Elementary Statistics (OER) - MAT 118

Spring 2026 Syllabus | Dutchess Community College

Professor Henry Mendoza Rivera

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Course Description and Purpose

Satisfies the mathematics requirement of the associate in Arts degree program. Basic statistical procedures are developed. Topics include descriptive statistics, hypothesis testing and confidence intervals and regression using both simulation and a theory-based approach. Technology will be used regularly throughout the course.

Pre-requisites and/or co-requisites: Placement level 2 (see DCC math placement table), OR ENG101 placement level or higher, OR High School GPA of 3.0 (83) or higher.

Course Learning Outcomes

Students who successfully complete the course will be able to:

1. Calculate and use descriptive statistics to analyze a data set (measures of center, measures of variation, distribution shapes, outliers).
2. Understand probability as a long-run relative frequency and interpret a p-value in terms of probability.
3. Use simulation and theory-based approaches like the Central Limit Theorem to draw inferences and reach conclusions.
4. Construct and interpret confidence intervals for a population mean or proportion.
5. Use hypothesis testing to test a claim and interpret results about a population mean or proportion.
6. Use technology to conduct simulations and generate values used in statistical inferences.
7. Use simulation and theoretical approaches to perform correlation and regression analysis and interpret the results.

Institutional Student Learning Outcomes

- **ISLO #4: Quantitative Reasoning.** Students will work with graphical, numerical, or symbolic models to solve problems and interpret results.

Instructor Contact & Office Hours

- **Office:** Washington 114 | **Phone:** 845-431-8554
- **Email:** henry.mendozarivera@sunydutchess.edu(email is the best way to contact me). I strive to respond to emails promptly, but please note that I may wait to respond. If you have not heard from me within 24 hours, please follow up with a reminder.

Instructor Office Hours (for help, tutoring, questions, etc)

I am available by appointment for both online and in-person meetings during office hours. To schedule a meeting, please visit **Brightspace**, navigate to the **"Getting Started"** section, and click the **"Office Hours Appointment"** link under Student Resources. You'll also find the Zoom link for online appointments.

If the available times don't suit you, please message or email me to arrange a different time that works for both of us. **Drop-ins are permitted.**

Drop-in Hours (Math & Science Center):

Day	Time	Location
MONDAYS	2:30 p.m. – 4:00 p.m.	Washington 126
TUESDAYS	3:30 p.m. – 4:30 p.m.	Washington 126
WEDNESDAYS	2:30 p.m. – 4:00 p.m.	Washington 126

Communication Policy

- **Official Email:** The college-supplied email class list will be used to share all critical information. It is imperative that your **@sunydutchess.edu** email is active and checked regularly.
- **Subject Line:** Students should contact via email using the prefix **"MAT118-section number"** as the email subject header.

Purpose of Office Hours

Office hours are intended to provide a time for students to:

- **Clarify concepts:** Discuss unclear points from lectures or readings.
- **Get feedback:** Discuss homework assignments or projects and receive feedback on progress.
- **Explore ideas:** Engage in deeper discussions about course topics.
- **Build relationships:** Get to know the instructor and ask questions about the course or career paths.

How to Prepare

To make the most of office hours, students are encouraged to:

- **Come prepared:** Review class materials and attempt homework assignments before visiting.
- **Identify specific questions:** Have clear questions or areas of confusion ready to discuss.
- **Communicate challenges:** If you are struggling, please let me know. We can work together to find effective solutions and support resources.

Course Access (Brightspace)

To access the reading and videos for the course: You will be required to use Brightspace throughout the semester. Readings, videos, assignments, and tests will be found in Brightspace and you will turn in work through Brightspace. **Access Link:** https://mylearning.suny.edu/d2l/home

Required Course Materials

- **Textbook:** OER materials (electronic in rightspace). Printed copies at DCC Bookstore.
- Online access to Brightspace: Go to https://mylearning.suny.edu/d2l/home

Grading & Assignments

Category	Weight
Exams (Exam 1, 2, and 3)	45% (15% each)
Cumulative Final Exam	15%
Computer Homework (21 assignments, 2 drops)	10%
Written Homework (8 assignments, 1 drop)	8%
In-class Quizzes (4 quizzes, 1 drop)	8%
Computer Quizzes (22 quizzes, 2 drops)	5%
In-class Activities (5 activities, 1 drop)	5%
Exam Corrections & Discussion	3%
Exit Tickets (2 drops)	1%

- See the tentative calendar of due dates for the assignments for the entire semester in Brightspace. The calendar also lists the topics covered in class each day of the semester.

