| Associate Instructor | Office Hours | Class Schedule | Spring 2024 |
| :---: | :---: | :---: | :---: |
| Lisa Kennedy | Monday 1:00-1:50 pm | MATH 255-06 |  |
| Office: D221Science Building | Tuesday 10:00-10:50 am | Monday, Tuesday, Wednesday, Thursday |  |
| Phone: 715-346-2120 | Wednesday 1:00-1:50 pm | 11:00 AM - 11:50 AM | iversity of Wisconsin |
| Email: 1kennedy@uwsp.edu | Science Building D221 <br> or by appointment | MATH 255-05 <br> Monday, Tuesday, Wednesday, Thursday 3:00 PM - $3: 50 \mathrm{PM}$ | Stevens Point |

## Course Description

MATH 255-4 credits. 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. May not earn credit in both MATH 255 and MATH 354
Prerequisite(s): MATH 95 or suitable placement score

## Required Materials

- Text: Introduction to the Practice of Statistics, $10^{\text {th }}$ edition by Moore, McCabe, and Craig.
- Calculator: Graphing Calculator TI-83, TI-83+, TI-84, or TI-84+ is strongly recommended. You will need a calculator with basic statistical functions such as mean and standard deviation. TI-30XIIS also will work.
- Cell phone calculators and calculators with computer algebra systems will not be allowed on exams.


## Course Grading

- $10 \%$ Homework
- $20 \%$ Quizzes
- $50 \%$ Exams
- $20 \%$ Comprehensive Final Exam
$\mathbf{1 0 \%}$ Assignments: Each class period, a list of problems will be assigned from the textbook. This will be a minimal list of problems needed to understand the content to do well in this course. Work must be shown for full credit. Check your work with the solutions. Fix the mistakes and/or ask for help understanding errors. Doing the assigned problems is extremely important. Plan to work on math everyday after class The textbook assignments for each unit will be scored/turned in on the day of the exam. Late submission of assignments is docked $10 \%$ per day, zero points after 1 week.
$\mathbf{2 0 \%}$ Formative Quizzes: There will be weekly quizzes. Quizzes are meant to be a quick check of understanding. The quizzes will be short, approximately 5-10 minutes. To be successful on the exam, students should earn above $70 \%$ on all quizzes. Quizzes can be remediated and retaken during office hours prior to the unit exam.
$\mathbf{5 0 \%}$ Chapter Exams: There will be four unit exams and the final cumulative exam. Partial credit will be given for problems when appropriate work is shown. Calculators and formula sheets/tables may be used on the exams. The lowest chapter exam score will be dropped at the end of the course. Attendance on the scheduled exam date is critical. Make-up chapter exams will not be allowed. In the very rare instance of a documented excused absence with the Dean of Students, an alternate exam may be given. Communication must occur prior to the exam.
$\mathbf{2 0 \%}$ Final Exam: There will be a cumulative final exam in person. The exam will cover all material covered in the course. All formula sheets and tables necessary will be provided to be used on the final exam. The final exam will be taken in the Collins Classroom Center CCC 213 on Monday, May 13 from 5:00-7:00 pm.


## Grading Scale

Final grades will be based on the percentages. I reserve the right to lower/raise these cutoff points. The cutoff points are:

| Course Grades (\%) at or above | 93 | 90 | 87 | 83 | 80 | 77 | 73 | 70 | 67 | 60 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| will receive at least a grade of | A | A - | B + | B | B - | C + | C | C - | D + | D |

## Important Dates:

| Exam | Tentative Dates |
| :--- | :--- |
| Unit 1: $1.1,1.2,1.3,1.4$ | Tuesday, February 13 |
| Unit 2: 2.1, 2.2, 2.3, 2.4, 2.5, 2.6,3.1,3.2, 3.3 | Thursday, February 29 |
| Unit 3: 4.1, 4.2, 4.3, 4.4, 5.1, 5.2, 5.3 | Wednesday, March 27 |
| Unit 4: 6.1, 6.2, 6.3, 6.4, 7.1, 7.2 | Thursday, April 18 |
| Cumulative Final Exam including 8.1. 8.2, and 9.1 | Monday - May 13, 5:00 - 7:00 pm CCC 213 |

## Math 255 Learning Outcomes:

This course satisfies the Quantitative Literacy (QL) component of the General Education Program.

