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	**Course Title:**	Probability and Statistics
Semester / Session:	Spring 2026 Session A	**Start / End Date:**	01/12/26 - 03/06/26

Instructor Information

Name:	Mike Enders		
Credentials:	MA Teaching and Learning	**E-Mail Address:**	menders@ncstatecollege.edu
Office Location:	none	**Office Hours:**	Immediately after class

I. Topical Timeline (Subject to Change):

Note: chapter homework, quizzes, and tests will be completed via Web Assign
All parts of project will be submitted via Canvas

Week # and Tuesday's Date		Tuesday's Class	Thursday's Class	Assignments due Saturday
1	01/13	**Outcomes/objectives: Course overview and Chapter 1** Learn an overview of statistics, sampling methods, and types of data	**Outcomes/objectives: Finish Chapter 1; Start Chapter 2** Collect, organize, and summarize data in tables, charts, and with statistics/parameters. Determine measures of central tendency and measures of dispersion	Ch 1 HW Project part 1
2	01/20	**Outcomes/objectives: Finish Chapter 2**	**Outcomes/objectives: Chapter 12** Describe the relationship between two variables both visually and numerically	Ch 2 HW Test chapters 1 and 2 Project part 2
3	01/27	**Outcomes/objectives: Finish Chapter 12**	**Outcomes/objectives: Chapter 3** Apply the rules and concepts of probability to solve a variety of problems	Ch 12 HW Project Part 5
4	02/03	**Outcomes/objectives: Chapter 4** Apply the binomial, Poisson, geometric, hypergeometric and discrete probability distributions to solve appropriate statistical problems	**Outcomes/objectives: Chapter 5** Apply the uniform and exponential probability distributions to solve appropriate statistical problems	Ch 3 HW Test: Ch 12 and 3
5	02/10	**Outcomes/objectives: Finish Chapter 5**	**Outcomes/objectives: Chapter 6** Apply the normal distribution to solve appropriate statistical problems	Ch 4 HW Ch 4 Quiz Ch5 HW
6	02/17	**Outcomes/objectives: Chapter 7** Define sampling distributions and use the Central Limit Theorem	**Outcomes/objectives: Chapter 8** Calculate confidence intervals for means and proportions using the z and t distributions	Ch 6 HW Ch 7 HW CH 6 & 7 Test
7	02/24	**Outcomes/objectives: Finish Chapter 8**	**Outcomes/objectives: chap 9** Compute one population tests for means and proportions using the z and t distributions	Ch 8 HW Ch 8 Quiz Project part 3
8	03/03	**Outcomes/objectives: catch up day** **Assignments due Tuesday 03/03:** Ch 9 HW Project Parts 4 & 6	**No in-person class.** **Assignments due Thursday 03/05:** Final Exam	**Last week – assignments are due TUESDAY & THURSDAY this week.**

II. Course Assignments:

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

III. Grading and Testing Guidelines:

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

IV. Examination Policy:

- Tests/Quizzes/Final Exam will be given online via the online homework platform WebAssign and are due according to dates on the syllabus.
- Students are allowed to use a formula sheet, notes, and a calculator.
- All tests/quizzes/final exam are open the first day of class and will close on the due date. You can take the test/quiz/final any day leading up to the due date.
- There is a time limit for the tests/quizzes/final so be alert about your time. The time starts when you begin the assignment. If you click into it and then walk away from it or close the browser, the timer will still run until the allotted time has expired and you will miss any questions that were not answered.
- You will have two attempts per question for each quiz and test.
- Extensions will be granted on an extremely limited basis. If you have already viewed the answer key online (I can see if you have or not), then no extension will be granted.

V. Class Attendance and Homework Make-Up Policy:

- Homework is due as assigned and is to be completed in Cengage / WebAssign.
- Homework will be due according to the syllabus.
- There are no time limits on homework, and you will have multiple attempts on each question.
- Homework will be open starting on the first day of class and will close when it is due. You can complete homework any time leading up to the time it is due.
- Attendance will be taken for every class. Attendance is not, however, part of the overall class grade. Since this class will go at a quick pace, regular attendance is strongly encouraged.
- Things do occur that may prevent attendance and may make it difficult to finish a homework assignment. In these events, please communicate with the instructor. One homework assignment will be accepted late with no penalty if it is completed before the next assignment is due. Otherwise, assignments will be scored based on what is completed by the due date.

VI. Classroom Expectations:

- Attend class ready to learn and be respectful to all.
- This class will move very quickly, so it is of the utmost importance that you stay organized and on top of your assignments.