Tentative Final Exam Schedule

Section	Date	Time	Location
010	Monday, 5/11/26	11:00 a.m. – 1:30 p.m.	Hudson Hall 506
020	Wednesday, 5/6/26	8:00 a.m. – 10:30 a.m.	Washington 248
030	Wednesday, 5/6/26	11:00 a.m. – 1:30 p.m.	Hudson Hall 226
110	Tuesday, 5/12/26	2:00 p.m. – 4:30 p.m.	Hudson Hall 506

- You must go to MyDCC website to confirm the final schedule.

How assignments and exams work in this class

• **Written Homework:** Students must also type all work and explanations for ments and write complete sentences in context. Students must also copy and paste screenshots from the Applet website into the written homework. It is essential to start as early as possible, put effort into these assignments, and seek help to complete each assignment fully and as accurately as possible. All written homework should be written clearly. Plagiarism is using others' ideas and/or words without clearly acknowledging the source of that information (intentional or unintentional). Cutting and pasting from a website is plagiarism. Copying homework is plagiarism. Any paper or assignment suspected of plagiarism will receive a zero. • Computer Homework: Computer homework problems can be attempted repeatedly up to the due date. Many of the problems include video help or similar resources. After the due date passes, students can access those homework problems in "review mode," which means that the problems can be practiced, but the scores won't count in the gradebook. • Computer Quizzes: Computer quizzes contain a small selection of problems from the computer homework, and students only get one attempt at the quiz. The quizzes are timed, and no help features are available during the quizzes. Students must complete quizzes independently without accessing other resources or working with others. • In-class Quizzes: In-class quizzes will be written on paper and take place during the class period. The quizzes will assess concepts from the class or previous classes. • In-class Activities: Students will solve in-class activities during the class. These activities can be: Discussion-based activities (think-pair-share): Students individually reflect on a question or topic, discuss their thoughts with a partner, and finally share their ideas with the larger group. Problem-solving activities: Students analyze real-world scenarios and apply their knowledge to develop solutions (case studies). Also, students take on different roles and simulate real-life situations, such as a job interview or a negotiation (role-playing). Creative activities: short writing assignments (writing exercises). Students present their research, projects, or ideas to the class (presentations). Technology-based activities: online quizzes and polls, interactive simulations, and collaborative online activities using tools like Google Docs. • Exam corrections (Exam 1, Exam 2, and Exam 3): You should write on printer paper your own correction of each question of each chapter exam and submit a pdf file in the place posted in Brightspace the next class after you receive your exam grade paper. • Exam corrections discussion (Exam 1, Exam 2, and Exam 3): You must set an office hours appointment in the fol- lowing two weeks of the exam to discuss one exam correction (Exam 1, Exam 2, or Exam 3) with the instructor. • Exit tickets: At the end of each class, you should answer the questions asked in the exit ticket survey posted in Brightspace under the class topic section. • Chapter Exams: Exams in this class take place in the classroom and will be written on paper. • Cumulative Final Exam: This will be a written exam during the final class, held in the classroom. * You must go to MyDCC website to confirm the final schedule How assignments and exams work in this class:

Absence and Late Work Policy

- **Computer Work:** NEVER accepted late. Two drops provided.
- **Written Homework:** NEVER accepted late. One drop provided.
- **Exams/Quizzes:** Email instructor **on or before** the day of. Makeup within 48 hours.

Academic Dishonesty & Integrity

The College regards academic dishonesty in any form as a breach of academic ethics. Violation results in a zero; a second offense results in an F for the course.

Study Time & Conduct

You are expected to spend at least **nine hours a week** studying. Read actively, master formulas, and arrive to class on time. Arrange personal business outside of class hours.

Tentative Course Outline Schedule

Chapter	Topic
01	Introduction to Statistics and Simulation
02	Introduction to Hypothesis Testing
03	Theory-Based Stats and Comparing Two Parameters
04	Confidence Intervals
05	Correlation and Regression

Academic Accommodations & Title IX

- **OAS:** Register with the Office of Accommodative Services (Room 103) at (845) 431-8055.
- **Title IX:** Reports of sexual harassment or misconduct: TitleIX@sunydutchess.edu.

Starfish

Starfish connects students to faculty and support services. Please check your **myDCC email** and log into **Starfish daily**.

Statement Regarding Health and Wellbeing

YOUR WELLBEING MATTERS The DCC Counseling Center provides individual/group counseling to help you achieve your mental health goals. * **988 Suicide & Crisis Lifeline:** Call or text **988** for 24-hour support.

AI Policy

AI is an emerging technology. It is inaccurate, so students must not use AI to try and "fact-find" unless they follow up with their own legitimate research. Students in this course must not use AI in any way to generate material for any assignment unless explicitly instructed by the teacher to do so.