- At the end of this course successful students will be able to: A) Select, analyze, and interpret appropriate numerical data used in everyday life in numerical and graphical format. B) Identify and apply appropriate strategies of quantitative problem solving in theoretical and practical applications. C) Construct a conclusion using quantitative justification.
- In general, we want you to approach data like a scientist. The main tasks involved are: Exploring data, quantifying uncertainty, drawing valid conclusions, and communicating results using written and graphical methods.


## Incompletes:

A grade of incomplete may be given when circumstances arise which are beyond the student's control, and which result in the student being unable to complete the course. A grade of incomplete will only be used if the student is passing when the circumstances arise.

## Electronics:

Cell phones should be silenced and put away once class begins. Earphones/earbuds should only be used when appropriate during class. Earphones/earbuds are prohibited during quizzes and exams. Cell phones and smart watches MUST be silenced and stored during quizzes and exams.

## Course Communication:

Email will be used to inform students of important information or changes for the class. A weekly outline with links to materials will be posted in Canvas. Including blank copies of notes, other handouts, review materials for exams, solutions, and current grade information.

To access Canvas, go to https://www.uwsp.edu, choose Canvas from the "Logins" dropdown menu, and use your regular campus login ID and password.

- Email is an excellent way to contact me (lkennedy@uwsp.edu).
- I will send the class emails using your UWSP address. Please check your email daily.


## Attendance Policy:

Attendance is expected at every class meeting. It is socially responsible to take extra care to not spread germs. If you have a fever or are concerned based on symptoms like coughing/sneezing, please stay home. Email when you will miss class. It is the student's responsibility to make prompt arrangements for finding out what was missed and for making up any assigned work in the case of an absence. I recommend exchanging contact information with another student in this specific section of Math 255. Canvas is a great resource if absent.

## Available Support:

- Ask questions as they occur during class. Talk to me before or after class. Come to office hours or schedule an appointment. It is my goal for all students to learn and build confidence in mathematics. I am committed to helping each student, experience \& exposure are needed to achieve success.
- Talk with classmates about your work. Communication helps to identify the questions needed to be asked and can solidify understanding of the concepts. Exchange a cell phone number or email with another student in class.
- The Tutoring-Learning Center (TLC) offers free one-on-one, group, and drop-in tutoring to support you in your math classes. The tutors are UWSP students who have done well in their classes and who are here to share their successful study habits and math content knowledge to help others succeed. The TLC helps students in all disciplines become more effective, confident learners. We believe all learners benefit from sharing work with knowledgeable, attentive tutors. To make an appointment, students can self-schedule using Navigate, contact us at tlctutor@uwsp.edu or 715-346-3568, or stop into CCC 234. https://www3.uwsp.edu/tlc/Pages/CA-tutoring.aspx
- UWSP Technology Support Seek assistance from the IT Service Desk, IT Service Desk Phone: 715-346-4357, or IT Service Desk Email: itsvdesk@uwsp.edu


## 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.

## UWSP student responsibilities:

All students are expected to know the UWSP student responsibilities found on the Dean of Students webpage. Information on Academic Concerns is available at https://www.uwsp.edu/dos/Pages/stu-academic.aspx. Information on Conduct Concerns and on Personal Concerns is also available on the Dean of Students site.

## Lisa Kennedy's Spring 2024 Schedule:

|  | Monday | Tuesday | Wednesday | Thursday | Friday |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 10:00-10:50 |  | Office Hours <br> Science D221 |  |  |  |
| 11:00-11:50 <br> Elementary <br> Statistical <br> Methods (35) | Science Building <br> A202 | MATH 255-06 <br> Science Building <br> A202 | Science Building <br> A202 | Science Building <br> A202 |  |
| $12: 00-12: 50$ | LUNCH | LUNCH | LUNCH | LUNCH |  |
| 1:00-1:50 | Office Hours <br> Science D221 | MATH 109-01 | MATH 109-01 | MATH 109-01 | MATH 109-01 |


