Course Description

Course provides a basic foundation in quantitative techniques in mathematics, algebra, and statistics as applied to business, economics, and accounting problems. This course may serve as the prerequisite for BUS 7500 Managerial Economics, BUS 7600 Managerial Finance, and BUS 7800 Management Accounting.

This is a fully online, eight-week course. We will not meet face-to-face at any time.

Course Prerequisites

None

Course Objectives

Upon successful completion of this course, students will be able to:

1. Collect, analyze and summarize data.
2. Apply and interpret statistical techniques.
3. Interpret descriptive statistics.
4. Evaluate probability and expectations.
5. Identify theoretical and sampling distributions.
6. Construct hypothesis testing, correlation and regression.
7. Apply scientific methodology in order to make sound business decisions.
8. Calculate the mean, median, mode, standard deviation, variance and inter-quartile range of a variable’s distribution.
9. Support or refute a belief that the data was supposed to address by using information provided by a data set.
10. Analyze the quantitative and qualitative aspects of a problem.
11. Apply logical decision criteria.

Required Text


ISBN: 9781111533847

Course Assignment Descriptions and Schedule At-A-Glance

You will have several opportunities to demonstrate your knowledge and understanding of the principles taught in this course. The primary means of evaluating your work will be through practical application of the material. In the event that you have difficulty
completing any of the assignments for this course, please contact your instructor immediately. Please refer to the **Weekly Materials** section of the cyberclassroom for complete details regarding the activities and assignments for this course. The following is merely a summary.

**Discussion contributions (160 points)**
(six postings per week @ 20 points per week)

**Initial Substantive Posts**: Submit an initial response to each of the prompts provided each week by your instructor. Your initial post should be substantive (approximately ½ of a page in length) and must be posted by midnight, Central Time by Wednesday of each week. In your substantive post you are encouraged to use references (you may use your textbook); show evidence of critical thinking as it applies to the concepts or prompt and/or use examples of the application of the concepts to work and life. Proper punctuation, grammar and correct spelling are expected. Please use the **spell-check** function.

**Required Replies**: You must reply to at least two different peers per prompt. Your replies should build on the concept discussed, offer a question to consider, or add a differing perspective, etc. Rather than responding with, "Good post," explain why the post is "good" (why it is important, useful, insightful, etc.). Or, if you disagree, respectfully share your alternative perspective. Just saying "I agree" or "Good idea" is not sufficient for the posts you would like graded.

**Posting Guidelines**: Overall, postings must be submitted on at least two separate days of the week. It is strongly recommended you visit the discussion forum throughout the week to read and respond to your peers’ postings. You are encouraged to post more than the required number of replies.

*(Please review the **Policies** section of Blackboard for further details.)*

<table>
<thead>
<tr>
<th>Week 1</th>
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<tbody>
<tr>
<td><strong>Readings</strong></td>
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</tbody>
</table>
| **Discussion** | Initial post to each prompt due by midnight, CT on Wednesday  
                | At least two replies to peers for each prompt due by midnight, CT on Sunday |
| **Assignment(s)** | **Survey Review** |

For this assignment you will find a survey that has recently been conducted and its findings reported. This survey must be current, meaning, within a few weeks of the due date for this assignment and can be from a newspaper, magazine, appropriate website, or radio/news show.

Write a 1-2 page paper where you discuss the following:

- Whether the data from the survey are categorical or quantitative and why
- What is the population of interest in this study?
- Any statistical inferences that your source might make on the basis of the survey

Your paper should include:
- A title page in APA format
- An introduction and conclusion
- Citations and references in APA format for the source the survey came from, as well as any other sources used (including your textbook)
- 1-2 pages of text besides the title page and reference page

Due: Sunday at Midnight, CT
Points Possible: 20

<table>
<thead>
<tr>
<th>Week 2</th>
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<tbody>
<tr>
<td><strong>Readings</strong></td>
</tr>
<tr>
<td>• Chapter 2: Descriptive Statistics: Tabular and Graphical Presentations</td>
</tr>
<tr>
<td>• Article: The Effectiveness of Graphic and Tabular Presentation Under Time Pressure and Task Complexity</td>
</tr>
<tr>
<td><strong>Discussion</strong></td>
</tr>
<tr>
<td>• Initial post to each prompt due by midnight, CT on Wednesday</td>
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<tr>
<td>• At least two replies to peers for each prompt due by midnight, CT on Sunday</td>
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<tr>
<td><strong>Assignment(s)</strong></td>
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<tr>
<td>Chapter 2 Case Problem</td>
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</tbody>
</table>

