Applied Business Statistics
BUSN-5760
S1 2020  Section 45  3 Credits  01/06/2020 to 03/06/2020  Modified 12/15/2019

Meeting Times

Tuesday, 6:00pm to 10:00pm (Central)

Contact Information

Name: Darron Williams
Email: darronw@webster.edu
Phone#: 901-343-6303
Office Hrs: 8am to 8pm (daily)

Description

The student examines the application of statistical analysis, hypothesis testing, and regression analysis in business decision making. The course should focus on the utilization of statistical methods as applied to business problems and operations.

Outcomes

1. Students can describe basic statistics concepts and apply proper sampling methods.
2. Students can compute basic descriptive statistics.
3. Student can describe a normal distribution and apply the concepts of the normal distribution to that of sampling distributions.
4. Students can construct confidence intervals for both numerical and categorical data, and can apply to a real-world business scenario.
5. Students can use numerical or categorical data to assess the validity of statements made in a business setting.
6. Students can perform simple and multiple regression analysis.
7. Students can determine expected wealth in an uncertain business climate.
8. Students can apply various advanced forecasting techniques.

Required Textbook

(Online Only)Statistics For Managers Using MS Excel (WITH Access Code)

Author: Levine
Publisher: PH
Edition: 8th
ISBN: 978-0134465975

Materials
MyStatLab is Required for HomeWork and Assessments (Quizzes & Exams)!

The Online Book is the book that comes with the MyStatLab access code.

Note: Used or Rented books will not have the MyStatLab Access Code!

If you have questions, Give me a call before buying a book (901-343-6303).

Enroll yourself in the correct MyStatLab (Links to an external site.) (http://www.mystatlab.com/) section:

a. To enroll, download the Student Registration Instructions
b. Use this CourseID williams10404 to register
c. Register with MyLabs using the purchased access code with the class text or going to the site in the above link.

You can use a Credit Card or PayPal to purchase access when registering for MyMathLab.

Student access for MyStatLab with eText for Levine/Stephan/Szabat, Statistics for Managers Using Microsoft Excel 8e

$104.95 USD

Waiting for financial aid? Get temporary access without payment for 14 days. Use an access code, credit card, or Paypal before the temporary access expires to stay in your course.

Deliverables

Your course grade will be based on your scores on your examinations, quizzes, homework and your contributions to class discussions.

Evaluation

Criteria

<table>
<thead>
<tr>
<th>Type</th>
<th>Weight</th>
<th>Topic</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>Syllabus Quiz</td>
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<tr>
<td>Midterm Exam</td>
<td>50pts</td>
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<tr>
<td>Final Exam</td>
<td>60pts</td>
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<tr>
<td>HW (Weekly)</td>
<td>70pts</td>
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<td>Quizzes (Weekly)</td>
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<td>Discussions (Weekly)</td>
<td>70pts</td>
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Breakdown

<table>
<thead>
<tr>
<th>Grade</th>
<th>Range</th>
<th>Notes</th>
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<tbody>
<tr>
<td>A</td>
<td>305 to 330</td>
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<tr>
<td>A-</td>
<td>295 to 304</td>
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<tr>
<td>B+</td>
<td>285 to 294</td>
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<tr>
<td>B</td>
<td>270 to 284</td>
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<tr>
<td>B-</td>
<td>260 to 269</td>
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### Grade Range Notes

