

Instructor: Mr. Fehrenbach

Room: Sci A202

Text: *Introduction to the Practice of Statistics* by Moore, McCabe, Craig (8th Edition, © 2014)

Statistics is the science of collecting, organizing, and interpreting numerical facts, which we call *data*. MTH 355, Elementary Statistical Methods, is an introductory 4-credit course dedicated to the study of Statistics.

### Course Goals

Many majors at UWSP and elsewhere require students to take and pass an introductory Statistics course. To that end a goal for students in this class is to not only demonstrate enough learning of statistics to pass, but also to learn the material well enough to be of value as you pursue other fields of study. The learning standards we will follow are the ones set forth internationally by the College Board (CB) in conjunction with the American Statistical Association (ASA).

Furthermore, MTH 355 fulfills UWSP's Quantitative Literacy component of the General Education requirement. Accordingly, additional goals for the student include the following: (1) Select, analyze and interpret appropriate numerical data used in everyday life in numerical and graphical format, (2) identify and apply appropriate strategies of quantitative problem solving in theoretical and practical applications, and (3) construct a conclusion using quantitative justification.

Our textbook authors state, "We are bombarded by data in our everyday lives." This has never been more true! Making sense of it can have shape how you make decisions and how you live. To that end, perhaps the most important goal for students in this course is *understand statistics as it relates to our everyday lives, today and beyond*.

The purpose of an introductory course in statistics is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes:

- \* Exploring Data: Observing patterns and departures from patterns
- \* Planning a Study: Deciding what and how to measure
- \* Anticipating Patterns: Producing models using probability theory and simulation
- \* Statistical Inference: Confirming models

### Student Expectations and Grading

*Students are expected to attend every class and to participate in class activities each day.* Attendance is recorded. You should have a notebook (*a graph paper notebook is really helpful*) for your daily assignments and a three-ring *binder* for distributed notes. You need a **calculator that has lists, can calculate standard deviations, and can calculate combinations** in class on a daily basis. I demonstrate with a TI-84, **so a TI-83 or 84 are the best choices.**

1. **Projects (25%):** Projects assess some essential concepts in the curriculum and are a significant part of the course. You are required to complete three projects in Stats. Projects will count as **25%** of your grade.
2. **Mid-Term Exams (40%):** There will be three mid-term exams. Each will have a Multiple Choice section and a Free-Response section. College Board questions will be used. Exams are taken at the scheduled time. Mid-terms will count **40%** of your grade, with the first exam counting 10% and the other two 15%. **Mid-Term Exam dates are currently scheduled for February 19, Mar 26, and April 23.**
3. **Final Exam (25%):** The Final will be **cumulative**, will also have multiple choice and free response sections, and will count **25%** of your grade. Mark your calendar—**May 13, 5:00 – 7:00 pm**—as there are no make-ups.
4. **Quizzes and Formative Assessments (10%):** Quizzes will be given once between Midterm exams, will model the exam format, and are considered formative. Formative assessments intend to guide the instructor and the student as to student progress while not lowering the student's grade. Formative assessments also include these optional elements: daily text assignments done in a notebook, graded weekly College Board free-response questions (FRQs), and quiz corrections. If completed, these optional formative assessments will improve your overall grade. Formative assessments will count as **10%** of your grade. If you choose not to do them, your **quiz average** will comprise this component of your grade.

### The Grading Scale:

(Decimals at .9 or higher will be rounded up in final grading.)

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 below 60.

## Keys to Student Success

*Daily attendance* is crucial to your success in Stats. You will learn a lot by being here and staying engaged. If you are absent, you should always pick up missed class notes. *Your attendance is required on test or quiz days if you want credit for the test or quiz.*

**Here are five recommended practices to help you to learn the course material and succeed in Stats.**

1. **Attend every class, stay engaged, complete the interactive notes** and **participate** in class activities. Ask questions. Request processing time or a re-statement.
2. **Complete any unfinished examples after class** and **study your class notes!**
3. **Complete the projects** thoroughly.
4. **Read the textbook** as assigned. Do the examples.
5. **Do the assigned problems**, from the text and the College Board FRQs.

## Extra Help

I highly recommend working with study partners or groups. Come to Group Tutoring sessions with Keegan. He's been through this and really knows his stats. (I will also try to be present.) Those times will be arranged soon. Visit the Math Room (SCI A113A, 9 am-4 pm, 7-9 pm) with other questions on assignments. Take part in the TIMS (Tutoring in Math and Science) program in 018D ALB (formerly LRC, library basement) for one-on-one tutoring (possible fee). See me during my office hours, or arrange another time to see me (Sci D221).

## Accommodations

UWSP is committed to providing reasonable and appropriate accommodations to students with disabilities and temporary impairments. If you have a disability or acquire a condition during the semester where you need assistance, please contact the Disability and Assistive Technology Center on the 6<sup>th</sup> floor of Albertson Hall (library) as soon as possible. DATC can be reached at 715-346-3365 or [DATC@uwsp.edu](mailto:DATC@uwsp.edu). If you are allergic to or fearful of dogs, please contact Dr. Susie Rood in the DATC Office (LRC Rm 609 ALB, [srood@uwsp.edu](mailto:srood@uwsp.edu)).

## General Classroom and Course Rules/Policies: *Respectful, Responsible, Committed*

1. Please observe general university rules in the classroom and outside. UWSP Community Rights and Responsibilities can be found at the For Students section of the Dean of Students website.
2. Please be on time and prepared for class.
3. Participate in class activity. Stay engaged! (See above.) **No texting. No ear buds. No cell phone use** without permission. Ask if needed.
4. Make-up tests or quizzes are not generally granted without pre-arrangement. An exception may be made in unusual circumstances.
5. Appeal of grading should be submitted in writing within 5 days of receiving the evaluation of assessment.
6. Copyright and File Sharing: Posting instructor-created notes and course material onto course-sharing websites directly violates the instructor's copyright on his/her academic materials. These materials are provided for your convenience as an aid to learning. **Permission to post instructor-created material on any such site is unequivocally denied.** You may have another student pick up hard copy of class notes for you or pick up the following class day.
7. No electronic cigarettes are allowed in our classroom.

## Contact Information for Mr. Fehrenbach

Email (best way to contact): [bill.fehrenbach@uwsp.edu](mailto:bill.fehrenbach@uwsp.edu)  
Telephone: **715.346.2811** Department Office is **715.346.2120** or x2120  
Teaching Hours: MTRF 9-11  
Office Hours: Sci D221 MTRF 11:00 – 12:00 and by arrangement.

Group Tutoring:

*I look forward to a great term together. My prediction: **You're going to love Stats!** Mr. Fehrenbach*