Complete Case Problem 1: Pelican Stores on pp.72-73 of your text. Write a 2-4 page managerial report including all of the components in the instructions following the case. Use the Pelican Stores spreadsheet provided in the Week 2 lesson to assist you in completing this case problem.

Your managerial report should include:
- A title page in APA format
- An introduction and conclusion
- A brief overview of the case
- Citations and references in APA format for any sources used for information (including your textbook)
- 2-4 pages of text besides the title page and reference page

Due: Sunday at Midnight, CT
Points Possible: 30
### Week 3

| Readings | • Chapter 3 Descriptive Statistics: Numerical Measures  
• Article: Mean, Median, and Skew: Correcting a Textbook Rule |
|----------|----------------------------------------------------------|
| Discussion | • Initial post to each prompt due by midnight, CT on Wednesday  
• At least two replies to peers for each prompt due by midnight, CT on Sunday |
| Assignment(s) | **Chapter 3 Case Problem** |

Complete Case Problem 2: Motion Picture Industry on p.140 of your text. Write a 2-4 page managerial report including all of the components in the instructions following the case. Use the Movies spreadsheet provided in the Week 3 lesson to assist you in completing this case problem.

Your managerial report should include:

- A title page in APA format
- An introduction and conclusion
- A brief overview of the case
- Citations and references in APA format for any sources used for information (including your textbook)
- 2-4 pages of text besides the title page and reference page

Due: Sunday at Midnight, CT  
Points Possible: 30

### Week 4

| Readings | • Chapter 4: Introduction to Probability  
• Article: Roulette Probability |
|----------|------------------------------------------------|
| Discussion | • Initial post to each prompt due by midnight, CT on Wednesday  
• At least two replies to peers for each prompt due by midnight, CT on Sunday |
| Assignment(s) | **Chapter 4 Case Problem** |

Complete Case Problem: Hamilton County Judges on pp.190-192 of your text. Write a 2-4 page managerial report including all of the components in the instructions following the case. Use the Judge spreadsheet provided in the Week 4 lesson to assist you in completing this case problem.
Your managerial report should include:

- A title page in APA format
- An introduction and conclusion
- A brief overview of the case
- Citations and references in APA format for any sources used for information (including your textbook)
- 2-4 pages of text besides the title page and reference page

Due: Sunday at Midnight, CT
Points Possible: 30

### Week 5

<table>
<thead>
<tr>
<th>Readings</th>
<th>Chapter 5: Discrete Probability Distributions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussion</td>
<td>Initial post to each prompt due by midnight, CT on Wednesday</td>
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<tr>
<td></td>
<td>At least two replies to peers for each prompt due by midnight, CT on Sunday</td>
</tr>
<tr>
<td>Assignment(s)</td>
<td><strong>Chapter 5 Exercises</strong></td>
</tr>
<tr>
<td></td>
<td>Complete the following exercises from your text to demonstrate your understanding of some of the concepts in Chapter 5.</td>
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<tr>
<td></td>
<td>- Page 228, #55</td>
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<tr>
<td></td>
<td>- Page 228, #56</td>
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<td></td>
<td>- Page 229, #66</td>
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<tr>
<td></td>
<td>You do not need to reference or cite any outside sources in your response to these exercises.</td>
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<td></td>
<td>Due: Sunday at Midnight, CT</td>
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<td></td>
<td>Points Possible: 20</td>
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</tbody>
</table>