<table>
<thead>
<tr>
<th>Grade</th>
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<tbody>
<tr>
<td>C</td>
<td>230 to 259</td>
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<tr>
<td>F</td>
<td>0 to 229</td>
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### Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Topics</th>
<th>Chapters in Text</th>
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<tbody>
<tr>
<td>1</td>
<td>INTRODUCTION AND DESCRIPTIVE STATISTICS:</td>
<td>1 - 3</td>
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<tr>
<td></td>
<td>Basic Terminology, Descriptive Statistics, Charts and Graphs</td>
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<tr>
<td>2</td>
<td>DISCRETE PROBABILITY DISTRIBUTIONS AND NORMAL PROBABILITY:</td>
<td>4 - 6</td>
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<td>Expected Value, Binomial Probability, Normal Probability</td>
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<tr>
<td>3</td>
<td>SAMPLING DISTRIBUTIONS, ESTIMATION:</td>
<td>7 - 8</td>
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<tr>
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<td>Central Limit Theorem, Confidence Intervals for Means and Proportions</td>
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<tr>
<td></td>
<td>Sample Size, Sampling</td>
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<tr>
<td>4</td>
<td>MIDTERM EXAM</td>
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<tr>
<td>5</td>
<td>HYPOTHESIS TESTING FOR ONE SAMPLE:</td>
<td>9</td>
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<tr>
<td></td>
<td>One Sample Hypothesis Testing for Means and Proportions</td>
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<tr>
<td>6</td>
<td>HYPOTHESIS TESTING FOR 2+ SAMPLES:</td>
<td>10 - 11</td>
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<td></td>
<td>Two Sample Hypothesis Testing for Means and Proportions, Analysis of Variance</td>
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<tr>
<td>7</td>
<td>HYPOTHESIS TESTS OF RELATIONSHIPS:</td>
<td>12 - 13</td>
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<td>Correlation, Simple Linear Regression, Chi Square Test of Independence</td>
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<tr>
<td>8</td>
<td>MULTIVARIATE MODELING:</td>
<td>14, 16</td>
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<td></td>
<td>Multiple Linear Regression, Time Series Analysis with Smoothing and Seasonality</td>
<td></td>
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<tr>
<td>9</td>
<td>FINAL EXAM</td>
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</table>
This syllabus may be revised at the discretion of the instructor without the prior notification or consent of the student. The schedule below presents an approximate expectation of course progress. The instructor reserves the right to add, delete, or modify any weeks of this schedule. The instructor also reserves the right to change the overall course grade weighting. Any changes will be announced in class.

If you miss class you are responsible for getting notes and assignments. No late homework will be accepted and missed quizzes will receive scores of zero unless prior approval to miss class is obtained from the instructor. Makeup exams will be scheduled only if arranged in advance of the scheduled exam date.

Institutional Policies

Academic Policies

Academic policies provide students with important rights and responsibilities. Students are expected to familiarize themselves with all academic policies that apply to them. Academic policies for undergraduate students can be found in the Undergraduate Studies Catalog; graduate students should review the Graduate Studies Catalog.

Undergraduate Studies Catalog

The Undergraduate Studies Catalog contains academic policies that apply to all undergraduate students. The academic policies and information section of the catalog contains important information related to attendance, conduct, academic honesty, grades, and more. If you are an undergraduate student, please review the catalog each academic year. The current Undergraduate Studies Catalog is at:

http://www.webster.edu/catalog/current/undergraduate-catalog/

Graduate Studies Catalog

The Graduate Studies Catalog contains academic policies that apply to all graduate students. The academic policies section of the catalog contains important information related to conduct, academic honesty, grades, and more. If you are a graduate student, please review the catalog each academic year. The current Graduate Studies Catalog is at:

http://www.webster.edu/catalog/current/graduate-catalog/

Grading

The Grades section of the academic catalog outlines the various grading systems courses may use, including the information about the final grade reported for this class.

Undergraduate

http://www.webster.edu/catalog/current/undergraduate-catalog/academic-policies.html#grading

Graduate

http://www.webster.edu/catalog/current/graduate-catalog/academic-policies.html#grades

Incomplete

There are important policies that govern grades of Incomplete (I), including the circumstances under which Incomplete grades are granted, deadlines for completion, and consequences should the remaining course work not be completed. It is the responsibility of a student who requests an Incomplete to ensure that he/she understands and follows the policies.

