Business Statistics

MGT 2040

Instructor Information

Phone: Email: Office Location: Office Hours

Course Description

Collection, analysis, and interpretation of business and economic data. Includes measures of location and dispersion, estimation and hypothesis testing, ANOVA, contingency tables, correlation, and regression.

This is a demanding course. Many students consider statistics courses to be their most challenging undergraduate classes. In general, it is expected that for each hour in class you will need to spend at least two hours studying outside of class.

Course Prerequisites

It is recommended students complete MATH 1050 or MATH 1090 prior to taking this course.

Pre-Requisite(s): MATH 0990 (equivalent or higher) with a grade of C or better and CSIS 2010.

Required Text or Materials

Title: Business Statistics A Decision-Making Approach ISBN: 9780137835423 (Includes ebook + MyLab) Authors: David F, Groebner, Patrick W. Shannon, Phillip C. Fry, and Kent D. Smith Publisher: Pearson Publication Date: 2024 Edition: 11th Edition

For more information on textbook accessibility, contact Accessibility & Disability Services at <u>ads@slcc.edu</u>.

Textbook Sources

Pearson

You will be required to read the textbook and the material on Canvas pages. Both provide important details about learning the material. Assignment and quiz questions could be based on material from the textbook or from Canvas. You will also be required to look for problems from the textbook to complete some of the activities in the course. There will be links to external websites that will provide you with opportunities to explore the concepts through simulations.

College Wide Student Learning Outcomes

- Acquire substantive knowledge
- Communicate effectively
- Develop quantitative literacies

- Think critically
- Express creatively
- Knowledge and skills to be civically engaged
- Work with others in a professional & constructive manner
- Develop information literacy
- Develop computer literacy

Course Student Learning Outcomes

- Organize and summarize data using appropriate descriptive statistics and graphical methods.
- Calculate and compare the various measures of central tendency and dispersion.
- Apply probability rules and concepts relating to discrete and continuous random variables to answer questions within a business context.
- Describe and interpret statistical methods, analyses and data collection.
- Analyze scenarios appropriate for the Central Limit Theorem and choose the sampling distributions to find and interpret probabilities for the sample mean and sample proportion.
- Interpret confidence intervals for a population mean and a population proportion and determine sample sizes for given levels of confidence and margins of error.
- Formulate null and alternative hypothesis, choose a test statistic, describe the rejection criteria, make a decision using a critical value and/or p-value, and draw an appropriate business conclusion.
- Utilize simple regression and correlation calculations to analyze the underlying relationships between the variables through hypothesis testing.
- Use Excel or other software to perform various statistical calculations, including those for descriptive statistics, probabilities confidence intervals & hypothesis testing.

Brief Description of Assignments/Exams

COURSE DELIVERABLES

Deliverables will include the following:

- 1. **Homework** which measures the students understanding of the readings and videos. They prepare students for quizzes and exams.
- 2. **Exams** which primarily assess students' understanding of the substantive knowledge of the material and the inter-relatedness of several topics.

Communication Plan

- I will respond to email within 24 hours. I will offer feedback on major assignments within 72 hours. The best way to contact me is via the Canvas Inbox, as I will prioritize this email over other modes of communication.
- Lastly, we'll be holding small group Q & A sessions, where we can learn from our peers (and faculty) on some of the more difficult units within the course.

Late Work

Late assignments will be reduced by 5% for every day they are late; that is, if your assignment (worth 50 points) is one day late, you cannot receive a grade higher than a 47.5; if it is two days late, you cannot receive a grade higher than a 45, and so on. You will not receive any credit for assignments that are more than 10 days late.

Grading Scale

COURSE EVALUATION

12	Discussions (20 pts each)	240	Points

12	Quizzes (various pts each)	395	Points
30	Homework (various pts each)	1220	Points
4	Module Exams (various pts each)	480	Points
1	Final Exam	100	Points
	Total Points	2435	Points

GRADING

	% OF GRADE
Discussions	5%
Quizzes	5%
Homework	30%
Module Exams	40%
Final Exam	20%
Total	100%

Course grades are determined by the students' achieved percentage based upon the relative weighting for homework assignments and examinations.