### Week 6

<table>
<thead>
<tr>
<th>Readings</th>
<th>Chapter 6: Continuous Probability Distributions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussion</td>
<td>Initial post to each prompt due by midnight, CT on Wednesday</td>
</tr>
<tr>
<td></td>
<td>At least two replies to peers for each prompt due by midnight, CT on Sunday</td>
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<tr>
<td>Assignment(s)</td>
<td><strong>Chapter 6 Case Problem</strong></td>
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<tr>
<td></td>
<td>Complete Case Problem: Specialty Toys on p.262 of your text. Write a 2-4 page managerial report including all of the components in the instructions following the case.</td>
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<tr>
<td></td>
<td>Your managerial report should include:</td>
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<tr>
<td></td>
<td>- A title page in APA format</td>
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</tbody>
</table>
An introduction and conclusion  
A brief overview of the case  
Citations and references in APA format for any sources used for information (including your textbook)  
2-4 pages of text besides the title page and reference page

Due: Sunday at Midnight, CT  
Points Possible: 30

**Week 7**

**Readings**  
- Chapter 7: Sampling and Sampling Distributions

**Discussion**  
- Initial post to each prompt due by midnight, CT on Wednesday  
- At least two replies to peers for each prompt due by midnight, CT on Sunday

**Assignment(s)**  
- **Chapter 7 Exercises**  
  
  Complete the following exercises from your text to demonstrate your understanding of some of the concepts in Chapter 5.  
  - Page 300, #46  
  - Page 300, #49  
  - Page 301, #52  
  
  You do not need to reference or cite any outside sources in your response to these exercises.

Due: Sunday at Midnight, CT  
Points Possible: 20

**Week 8**

**Readings**  
- Chapter 8: Interval Estimation  
- Chapter 9: Hypothesis Testing  
- Article: Degrees of Freedom

**Discussion**  
- Initial post to each prompt due by midnight, CT on Wednesday  
- At least two replies to peers for each prompt due by midnight, CT on **Saturday**

**Assignment(s)**  
- **Application Paper**  
  
  For your final project in this course, you will be using quantitative analysis to review an ethical issue of cheating by business students at a university. You will be reviewing background information on the problem, conducting an analysis of data provided, and providing solutions to the Dean of the College of Business for the (fictitious) Bayview University.
To begin preparing for your paper, first review the case problem Ethical Behavior of Business Students at Bayview University on pp.383-384 of your text. Then read the following articles for additional background on the problem of academic dishonesty in business programs.

- The Costs of Cheating are Too High to Ignore by Blair Sheppard (BizEd; Mar/Apr2008, Vol. 7 Issue 2, p43-44)
- Cheating—or Postmodern Learning? by Michele Conlin (BusinessWeek; 5/14/2007, Issue 4034, p42)
- Who Is Responsible for College Students Cheating? by Curtis C. Verschoor (Strategic Finance; Jul2007, Vol. 89 Issue 1, p15)

Write a 6-8 page managerial report that includes the following:

- A title page in APA format
- An introduction describing the purpose of the report, directed toward the Dean of the College of Business (introduction should include a thesis statement clearly stating the main idea(s) to be addressed in the report)
- A 2-4 page description and synthesis of the problem of cheating by business students in higher education, based on the information provided in the articles listed here, the case problem from the text, and or additional scholarly articles you find relating to this topic. You need to cite at least three scholarly articles in addition to your text. Citations in APA format should be included throughout this section for all sources used. Describe different perspectives on the issue, and synthesize information from the articles you are citing (as opposed to just providing summaries of the articles).
- A 2-4 page response to the specific case at Bayview University that answers all of the questions posed for this case on page 384 of your text. Provide any calculations or analysis that you used in answering these questions.
- A conclusion that reviews the main points of the report (your answer to question #5 from the text could be part of the conclusion, as well).
- A reference page in APA format for all sources used

Due: **Saturday** at Midnight, CT
Points Possible: 70

* All online weeks run from Monday to Sunday, except the last week, which ends on Saturday.
** All assignments are due at midnight Central Time. (All submissions to the Blackboard system are date/time stamped in Central Time).