Grade Appeals

Instructors are responsible for assigning grades, and student should discuss grade issues with the instructor. Policies and procedures for appealing grades are available in the appropriate catalog.
Academic Honesty Policy

Webster University is committed to academic excellence. As part of our Statement of Ethics, we strive to preserve academic honor and integrity by repudiating all forms of academic and intellectual dishonesty, including cheating, plagiarism and all other forms of academic dishonesty. Academic dishonesty is unacceptable and is subject to a disciplinary response. Students are encouraged to talk to instructors about any questions they may have regarding how to properly credit others' work, including paraphrasing, quoting, and citation formatting. The university reserves the right to utilize electronic databases, such as Turnitin.com, to assist faculty and students with their academic work.

The University's Academic Honesty Policy is published in academic catalogs:

**Undergraduate**

http://www.webster.edu/catalog/current/undergraduate-catalog/academic-policies.html

**Graduate**

http://www.webster.edu/catalog/current/graduate-catalog/academic-policies.html

As a part of the University commitment to academic excellence, the Academic Resource Center provides student resources to become better acquainted with academic honesty and the tools to prevent plagiarism in its many forms:

http://www.webster.edu/arc/plagiarism_prevention/

Statement of Ethics

Webster University strives to be a center of academic excellence. The University makes every effort to ensure the following:

- The opportunity for students to learn and inquire freely
- The protection of intellectual freedom and the rights of professors to teach
- The advancement of knowledge through scholarly pursuits and relevant dialogue

To review Webster University's statement of ethics, see the Undergraduate Studies Catalog and the Graduate and Studies Catalog:

**Undergraduate**

http://www.webster.edu/catalog/current/undergraduate-catalog/overview.html#ethics

**Graduate**

http://www.webster.edu/catalog/current/graduate-catalog/ethics.html

Contact Hours for this Course

It is essential that all classes meet for the full instructional time as scheduled. A class cannot be shortened in length. If a class session is cancelled for any reason, the content must be covered at another time.

Important Academic Resources

### Academic Accommodations

Webster University makes every effort to accommodate individuals with academic/learning, health, physical and psychological disabilities. To obtain accommodations, students must identify themselves and provide documentation from a qualified professional or agency to the appropriate campus designee or the Academic ADA Coordinator at the main campus. The Academic ADA Coordinator may be reached at 314-246-7700 or disability@webster.edu.

If you have already identified as a student with a documented disability and are entitled to classroom or testing accommodations, please inform the instructor of the accommodations you will require for this class at the beginning of the course.

### Academic Resource Center
Additional support and resources may be accessed through the Academic Resource Center (ARC). Support and resources include academic counseling, accommodations, assistive technology, peer tutoring, plagiarism prevention, testing center services, and writing coaching. Visit [www.webster.edu/arc](http://www.webster.edu/arc) or Loretto Hall 40 on the main campus for more information.

**Student Success Portal**

Webster University’s Student Success Portal, powered by Starfish, is a communications tool to connect students with faculty members and campus support services. It allows faculty and staff members to communicate with you regarding academic achievements as well as areas where support may be helpful. You may use the portal to contact faculty and staff members for assistance and to arrange meetings. Activity in the portal will be communicated to your Webster University email account. The Student Success Portal is available via your course home page in WorldClassRoom or via Connections. Learn more about the Student Success Portal at [http://www.webster.edu/success/students.html](http://www.webster.edu/success/students.html).

**University Library**

Webster University Library is dedicated to supporting the research needs and intellectual pursuits of students throughout the University’s worldwide network. Resources include print and electronic books, journal articles, online databases, DVDs and streaming video, CDs and streaming music, datasets, and other specialized information. Services include providing materials at no cost and research help for basic questions to in-depth exploration of resources. The gateway to all of these resources and services is [http://library.webster.edu](http://library.webster.edu). For support navigating the library’s resources, see [http://libanswers.webster.edu/](http://libanswers.webster.edu/) for the many ways to contact library staff.

