

BUSN662

STUDENT WARNING: This course syllabus is from a previous semester archive and serves only as a preparatory reference. Please use this syllabus as a reference only until the professor opens the classroom and you have access to the updated course syllabus. Please do NOT purchase any books or start any work based on this syllabus; this syllabus may NOT be the one that your individual instructor uses for a course that has not yet started. If you need to verify course textbooks, please refer to the online course description through your student portal. This syllabus is proprietary material of APUS.

Course Summary

Course : BUSN662 **Title :** Applied Advanced Analytics

Length of Course : 8

Prerequisites : BUSN661 **Credit Hours :** 3

Description

Course Description: This course provides four case scenario exercises in which students will use the tools learned to create viable case summaries and data-supported solutions. Exercises will range from intermediate to advanced levels of analytical ability and will allow students to create a portfolio demonstrating skills in various business functions and analytical tools. (Prerequisite: BUSN661)

Course Scope:

This course will combine topics from two separate fields: statistics and management science. The materials will cover three important themes: Data Analysis—includes data description, data inference, and the search for relationships in data; Decision Making—includes optimization techniques for problems with no uncertainty, decision analysis for problems with uncertainty, and structured sensitivity analysis; and Dealing with Uncertainty—includes measuring uncertainty and modeling uncertainty explicitly in optimization models.

Objectives

After successfully completing this course, you will be able to:

1. Identify different models and tools used in data analysis, decision making, and dealing with uncertainty.
 2. Interpret results from analytics models to gain a competitive advantage in market place.
 3. Implement analytics in various functions of a business.
 4. Distinguish various models to identify the right model to apply to a real world scenario.
 5. Evaluate the relevance and accuracy of analytics modeling to a specific real world scenario.
 6. Develop a seven-step process in analytics modeling to a particular real world scenario.
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Outline

Week 1: Sampling and Sampling Distributions

Course Objectives

Identify different models and tools used in data analysis, decision making, and dealing with uncertainty.

Readings

S. Christian Albright and Wayne L. Winston;
Business Analytics: Data Analysis & Decision Making, 6th ed. Ch 7

Assignments

Week 1 Problem Set; under "Tests & Quizzes" section

Week 2: Confidence Interval Estimation and Hypothesis Testing

Course Objectives

Interpret results from analytics models to gain a competitive advantage in market place.

Readings

S. Christian Albright and Wayne L. Winston;
Business Analytics: Data Analysis & Decision Making, 6th ed.Ch 8 & 9

Assignments

Week 2 Problem Set; under "Tests & Quizzes" section

Week 2 Team Project

Week 3: Simple/Multiple Regression and Statistical Inference

Course Objectives

Implement analytics in various functions of a business.
Distinguish various models to identify the right model to apply to a real world scenario.

Readings

S. Christian Albright and Wayne L. Winston;
Business Analytics: Data Analysis & Decision Making, 6th ed. Ch 10 & 11

Assignments

Week 3 Team Project

Week 4: Time Series Analysis and Forecasting

Course Objectives

Implement analytics in various functions of a business.
Distinguish various models to identify the right model to apply to a real world scenario.
Evaluate the relevance and accuracy of analytics modeling to a specific real world scenario.

Readings

S. Christian Albright and Wayne L. Winston;
Business Analytics: Data Analysis & Decision Making, 6th ed. Ch 12

Assignments

Week 4 Problem Set; under "Tests & Quizzes" section

Week 5: Optimization Models

Course Objectives

Implement analytics in various functions of a business.
Distinguish various models to identify the right model to apply to a real world scenario.
Evaluate the relevance and accuracy of analytics modeling to a specific real world scenario.

Readings

S. Christian Albright and Wayne L. Winston;
Business Analytics: Data Analysis & Decision Making, 6th ed. Ch 13 & 14

Assignments

Week 5 Team Project

Week 6: Simulation Models

Course Objectives

Implement analytics in various functions of a business.