| Week | Date | Plan | Topic |
| :---: | :---: | :---: | :---: |
| 1 | January 22-26 | M: Virtual Intro <br> T: 1.1 <br> W: 1.2 <br> TH: 1.2 QUIZ | Intro/syllabus/welcome <br> 1.1 Data <br> 1.2 Displaying Distributions with Graphs |
| 2 | January 29-February 2 | M: 1.3 <br> T: 1.3 <br> W: 1.4 <br> TH: 1.4 QUIZ | 1.3 Describing Distributions with Numbers 1.4 Density Curves and Normal Distributions |
| 3 | February 5-9 | M: 1.4 <br> T: 1.4 <br> W: Review 1.1-1.4 <br> TH: $2.1 \& 2.2$ | Review Practice Exam <br> 2.1 Relationships \& 2.2 Scatterplots |
| 4 | February 12-16 | M: Review 1.1-1.4 <br> T: Exam 1 <br> W: 2.3 <br> TH: 2.4 | Review for Exam <br> Exam 1 Tuesday, February 13 Unit 1 Assignments due at the start of class <br> 2.3 Correlation <br> 2.4 Least-Squares Regression |
| 5 | February 19-23 | M: 2.5  <br> T: 2.6  <br> W: 3.1  <br> TH: 3.2 QUIZ  | 2.5 Cautions about Correlations and Regressions 2.6 Data Analysis for Two-Way Tables <br> 3.1 Sources of Data <br> 3.2 Design of Experiments |
| 6 | February 26-March 1 | M: 3.3 <br> T: Review <br> W: Review <br> TH: Exam 2 | 3.3 Sampling Design <br> Practice Exam Practice Exam Solutions <br> Review Practice Exam Solutions <br> Exam 2 Thursday, February 29 Unit 2 Assignments due at the start of class |
| 7 | March 4-8 | M: 4.1 <br> T: 4.2 <br> W: 4.3 <br> TH: 4.4 QUIZ | 4.1 Randomness <br> 4.2 Probability Models <br> 4.3 Random Variables <br> 4.4 Means and Variances of Random Variables |
| 8 | March 11-15 | M: 5.1 <br> T: 5.2 <br> W: 5.3 <br> TH: 5.3 QUIZ | 5.1 Toward Statistical Inference <br> 5.2 The Sampling Distribution of a Sample Mean <br> 5.3 Sampling Distributions for Counts and Proportions |
|  | March 18-22 | Spring break | Spring break |
| 9 | March 25-29 | M: Review T: Review W: Exam 3 TH: 6.1 | Practice ExamReview $\quad$ Wednesday, March $27 \quad$ Unit 3 Assignments due at the start of classExam $3 \quad$Estimating with Confidence Lesson6.1 Estion |
| 10 | April 1-5 | M: 6.1 T: 6.2 W: 6.2 TH: 6.3 QUIZ | 6.2 Tests of Significance Lesson 6.3 Use and Abuse of Tests Lesson |
| 11 | April 8-12 | M: 6.4 <br> T: 7.1 <br> W: 7.1 <br> TH: 7.2 QUIZ | 6.4 Power and Inference as a Decision <br> 7.1 Inference for the Mean of a Population Lesson |
| 12 | April 15-19 | M: 7.2 <br> T: Review W:Review TH: Exam 4 | 7.2 Comparing Two Means Lesson <br> Exam 4 Thursday, April 18 Unit 4 Assignments due at the start of class |
| 13 | April 22-26 | $\begin{aligned} & \text { M: } 8.1 \\ & \text { T: } 8.1 \\ & \text { W: } 8.2 \\ & \text { TH: } 8.2 \end{aligned}$ | 8.1 Inference for a Single Proportion Lesson 8.2 Comparing 2 Population Proportions Lesson |
| 14 | April 29- May 3 | M: Review <br> T: 9.1 <br> W: 9.1 <br> TH: Review QUIZ | 9.1 Goodness-of-Fit/Chi-Squared Lesson |
| 15 | May 6-May 10 | M: Review <br> T: Review FINAL <br> W: Review <br> TH: Review FINAL |  |
| 16 | Monday May 13 | $\begin{gathered} \text { Cumulative } \\ \text { FINAL EXAM } \end{gathered}$ | May 13, 5-7 pm (Definitive date) CCC 213 |

