

Class Hours: Tue & Thu 1:30–2:50 pm in Fellows Hall 207

Instructor: Vinicius Cícero

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Office Location and Hours: Fellows Hall 102C

Tue & Thu 4:30–6:00 pm or by **appt.**

Course Description

In today's fast-paced global landscape, proficiency in analyzing and interpreting data is a vital skill for effective decision-making and problem-solving across diverse business and social settings. This course introduces fundamentals of statistics, tailored for Global Commerce majors, such as descriptive statistics, basic probability, probability distribution and data visualization. Students will learn methods of collecting and analyzing data to solve practical problems in global commerce and social contexts as well as develop the ability to not only comprehend but also critically evaluate statistical claims made by others.

Materials

Required Material:

- Anderson, D. R.; Sweeney, D. J.; Williams, T. A.; Camm, J. D.; Cochran, J. J.; Fry, M. J.; & Ohlmann, J. W. (2023). *Essentials of Modern Business Statistics with Microsoft Excel*. Cengage Learning, 8th edition. ISBN-13 (eBook): 9780357708484 ISBN-13 (Hardcover): 9780357131626 [ASW]

ASW is the *required* textbook for the course. The eBook version is typically more affordable than the hardcover edition.

Course Objectives

By the end of this course, students will be able to:

- Gain hands-on experience in using Microsoft Excel for data analysis, collection, and visualization purposes;
- Interpret their own findings and think critically about the validity and reliability of statistical conclusions derived by others;
- Acquire intuition for selecting, using, and interpreting statistical methods to address practical problems in business and broader societal settings;
- Develop the capability to convey data-driven conclusions to a wider audience with varying backgrounds in a concise and clear manner.

Course Structure and Grade Distribution

Homework (10%)

Homework assignments will be posted on Canvas on Thursdays and are due the following Tuesday at 11:59 pm (with some variation during exam weeks). Assignments include Excel-based exercises and problem sets. One homework assignment with the lowest grade will be dropped at the end of the semester.

Quizzes (10%)

Quizzes will be given approximately every two weeks and will consist of short multiple-choice questions covering recent material. Quizzes are taken during scheduled class time, and an inexpensive calculator is required. Two quiz scores will be dropped for students with fewer than three unexcused absences.

Midterm Exams (60%)

There will be three midterm exams during the semester (20% each) — October 1, October 29, and December 3. Exams will include written-response and multiple-choice questions and will cover lectures, assigned readings, and homework. All exams are closed book, and electronic devices are not permitted. Use of unauthorized devices will result in a grade of zero. An inexpensive calculator is required.

Group Project (15%)

Students will work in groups of two to three on a project. Groups will be formed based on shared interests (e.g., sports, education, health, financial markets, environment, or economics). Evaluation will reflect both group performance and individual contribution.

Project. Each group will identify a statistical question and analyze it using tools learned in class. Projects must include at least two numerical variables and one categorical variable. A brief literature review summarizing related research is required. A project proposal is due on November 12, and groups are expected to meet with the instructor between November 2 and November 20. The final written project is due on December 15.

Presentation. Groups will give a 7–10 minute presentation followed by 2–3 minutes of questions. Evaluation will be based on clarity, coherence, effective use of statistics, quality of slides, oral delivery, and engagement with questions. Attendance during presentations is required.

Class Discussion and Participation (5% + extra credit)

This course relies heavily on discussion. Participation is expected and will enhance your learning experience. Contributions may include asking or answering questions, bringing in real-world examples, and engaging respectfully with peers. Professional conduct—including arriving on time, being prepared, and treating others with respect—is part of your participation grade.

Late / Missed Assignments

Extensions or make-up assignments will be granted only in cases covered by Academic Resource Center (ARC) accommodations.

Grading Policy

Letter grades will be assigned on the plus/minus system. While I believe in helping students achieve their full potential, I do not believe in grade inflation. If you get an A in this course, it is because you earned it!

A+	100%	to 97%	C+	<79.9%	to 77%
A	<96.9%	to 93%	C	<76.9%	to 73%
A-	<92.9%	to 90%	C-	<72.9%	to 70%
B+	<89.9%	to 87%	D+	<69.9%	to 67%
B	<86.9%	to 83%	D	<66.9%	to 63%
B-	<82.9%	to 80%	D-	<62.9%	to 60%
			F	<60%	to 0

Course Expectations

- **Workload** This is a three-credit course, which corresponds to approximately nine hours of academic work per week: three hours in class and about six hours outside of class. The table below summarizes the expected weekly time commitment:

Activity	Hours/week
Attend class	3
Read assigned materials	2
Review class notes	1
Homework	2
Study for exams	1
Total	9

- **General Expectations**
 - Students are expected to engage respectfully and professionally at all times. This includes being punctual, prepared, and considerate of others.
 - Learning is a process, and questions are always welcome. Seeking clarification and engaging thoughtfully with course material are essential parts of the learning experience.
- **Sensitive Topics and Inclusivity**
 - Some course topics may be challenging or sensitive. Respectful dialogue is essential, and all sincere questions and perspectives are welcome.