GRADES BASED ON THE PERCENT OF TOTAL POINTS EARNED

93-100 % = A	79-82 % = B-	66-68 % = D+
90-92 % = A-	76-78 % = C+	63-65 % = D
87-89 % = B+	73-75 % = C	59-62 % = D-
83-86 % = B	69-72 % = C-	BELOW 59 % = E

Online Tutoring

Students at SLCC have access to online tutoring through Canvas. From your Canvas course click Online Tutoring in the course navigation and follow the steps to set up an appointment. If this is your first time using the Online Tutoring we recommend you click "Take a Tour" to familiarize yourself with the service.

Note that students only receive 480 minutes of tutoring time each semester. After that we encourage you to use the resources found through this link: <u>https://www.slcc.edu/tutoring/index.aspx</u>

If you have any additional questions reach out to elearningsupport@slcc.edu.

Institutional Policies

As members of our academic community, we would like to invite you to review the Institutional Syllabus which covers important policies and procedures. This document contains important links for students on the code of student rights and responsibilities, academic integrity, and grading policies, Title IX and other important acknowledgements. By familiarizing yourself with this information, you can help us create a safe and respectful environment for everyone.

You can access the document by clicking on the following link: <u>https://slcc.instructure.com/courses/530981/pages/institutional-syllabus</u>

Learning Support and Tutoring Services

We are pleased to offer a range of tutoring and learning support services to help you achieve your academic goals. Whether you need assistance with a specific subject or want to improve your study skills, you have many options for tutoring or other support.

To learn more about the services we offer and how to access them, please visit the Institutional Syllabus under the Tutoring and Learning Support tab:

https://slcc.instructure.com/courses/530981/pages/institutional-syllabus. We encourage you to take advantage of these resources to help you succeed in your studies. If you have any questions or would like to schedule a tutoring session, please don't hesitate to reach out to us. We are here to support you in any way we can.

Advising and Counseling Support Services

At our institution, we are committed to supporting your academic and personal growth. That's why we offer a range of advising and counseling services to help you navigate the challenges of college life. To learn more about the resources available to you and how to access them, please visit the Institutional Syllabus under the Advising and Counseling Support Services tab: <u>https://slcc.instructure.com/courses/530981/pages/institutional-syllabus</u>. Our advising team and the support centers across campus are here to support you in achieving your goals and overcoming any obstacles you may face.

Student Academic Calendar

As students you should be aware of all important dates in the semester, such as the day that courses begin and end, as well as the drop date and the last day to withdraw. To learn more about those dates, navigate to the Student Academic Calendar below:

SLCC Student Academic Calendar

A Note About Responsibility

Your instructor will provide material for you to read, exercises for you to participate in, assignments for you to complete. Your instructor will lecture, moderate class discussions, evaluate your work; but your instructor will hold you responsible for developing your understanding and skills relative to the course content. Your instructor will assume that if you are having difficulty in the course, you will make arrangements for a consultation. Instructors will remain available to you for assistance in your understanding of assignment requirements, for clarification of evaluation processes, and for general discussion of your questions and concerns related to the course.

Respect For Diversity

It is my intent that students from all diverse backgrounds and perspectives be well served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength and benefit. It is my intent to present materials and activities that are respectful of diversity: gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture. Your suggestions are encouraged and appreciated. Please let me know ways to improve the effectiveness of the course for you personally or for other students or student groups. In addition, if any of our class meetings conflict with your religious events, please let me know so that we can make arrangements for you.