**Drops and Withdrawals**

Drop and withdrawal policies dictate processes for students who wish to unenroll from a course. Students must take proactive steps to unenroll; informing the instructor is not sufficient, nor is failing to attend. In the early days of the term or semester, students may DROP a course with no notation on their student record. After the DROP deadline, students may WITHDRAW from a course; in the case of a WITHDRAW, a grade of W appears on the student record. After the WITHDRAW deadline, students may not unenroll from a course. Policies and a calendar of deadlines for DROP and WITHDRAW are at:

*Undergraduate*  

*Graduate*  
[http://www.webster.edu/catalog/current/graduate-catalog/enrollment.html](http://www.webster.edu/catalog/current/graduate-catalog/enrollment.html)

*Academic Calendar* - [http://www.webster.edu/academics/academic-calendar/](http://www.webster.edu/academics/academic-calendar/)

Current tuition rates, policies, and procedures, including details of pro-rated tuition refunds, are available in the “Tuition, Fees, and Refunds” section of Webster’s Academic Catalogs:

*Undergraduate*  

*Graduate*  
[http://www.webster.edu/catalog/current/graduate-catalog/tuition.html](http://www.webster.edu/catalog/current/graduate-catalog/tuition.html)

**Student Handbook and Other Important Policies**

Student handbook and other non-academic policies may apply to you and may impact your experience in this class. Such policies include the student code of conduct, privacy, technology and communications, and more. Please review the handbook each year and be aware of policies that apply to you. The handbook is available at:

Sexual Assault, Harassment, and Other Sexual Offenses

Webster University makes every effort to educate the community to prevent sexual assault, harassment, and other sexual offenses from occurring, and is committed to providing support to those affected when this behavior does occur. To access information and resources or to review the Policy on Sexual Assault, Harassment, and Other Sexual Offenses, visit:

http://www.webster.edu/sexual-misconduct/

Research on Human Subjects

The Webster University Institutional Review Committee (IRB) is responsible for the review of all research on human subjects. The IRB process applies to all Webster University faculty, staff, and students and must be completed prior to any contact with human subjects. For more information on the IRB, visit:

http://www.webster.edu/irb/index.html

Course Evaluations

At the end of this course, you will have the opportunity to provide feedback about your experience. Your input is extremely valuable to the university, your instructor, and the department that offers this course. Please provide your honest and thoughtful evaluation, as it helps the university to provide the best experience possible for all of its students.

Important Technology Information

Connections Accounts

Webster University provides all students, faculty, and staff with a University email account through Connections. Students are expected to activate their Connections account and regularly check incoming University email. Students may choose to have their University email forwarded to an alternate email address. Connections account holders can call the Help Desk (314-246-5995 or toll free at 1-866-435-7270) for assistance with this setup. Instructions are also provided on the Information Technology website at:

http://www.webster.edu/technology/service-desk/

WorldClassRoom

WorldClassRoom is Webster’s Learning Content Management System (LMS). Your instructor may use WorldClassRoom to deliver important information, to hold class activities, to communicate grades and feedback, and more. WorldClassRoom is available using your Connections ID at:

https://worldclassroom.webster.edu/

Webster Alerts

Webster Alerts is the University’s preferred emergency mass notification service, available free to current students, faculty and staff at all US campuses. By registering a valid cell phone number and email address, you will receive urgent campus text, voice mail and email communications. Valuable information concerning a range of incidents affecting you - from weather-related campus closures, class delays and cancellations, to more serious or life-threatening events - are immediately and simultaneously delivered through multiple communication channels. To register for Webster Alerts, visit:

http://www.webster.edu/technology/services/webster-alerts/

Campus Information

Additional Items

Prerequisites

1. Prior basic knowledge/experience using Microsoft Excel. Optimal success in this class relies heavily upon using Microsoft (MS) Excel, along with the mandatory add-in PHStat2 (available at www.pearsonhigher.com/levine). PHStat2 is used as an aid to
complete the supporting documentation used to complete your quizzes and assessments.

2. General knowledge of quantitative studies. BUSN 5760 is clearly a course deeply rooted in quantitative analysis. If you experience difficulties in general with quantitative courses which are an integral portion of all MBA programs, then you may require extra effort in this course.