- Disrespectful or hostile behavior will not be tolerated. Productive disagreement and open inquiry are encouraged as part of a supportive and inclusive learning environment.
- **Assignments**
 - Collaboration is encouraged for learning purposes, but all submitted work must be your own. Plagiarism or misuse of others' work will be treated seriously.
 - Assignments should be clear, well-organized, and submitted on time. Late work may be penalized unless prior arrangements have been made.

Academic Integrity

Proposed and developed by Denison students, passed unanimously by DCGA and Denison's faculty, the Code of Academic Integrity requires that instructors notify the Associate Provost of cases of academic dishonesty. Cases are typically heard by the Academic Integrity Board which determines whether a violation has occurred, and, if so, its severity and the sanctions. In some circumstances then case may be handled through an Administrative Resolution Procedure. Further, the code makes students responsible for promoting a culture of integrity on campus and acting in instances in which integrity is violated. Academic honesty, the cornerstone of teaching and learning, lays the foundation for lifelong integrity.

Academic dishonesty is intellectual theft. It includes, but is not limited to, providing or receiving assistance in a manner not authorized by the instructor in the creation of work to be submitted for evaluation. This standard applies to all work ranging from daily homework assignments to major exams. Students must clearly cite any sources consulted — not only for quoted phrases but also for ideas and information that are not common knowledge. Neither ignorance nor carelessness is an acceptable defense in cases of plagiarism. It is the student's responsibility to follow the appropriate format for citations. Students should ask their instructors for assistance in determining what sorts of materials and assistance are appropriate for assignments and for guidance in citing such materials clearly.

Note on Technology: Unauthorized use of technology (including, but not limited to, artificial intelligence sites and translation programs) in the preparation or submission of academic work can be considered a form of cheating and/or plagiarism. Instructors may at their discretion create assignments that incorporate the use of supporting technologies and will inform students of acceptable uses of technology in their courses. It is the responsibility of the student to ask the instructor for clarification whenever they are unclear about the parameters of a specific assignment and to understand that presenting the work of artificial intelligence as your own constitutes a violation of Denison's Code. Cases of suspected inappropriate use of technology may be submitted to the Academic Integrity Board to initiate an investigation of academic dishonesty. For further information about the Code of Academic Integrity, see [link here](#).

Attendance Policy

A hallmark of a Denison education is the small, interactive, and participatory classroom situated within a residential community. Therefore, it is essential that students be present on campus and attend the classes in which they are enrolled. Attendance policies are designed to promote the success and well-being of the individual students as well as the community of learners in each class and co-curricular undertaking. For oneself and one's peers, attendance and presence on campus are vital to the Denison education. Students are expected to be aware of the attendance policy expectations for this course. Attentive presence in class is essential to facilitate a productive learning environment.

Students with Disabilities

Denison University strives to ensure that all courses are accessible and that all students are able to meaningfully engage in the learning experience. Students are encouraged to communicate early with their faculty to discuss specific access needs.

Students with long-term or temporary disabilities who believe they may need accommodations in this course are encouraged to complete an [intake form](#) in MyDenison or contact Student Accessibility and Accommodation with questions.

Students with approved accommodations must submit a Semester Request for Accommodations through their [MyAccommodations portal](#) at the beginning of each semester. Testing accommodations must be arranged at least 72 hours in advance, adhering to the established [Denison Exam Accommodation Policy](#).

Contact information Office: Higley 020 | Phone: 740-587-6666 | [Website](#) | Email: disability-services@denison.edu

Appropriate Use of Course Materials

As an institution which strives to inspire and educate our students to become discerning moral agents and active citizens of a democratic society, we are committed to complying with all laws regarding copyright throughout the University. This syllabus and all course materials used in this course may be copyrighted and accordingly will be governed by the provisions of the U.S. copyright law (for an overview see <https://copyright.gov/circs/circ01.pdf> and for fair use guidelines see <https://copyright.gov/fair-use/>). In particular, posting any course materials on commercial sites or creating a bank of materials for distribution to other students may be considered a violation of the University's Code of Academic Integrity as well as a breach of copyright law. If you have any questions about these guidelines, please speak with your instructor.