Assignments At-A-Glance

<table>
<thead>
<tr>
<th>Assignment/Activity</th>
<th>Qty.</th>
<th>Points</th>
<th>Total Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weeks 1-8: Discussion*</td>
<td>-</td>
<td>20</td>
<td>160</td>
</tr>
<tr>
<td>Week 1: Survey Review</td>
<td>1</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Week 2: Chapter 2 Case Problem</td>
<td>1</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Week 3: Chapter 3 Case Problem</td>
<td>1</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Week 4: Chapter 4 Case Problem</td>
<td>1</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Week 5: Chapter 5 Exercises</td>
<td>1</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Week 6: Chapter 6 Case Problem</td>
<td>1</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Week 7: Chapter 7 Exercises</td>
<td>1</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Week 8: Application Paper</td>
<td>1</td>
<td>70</td>
<td>70</td>
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<tr>
<td>TOTAL POINTS</td>
<td></td>
<td>410</td>
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</tbody>
</table>

*Please refer to the Policies menu for more information about requirements for Discussions.

Grading Scale

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90 to 100%</td>
<td>369-410</td>
</tr>
<tr>
<td>B</td>
<td>80 to 89%</td>
<td>328-368</td>
</tr>
<tr>
<td>C</td>
<td>70 to 79%</td>
<td>287-327</td>
</tr>
<tr>
<td>D</td>
<td>60 to 69%</td>
<td>246-286</td>
</tr>
<tr>
<td>F</td>
<td>&lt; 60%</td>
<td>&lt; 246</td>
</tr>
</tbody>
</table>

To access your scores, click on Grades in the Student Tools area in Blackboard.

Important Policies
All course-specific policies for this course are spelled out here in this syllabus. However, additional university policies are located in the Policies section of Blackboard. You are responsible for reading and understanding all of these policies. All of them are important. Failure to understand or abide by them could have negative consequences for your experience in this course.

Editorial Format for Written Papers
All written assignments are to follow the APA writing style guidelines for grammar, spelling, and punctuation. This online course includes information regarding the APA style under “Writing and Research Resources” in the Resource Room on the course menu in Blackboard.

Ottawa Online Late Policy
With instructor approval, assignments may be accepted for up to one week after the due date, but a minimum automatic deduction of 10% of the points will be assessed. The instructor also has the option of increasing this deduction percentage up to a maximum of 20%. Extenuating circumstances may be determined on rare occasions and an extension allowed without a deduction, but only at the sole discretion of the instructor.
Discussion board postings will not be accepted for credit when posted after the close of the discussion week. There are no exceptions to this rule; however, solely at the discretion of the instructor, the student may be allowed to submit an alternative assignment to make up for the points under extenuating circumstances. If granted, this should be an exception to the rule.

No assignments will be accepted after the last day of the course (end of term) unless arrangements have been made and “approved” by the instructor at least one week in advance.

**Saving Work**

It is recommended that you save all of your work from this course on your own computer or flash drive. The capstone course you take at the end of your program may require you to have access to this work for culminating assignments and/or reflections.

**Academic Integrity**

Plagiarism and cheating will not be tolerated at any level on any assignment. The reality of cyberspace has made academic dishonesty even more tempting for some, but be advised that technology can and will be used to help uncover those engaging in deception. If you ever have a question about the legitimacy of a source or a procedure you are considering using, ask your instructor. As the University Academic Council approved on May 29, 2003, “The penalty for plagiarism or any other form of academic dishonesty will be failure in the course in which the academic dishonesty occurred. Students who commit academic dishonesty can be dismissed from the university by the provost/director.”

Please refer to **Academic Honesty** in the **Policies** section of the online course menu for important information about Ottawa University’s policies regarding plagiarism and cheating, including examples and explanations of these issues.

**Student Handbook**

Please refer to your student handbook for all university regulations. The **Resource Room** on the course menu in Blackboard contains information about where to find the student handbook online for your campus.

Please see **Policies** in Blackboard for additional university policies.

**Blackboard Technical Support**

The Resource Room in Blackboard contains links to student tutorials for learning to use Blackboard as well as information about whom to contact for technical support. Ottawa University offers technical support from 8 a.m. to midnight Central Time for all students, staff, and faculty at no cost. See [www.ottawa.edu/ouhelp](http://www.ottawa.edu/ouhelp) for contact information.

**Ottawa University Mission Statement**

The mission of Ottawa University is to provide the highest quality liberal arts and professional education in a caring, Christ-centered community of grace which integrates faith, learning and life. The University serves students of traditional age, adult learners and organizations through undergraduate and graduate programs.