6 Homework

	Outcomes/objectives: Apply the uniform and exponential probability distributions to solve appropriate statistical problems	**Outcomes/objectives:** Apply the normal distribution to solve appropriate statistical problems
Week 6 *September 15 – September 22*	**Assignments:** Chapter 7 Homework **Outcomes/objectives:** Define sampling distributions and use the Central Limit Theorem	**Assignments:** Chapter 6 & 7 Test
Week 7 *September 22 – September 29*	**Assignments:** Chapter 8 Homework Chapter 9 Homework **Outcomes/objectives:** Calculate confidence intervals for means and proportions using the z and t distributions Compute one population tests for means and proportions using the z and t distributions	**Assignments:** Chapter 8 Quiz Project Part 3 Project Part 4
Week 8 *September 29 – October 3*	**Assignments:** Final Exam Project Part 6	***Happy Fall Break!*** ☺

II. Course Assignments:

1. Quizzes
2. Tests
3. Homework
4. Final Project
5. Final Exam

Assignments for each week will open on Monday at 12:00am and will be due on either Friday at 11:59pm or the following Monday at 11:59pm. See schedule above for the specific assignments and their due dates.

Homework, quizzes, tests, and the final exam will be submitted through WebAssign. To access WebAssign, visit www.webassign.net and follow the registration instructions using the class key provided in Canvas and an access code purchased through WebAssign or at the campus bookstore.

The project will be submitted in parts through Canvas. Please upload either a Word or PDF document for each part. Feedback will be posted in Canvas along with the grade—be sure to check the feedback before continuing to the next part of the project.

All assignment grades will be posted in Canvas. The grade posted in Canvas should be used to determine the current course grade.

III. Grading and Testing Guidelines:

Activity	Qty	Points	Percentage
Homework (10 points each)	10	100	10%
Project	1	84	15%
Tests (100 points each)	3	300	45%
Quizzes (100 points each)	2	200	10%
Final Exam	1	100	20%
Total	17	784	100%

1. Homework: 10%
2. Project: 15%
3. Tests/Quizzes: 55%
4. Final Exam 20%

IV. Examination Policy:

- Tests, quizzes, and the final exam should be completed via WebAssign by the due date indicated in Canvas and on WebAssign.
- A time/attempt limit applies for tests, quizzes, and the final exam; this is indicated prior to starting the assignment in WebAssign.
- Failure to complete an assignment by the indicated due date will result in a grade of zero for that assignment.
- Extensions for tests and quizzes should be requested at least 24 hours before the assignment due date. Extensions requested after that time are not guaranteed.
- Extensions will not be granted if the answer key for the assignment has been viewed.

V. Class Attendance and Homework Make-Up Policy:

- Homework should be completed via WebAssign by the due date indicated in Canvas and on WebAssign.
- There is not a time limit and multiple attempts are allowed for homework.
- Failure to complete an assignment by the indicated due date will result in a grade of zero for that assignment.
- Extensions for homework should be requested at least 24 hours before the assignment due date. Extensions requested after that time are not guaranteed.
- Extensions will not be granted if the answer key for the assignment has been viewed.

VI. Classroom Expectations:

- Respectful interaction among NCSC students, faculty, and staff is always expected.
- Assignments should be completed by the indicated due date. Failure to complete an assignment by the indicated due date will result in a grade of zero for that assignment. Extensions for tests and quizzes should be requested at least 24 hours before the assignment due date. Extensions requested after that time are not guaranteed. Extensions will not be granted if the answer key for the assignment has been viewed.
- Generally, assignments will be graded within 2-3 business days and communication via email will be addressed within 48 hours.
- If assistance is needed, Zoom meetings may be scheduled at a time convenient for both the student and instructor. Please reach out to the instructor via email to schedule.
- AI should not be used as a substitute for student work on any graded assignment.
- Any student who requires reasonable accommodations related to a disability should inform the course instructor and the Coordinator of Specialized Services (Room 138 in Kee Hall; phone 419-755-4727).
- Students who encounter difficulty in any of their courses are encouraged to visit the Tutoring Resource Center (Room 119 in Fallerius Technical Education Center) for tutoring assistance, and the Student Success Center (Room 136 in Kee Hall) for academic assistance, advising services, referrals for personal counseling and Learning Disability (LD) Testing.