



North Central State College
MASTER SYLLABUS
2019-2020

- A. Academic Division: Liberal Arts
- B. Discipline: Statistics
- C. Course Number and Title: STAT1010 Probability and Statistics
- D. Course Coordinator: Sara Rollo
Assistant Dean: Dr. Steve Haynes

Instructor Information:

- Name: Click here to enter text.
- Office Location: Click here to enter text.
- Office Hours: Click here to enter text.
- Phone Number: Click here to enter text.
- E-Mail Address: Click here to enter text.

- E. Credit Hours: 3
- F. Prerequisites: MATH0084 (Minimum grade of C- required) or qualifying placement test score
OR
Co-requisites: STAT 0086
- G. Syllabus Effective Date: Fall, 2019
- H. Textbook(s) Title:

****Sections instructed by Sara Rollo will not need to purchase books.**

Statistics Informed Decisions Using Data Author: Michael Sullivan, III

- Copyright Year: 2016
- Edition: 5th
- ISBN 9780134135373

For online Courses:

Statistics Informed Decisions Using Data plus MyStatLab Package

- Author: Michael Sullivan, III
- Copyright Year: 2016
- Edition: 5th
- ISBN 9780134136783

- 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 OTM 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, week 8, test 2

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.	HW, Project, Tests, final exam Weeks 1,2,4 and 16
2. Collect, organize, and summarize data in tables, charts, and with statistics/parameters.	HW, Project, Tests, final exam Weeks 3,4 and 16
3. Describe the relationship between two variables both visually and numerically.	HW, Project, Tests, final exam Weeks 4, 8 and 16
4. Apply the rules and concepts of probability to solve a variety of problems.	HW, Tests, final exam Weeks 4,5,6,8 and 16
5. Apply the binomial, poison, and hyper-geometric discrete probability distributions to solve appropriate statistical problems.	HW, Tests, final exam Weeks 6,7,8 and 16
6. Apply the normal distribution to solve appropriate statistical problems.	HW, Tests, final exam Weeks 9,12 and 16
7. Define sampling distributions.	HW, Project, Tests, final exam Weeks 10,12 and 16
8. Calculate confidence intervals for means and proportions using the z and t distributions.	HW, Project, Tests, final exam Weeks 11,12,13 and 16
9. Compute one population tests for means and proportions using the z and t distributions.	HW, Project, Tests, final exam Weeks 13,14,15 and 16

M. Topical Timeline (Subject to Change):

Weeks 1-2	Overview of statistics Sampling methods.
Week 3	Types of data. Frequency distributions. Graphical representations.
Weeks 3-4	Measures of central tendency. Measures of dispersion.
Week 4	Scatter diagrams and correlation. Least squares linear regression.
Weeks 4-6	Counting Techniques. Probability rules.
Weeks 6-8	Discrete probability functions: Binomial, Poisson, Hyper-Geometric

Week 9	Normal probability distribution.
Week 10	T-distribution. Sampling distributions.
Weeks 11-13	Confidence intervals for means and proportions.
Weeks 13-16	Hypothesis testing (one population) of means and proportions.

N. Course Assignments:

Content as it is found in the textbook:

Homework & Tests

Value Rubric – Test 2, Quantitative Literacy

Chapter 1 – Sections 1, 2, 3, 4, 5

Chapter 2 – Sections 1, 2, 3, 4

Chapter 3 – Sections 1, 2, 3, 4, 5

Chapter 4 – Sections 1, 2

Chapter 5 – Sections 1, 2, 3, 4, 5

Chapter 6 – Sections 1, 2, 3, 4

Chapter 7 – Sections 1, 2, 3

Chapter 8 – Sections 1 (mention 2)

Chapter 9 – Sections 1, 2, 3, 4, 5

Chapter 10 – Sections 1, 2, 3, 4

Chapter 11 – Sections 1, 2

O. 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

P. Grading and Testing Guidelines:

1. HW, Quizzes, Project	30%
2. Tests	50%
3. Departmental Comprehensive Final Exam	20%

Q. Examination Policy:

[Click here to enter text.](#)

R. Class Attendance and Homework Make-Up Policy:

[Click here to enter text.](#)

S. Classroom Expectations:

Click here to enter text.

T. College Procedures/Policies:

Important information regarding College Procedures and Policies can be found on the [syllabus supplement](#) located at <https://sharept.ncstatecollege.edu/committees/1/curriculum/SiteAssets/SitePages/Home/SYLLABUS%20SUPPLEMENT.pdf>

The information can also be found Choose an item.