Writing Center

Every writer—no matter the course or their experience level—needs a reader and benefits from deep conversation about their work! At the Writing Center, student consultants are eager to support you at any stage of the writing process including (but not limited to): deciphering assignment instructions, brainstorming, developing an argument, organizing your ideas, integrating research and sources, working with faculty feedback, and/or polishing a draft. Consultants,

who are themselves experienced writers from a range of areas of study, are specially trained to support writing for any course or purpose from lab reports, research papers, and informal writing assignments to cover letters, personal statements, and other application materials. The Center welcomes writers from all backgrounds and levels of college preparation. Appointments can be scheduled for 25 or 50 minutes at [this link](#) and take place in-person in the Atrium level of the Library (A22).

Multilingual Support

Students who use English in addition to other languages are welcome to use the resources available at the Multilingual Learning Office (MLO). The MLO includes Morayo Akinkugbe, PhD, the Assistant Director of Multilingual Programming and the student consultants who work with her. They are all trained and experienced in helping students address the different issues that arise when working in more than one language. If English is not your first or only language, please consider utilizing this resource, which is available to ALL Denison students. Dr. Akinkugbe and the student consultants offer a variety of support for L2 students, including consulting with you about your written language (grammar, syntax, word-choices), developing strategies to manage your reading assignments, assisting with class conversation and presentations, and helping to devise ways to develop and effectively use all your skills in English. You can set up an appointment via [this link](#), or by emailing the Multilingual Learning Office directly at englishhelp@denison.edu.

Reporting Sexual Assault

Essays, journals, and other coursework submitted for this class are generally considered confidential pursuant to the University's student record policies. However, students should be aware that University employees are required by University policy to report allegations of discrimination based on sex, gender, gender identity, gender expression, sexual orientation, or pregnancy to the Title IX Coordinator. This includes reporting all incidents of sexual misconduct, sexual assault, and suspected abuse/neglect of a minor. Further, employees are to report these incidents that occur on campus and/or that involve students at Denison University whenever the employee becomes aware of a possible incident in the course of their employment, including via coursework or advising conversations. There are others on campus to whom you may speak in confidence, including clergy and medical staff and counselors at the Wellness Center. More information on Title IX and the University's Policy prohibiting sex discrimination, including sexual harassment, sexual misconduct, stalking and retaliation, including support resources, how to report, and prevention and education efforts, can be found at: <https://denison.edu/campus/title-ix>.

Tentative Course Schedule

The weekly coverage might change as it depends on the progress of the class.

Week	Content	Text Ref.
1: Aug 24-30	- Syllabus - Introduction and Knowledge Check	
2: Aug 31-Sep 6	Chapter 1: Data and Statistics	Ch. 1 [AWS]
3: Sep 7-13	Chapter 2: Descriptive Statistics (tabular & graphical displays)	Ch. 2 [AWS]
4: Sep 14-20	- Chapter 2 (cont.) - Quiz 1	Ch. 2 [AWS]
5: Sep 21-27	- Chapter 3: Numerical Measures - Quiz 2	Ch. 3 [AWS]
6: Sep 28-Oct 4	- First exam review Midterm Exam I	–
7: Oct 5-11	- Chapter 4: Introduction to Probability - Quiz 3	Ch. 4 [AWS]
8: Oct 12-18	- Chapter 4 (cont.) NO CLASS, Fall Break (Oct 15-16)	Ch. 4 [AWS]
9: Oct 19-25	- Chapter 5: Discrete Probability Distributions - Quiz 4	Ch. 5 [AWS]
10: Oct 26-Nov 1	- Second exam review Midterm Exam II	–
11: Nov 2-8	Chapter 5 (cont.)	Ch. 5 [AWS]
12: Nov 9-15	- Chapter 6: Continuous Probability Distributions - Quiz 5 <i>Project proposal due by 11:59 pm (Thu)</i>	Ch. 6 [AWS]
13: Nov 16-22	- Chapter 6 (cont.) - Chapter 7: Sampling and Sampling Distributions - Quiz 6 <i>Lottery (project presentation order)</i>	Ch. 6 & 7 [AWS]
TB: Nov 23-29	NO CLASS, Thanksgiving Break	–
14: Nov 30-Dec 6	- Chapter 7 (cont.) - Project check-in + third exam review Midterm Exam III	Ch. 7 [AWS]
15: Dec 7-13	- Chapter 8: Interval Estimation - Presentations	Ch. 8 [AWS]
FW: Dec 14-17	NO CLASS, Finals Week Written final project & excel file	–