

MATH 350+MED 350: Prob/Stat for Teachers

Class Times: MTWR, 1:00 – 1:50, Sci D228

Instructor: Daniel Harnett

Office: Sci D353 Email: dharnett@uwsp.edu

Office Hours (usually right before class time): M 11:00 - 12:50, R 12:00 – 12:50, Friday morning, or by appt.

Course Description:

Discrete and continuous probability distributions; random variables; mathematical expectation; statistical estimation and inference; hypothesis testing; regression. Applications and teaching methods for probability and statistics in high school classroom. **Note: This will be treated as a single, 4-credit course in every way.**

Required Materials:

1. **Text: Text: Introduction to the Practice of Statistics, 10th Ed.** by Moore, McCabe and Craig. This is the same text as for MATH 255, just so you know. There will be some additional materials handed out in class and/or posted in Canvas.
2. **Calculator:** TI-83, TI-83+, TI-84, or TI-84+ recommended. Something with statistical functions.
3. **Computer access:** You are expected to have access to your UWSP email and CANVAS account at UWSP. We will use EXCEL for some projects. We will also see some free, web-based software tools.

Course Learning Outcomes: This course will cover the same material as MATH 255, with some added mathematical background. The course material is consistent with the AP Statistics syllabus, and also with Common Core standards for HS statistics. We will also discuss some pedagogical issues. By the end of the course, students will understand and use some of the most popular statistical methods. In addition, students will be alert to issues of data quality and scientific approaches to gathering information.

The course will have 3 units:

1. Exploratory data analysis, descriptive statistics, scientific methods.
2. Probability theory with emphasis on statistical applications.
3. Statistical inference with common methods: z -test, t -test and confidence intervals.

Attendance: You are expected to attend every class. We will see and discuss materials in the classroom that are not included in the textbook. If you are absent, for any reason, it is your responsibility to talk with others who were present and get notes from them. You are responsible for making sure that you have copies of all materials distributed in class, announcements made in class, and content covered in class. There will be a “Class Participation Grade” assigned to each student at the end of the semester. If everyone shows up and contributes, then it will be easy and automatic for everyone. If there is a variance in participation, then I will create graded activities.

Homework: There will be 8 to 10 written homework assignments, about 1 per week. Homework may be turned in on paper at class time, or submitted online. These assignments will be some problems from the main textbook, and also supplemental problems that explore the mathematical background in greater depth. It is allowed and expected that you will use a computer for some homework problems.

Projects: These will be longer assignments that are done in teams. Each team will do a presentation in class, and also prepare a written summary. See the calendar, I anticipate there will be 6 projects.

Final Exam: There will be a 2-hour Final Exam on Wednesday, December 21 at 12:30 pm. You are enrolled in two courses, but only one final exam, all right?

Grade Calculation:

Homework	30%
Attendance/Participation	12%
Projects	33%
Comprehensive Final Exam	25%
Total	100%

Grades for each assignment and exam will be recorded on your Canvas page. Questions about individual grades must be addressed within one week from the day the paper is returned to you. **Do not believe the Canvas grade calculations, it sometimes computes things in strange ways.** Your Final grade at the end of the semester will be posted in acceSPoint.

Your letter grade will be assigned based on the following scale:

A: 93-100%	A - : 90-92%	B+: 87-89%
B: 83-86%	B-: 80-82%	C+: 77-79%
C: 73-76%	C- : 70-72%	D+: 67-69%
D: 60-66%	F: 59 % or less	

The above table is a minimum guide, the instructor may make positive adjustments at the end of the semester.

Help Available:

INDIVIDUAL TUTORING: TLC

STUDY GROUPS: Meet with your peers on a regular basis; Free

INSTRUCTOR OFFICE HOURS: See office hours, above.

Academic Integrity: 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 found at https://www.uwsp.edu/dos/Documents/UWS_14.docx

Information regarding Section 504 of the Rehabilitation Act or the Americans with Disabilities Act can be found at the UWSP Disability and Assistive Technology Center site <https://www.uwsp.edu/datc>

Religious Beliefs: Students' sincerely held religious beliefs will be reasonably accommodated with respect to all examinations and other academic requirements. According to UWS 22.03, you must notify the instructor within the first three weeks of classes about specific dates which require accommodation. See the link below: https://www.uwsp.edu/dos/Documents/UWS_CHAPTER_22.docx