

SYLLABUS
ELEMENTARY STATISTICAL METHODS
MATH 255 – FALL 2020 – SECTION 1

Important Note: This syllabus, along with course assignments and due dates, are subject to change. It is the student's responsibility to check Canvas for corrections or updates to the syllabus. Any changes will be clearly noted in a course announcement or through email.

INSTRUCTOR

Dr. Richard Mitchell Office: D356B, Science Building e-mail: rmitchel@uwsp.edu
Cell: 340-4753 Math Dept: 766-2120 Fax: 346-4260

TIMES

Completely on-line, asynchronous. I am available via e-mail, cell phone, and zoom meetings. Weekly modules are due each Sunday before 11:59 pm.

COURSE INFORMATION

Course Description: Fundamental concepts and techniques that underlie applications to various disciplines, including descriptive statistics; averages; dispersion; random sampling; binomial, normal, Student T, Chi-square, and F distributions; estimation and tests of hypothesis; linear regression and correlation; laboratory emphasis on sampling and applications. Does not count toward math major/minor, or major for teacher certification. May not earn credit in both MATH 355 and MATH354.

Credits: 4

Prerequisite: MATH 95 or suitable placement test score

GEP: QL; AAS: AAS-QL, NW

KHAN ACADEMY

Create a Khan Academy account. See <https://www.khanacademy.org/signup>. Class code: VCEAFP2K

TEXTBOOK

Optional, reference only: *Introduction to the Practice of Statistics – Eighth Edition*. Moore and McCabe.

EXPECTED INSTRUCTOR RESPONSE TIMES

- I will attempt to respond to student emails within 24 hours. If you have not received a reply from me within 24 hours, please resend your email.
- ***If you have a general course question (not confidential or personal in nature), please post it to the Course Q&A Discussion Forum found on the course homepage. I will post answers to all general questions there so that all students can view them. Students are encouraged to answer each other's questions too.
- I will attempt to reply to and assess student discussion posts within 48 hours.
- I will attempt to grade written work within 72 hours.

COURSE LEARNING OUTCOMES

This course has two overall goals: At the end of this course you will understand, be able to implement, and evaluate (1) hypothesis testing procedures and (2) confidence interval procedures. Along the way, there are 11 units.

- Unit 1: Analyzing categorical data
- Unit 2: Summarizing quantitative data
- Unit 3: Displaying and comparing quantitative data
- Unit 4: Modeling data distributions
- Unit 5: Study design
- Unit 6: Probability
- Unit 7: Random variables
- Unit 8: Sampling distributions
- Unit 9: Confidence intervals
- Unit 10: Significance tests (hypothesis testing)

COURSE REQUIREMENTS

1. Completion of the Khan Academy units: 90% of grade. There are 15 weekly modules with each module scored 0-10 points (exceptional work may be scored greater than 10 points). Each weekly module will be computed according to the following schedule:

All listed assignments complete <u>and</u> scores on exercises, quizzes, and unit test:	≥ 75%	≥ 60%	≥ 50%	≤ 50%
Points:	10-8	7	6	5-0
<ul style="list-style-type: none"> • Note: Exercises, quizzes and unit tests may be repeated to increase your score (the latest score is recorded). • Note: Missing work (e.g., videos, articles, exercises, quizzes, unit test) may result in a lower score. • Note: Late submissions may result in a lower score. • Note: To score an A or B in the course, each unit must score at least 5 points (i.e., cannot skip any units). <p>Bottom line: Complete all listed assignments on time and score at least 75% on each assessment (exercises, quizzes, and unit test) will result in a score of 9 or 10 for that weekly module.</p>				

2. Participation: 10% of the grade. Units completed on time. Each module will have a due date. The participation portion of your grade will be computed according to the following schedule:

Late submissions:	0-1	2	3	4 or more
Percentage Points:	10%	8%	5%	0%

VIEWING GRADES IN CANVAS

Points you receive for graded activities will be posted to Grades. Click on the Grades link to view your points.

GRADING POLICY

Final letter grades will be assigned as follows:

A [100% - 90%]; B (90% - 80%]; C (80% - 70%]; D (70% - 60%] F (60% - 0%]

Appropriate + and - scores will be added at the discretion of the instructor. An incomplete will not be given for this course, unless you provide evidence of a situation beyond your control that prevents you from doing your work for a substantial time period. A heavy course load is not enough reason for an incomplete.

HONORLOCK

We will be using an online exam proctoring service called Honorlock in this course. You will be required to use Honorlock for some assessments in this course (see the Outline).

WORKLOAD

University guidelines suggest that to do well in a course, students may need to spend 2-3 hours outside of class for each hour in class. **This is an on-line course, but if it were face-to-face**, Math 255 would be scheduled for a total of 4 hours per week. To do well in this course (e.g., a B or better), you should plan to spend approximately 12 hours per week on this course. How and when you schedule this time is up to you, however, keep in mind that weekly modules are due on Sunday's at 11:59 pm.

BUILD RAPPORT

If you find that you have any trouble keeping up with assignments or other aspects of the course, make sure you let your instructor know as early as possible. Make sure that you are proactive in informing your instructor when difficulties arise during the semester so that we can help you find a solution.

UNDERSTAND WHEN YOU MAY DROP THIS COURSE

It is the student's responsibility to understand when they need to consider unenrolling from a course. Refer to the UWSP [Academic Calendar](#) for dates and deadlines for registration. After this period, a serious and compelling reason is required to drop from the course. Serious and compelling reasons includes: (1) documented and significant change in work hours, leaving student unable to attend class, or (2) documented and severe physical/mental illness/injury to the student or student's family.

INCOMPLETE POLICY

Under emergency/special circumstances, students may petition for an incomplete grade.

INFORM YOUR INSTRUCTOR OF ANY ACCOMMODATIONS NEEDED

If you have a documented disability and verification from the [Disability and Assistive Technology Center](#) and wish to discuss academic accommodations, please contact your instructor as soon as possible. It is the student's responsibility to provide documentation of disability to Disability Services and meet with a Disability Services counselor to request special accommodation *before* classes start.

The Disability and Assistive Technology Center is located in 609 Albertson Hall and can be contacted by phone at (715) 346-3365 (Voice) (715) 346-3362 (TDD only) or via email at datctr@uwsp.edu

ACADEMIC MISCONDUCT POLICY

Academic misconduct is an act in which a student:

- Seeks to claim credit for the work or efforts of another without authorization or citation.
- Uses unauthorized materials or fabricated data in any academic exercise.
- Forges or falsifies academic documents or records.
- Assists other students in any of these acts.

For a full discussion of the academic misconduct rules on the UWSP campus see Chapter 14 of the Rules of the Board of Regents, Wisconsin Administrative Code:

<http://www.google.com/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=1&ved=0CB0QFjAA&url=http%3A%2F%2Fwww.uwsp.edu%2Fdos%2FDocuments%2FUWS%252014.docx&ei=v2zzU4XdH9jgoAS0pYKQBw&usg=AFQjCNE3yU8CJfs0O4CXRnkUIT-aZkSPrA>

STUDENT RIGHTS AND RESPONSILITIES

You should be fully aware of your rights and responsibilities as a UWSP student. These are detailed in the *UWSP Community Bill of Rights and Responsibilities*:

<http://www3.uwsp.edu/stuaffairs/Documents/RightsRespons/rightsCommBillRights.pdf>