Due Date	Assignment Name	Assignment Type	Points
	Any Questions? (optional)	Discussion	0
	<u>Chapter 9: Getting</u> <u>Ready</u>	Quiz	10
	Introduce Yourself	Discussion	0
	Introduce Yourself	Discussion	0
	Introduce Yourself	Discussion	20
	<u>Is Online Learning_</u> <u>Right For Me?</u>	Quiz	0
	Practice Submitting Assignments	Assignment	0
8/27	Discussion board: Chapter 1	Discussion	20
8/27	Discussion Board: Chapter 2	Discussion	20
8/27	Registered for MyLab Stat	Quiz	1

Assignment Schedule

Due Date	Assignment Name	Assignment Type	Points
8/29	<u>Chapter 1 Review</u> Quiz	Assignment	50
8/29	<u>Chapter 2 Review</u> Quiz	Assignment	30
8/29	Section 2.1 Homework	Assignment	50
8/29	Section 2.2 Homework	Assignment	40
8/29	Section 2.3 Homework	Assignment	40
9/3	<u>Chapter 3 Review</u> Quiz	Assignment	40
9/3	Discussion Board: Chapter 3	Discussion	20
9/3	Section 3.1 Homework	Assignment	40
9/3	Section 3.2 Homework	Assignment	30
9/3	Section 3.3 Homework	Assignment	40
9/13	Module 1 Exam (Chapters 1-3)	Assignment	140
9/17	<u>Chapter 4 Review</u> Quiz	Assignment	30
9/17	Discussion Board: Chapter 4	Discussion	20
9/17	Section 4.1 Homework	Assignment	50
9/17	Section 4.2 Homework	Assignment	50

Due Date	Assignment Name	Assignment Type	Points
9/24	<u>Chapter 5 Review</u> Quiz	Assignment	35
9/24	Discussion Board: Chapter 5	Discussion	20
9/24	Section 5.1 Homework	Assignment	30
9/24	Section 5.2 Homework	Assignment	50
9/24	Section 5.3 Homework	Assignment	50
10/1	<u>Chapter 6 Review</u> Quiz	Assignment	30
10/1	Discussion Board: Chapter 6	Discussion	20
10/1	Section 6.1 Homework	Assignment	80
10/1	Section 6.2 Homework	Assignment	40
10/8	<u>Module 2 Exam</u> (<u>Chapters 4-6</u>)	Assignment	140
10/15	<u>Chapter 7 Review</u> Quiz	Assignment	25
10/15	Discussion Board: Chapter 7	Discussion	20
10/15	Section 7.1 Homework	Assignment	30
10/15	Section 7.2 Homework	Assignment	50
10/15	Section 7.3 Homework	Assignment	30
10/22	<u>Chapter 8 Review</u> <u>Quiz</u>	Assignment	30

Due Date	Assignment Name	Assignment Type	Points
10/22	Discussion Board: Chapter 8	Discussion	20
10/22	Section 8.1 Homework	Assignment	40
10/22	Section 8.2 Homework	Assignment	40
10/22	Section 8.3 Homework	Assignment	40
10/29	Module 3 Exam (Chapters 7 & 8)	Assignment	100
11/5	<u>Chapter 9 Review</u> Quiz	Assignment	30
11/5	Discussion Board: Chapter 9	Discussion	20
11/5	Section 9.2 Homework	Assignment	40
11/5	Section 9.1 Homework	Assignment	60
11/12	<u>Chapter 10 Review</u> <u>Quiz</u>	Assignment	30
11/12	Discussion Board: Chapter 10	Discussion	20
11/12	Section 10.1 & 10.2 Population Stdev Known Homework	Assignment	20
11/12	Section 10.1 & 10.2 Population Stdev Unknown Homework	Assignment	60
11/12	<u>Section 10.4</u> <u>Homework</u>	Assignment	30

Due Date	Assignment Name	Assignment Type	Points
11/19	Module 4 Exam (Chapters 9 & 10)	Assignment	100
11/26	Chapter 11.2 Chapter 12.1 and Chapter 13 Review Quiz	Assignment	30
11/26	Discussion Board: Chapters 11, 12, 13	Discussion	20
11/26	Section 11.2 Homework	Assignment	30
11/26	Section 12.1 Homework	Assignment	30
11/26	Section 13.1 Homework	Assignment	30
11/26	Section 13.2 Homework	Assignment	40
12/3	<u>Chapter 14 Review</u> Quiz	Assignment	20
12/3	Discussion Board: Chapter 14	Discussion	20
12/3	Section 14.1 Homework	Assignment	30
12/3	Section 14.2 Homework	Assignment	30
12/11	Final Exam	Assignment	100