Readings

S. Christian Albright and Wayne L. Winston;
Business Analytics: Data Analysis & Decision Making, 6th ed. Ch 15 & 16

Assignments

Week 6 Problem Set; under "Tests & Quizzes" section

Week 7: Data Mining

Course Objectives

Develop a seven-step process in analytics modeling to a particular real world scenario.

Readings

S. Christian Albright and Wayne L. Winston;
Business Analytics: Data Analysis & Decision Making, 6th ed. Ch 17

Assignments

Week 7 Problem Set; under "Tests & Quizzes" section

Week 8: Wrap up

Course Objectives

All

Readings

All

Assignments

Final Exam

Evaluation

Grading:

Name	Grade %
Discussion Forums	20.00 %
Week 1 Forum	2.86 %
Week 2 Forum	2.86 %
Week 3 Forum	2.86 %
Week 4 Forum	2.86 %
Week 5 Forum	2.86 %
Week 6 Forum	2.86 %
Week 7 Forum	2.86 %
Writing Assignments	30.00 %
Week 2 Team Project	10.00 %
Week 3 Team Project	10.00 %
Week 5 Team Project	10.00 %
Problem Sets	35.00 %
Week 1 Problem Set	7.00 %
Week 2 Problem Set	7.00 %
Week 4 Problem Set	7.00 %
Week 6 Problem Set	7.00 %
Week 7 Problem Set	7.00 %
Final Exam	15.00 %
BUSN662 Final Exam	15.00 %

Materials

Book Title: Business Analytics: Data Analysis & Decision Making, 6th ed.

Author: Albright and Winston

Publication Info: Cengage

ISBN: 9781305947542

This book has an electronic version which is accessible via the ED MAP bookstore or at

<http://www.directtextbook.com/isbn/9781133629603>. To become familiar with the bookstore process and procedures, including tutorials and eBook access, please visit <http://apus.campusguides.com/bookstore>.

Course Guidelines

Citation and Reference Style

Attention Please: Students will follow the APA Format as the sole citation and reference style used in written work submitted as part of coursework to the University. Assignments completed in a narrative essay or composition format must follow the citation style cited in the APA Format.

Late Assignments

Students are expected to submit classroom assignments by the posted due date and to complete the course according to the published class schedule. The due date for each assignment is listed under each Assignment. As adults, students, and working professionals, I understand you must manage competing demands on your time. We all know that “life happens” but it is important to adhere as closely to the deadlines in the class as possible.

Should you need additional time to complete an assignment, please contact me before the due date so we can discuss the situation and determine an acceptable resolution. If arrangements are not made in advance, a late penalty of 10% will be assessed for any assignment submitted 117 days past the due date. Assignments will not be accepted after the 7th day. No work will be accepted past the final day of class.

Netiquette

Online universities promote the advancement of knowledge through positive and constructive debate – both inside and outside the classroom. Forums on the Internet, however, can occasionally degenerate into needless insults and “flaming.” Such activity and the loss of good manners are not acceptable in a university setting – basic academic rules of good behavior and

proper “Netiquette” must persist. Remember that you are in a place for the rewards and excitement of learning which does not include descent to personal attacks or student attempts to stifle the Forum of others.

- **Technology Limitations:** While you should feel free to explore the full range of creative composition in your formal papers, keep e-mail layouts simple. The Sakai classroom may not fully support MIME or HTML encoded messages, which means that bold face, italics, underlining, and a variety of color coding or other visual effects will not translate in your e-mail messages.
- **Humor Note:** Despite the best of intentions, jokes and especially satire can easily get lost or taken seriously. If you feel the need for humor, you may wish to add “emoticons” to help alert your readers: ;!), :)

Disclaimer Statement

Course content may vary from the outline to meet the needs of this particular group.

Academic Services

The Online Library is available to enrolled students and faculty from inside the electronic campus. This is your starting point for access to online books, subscription periodicals, and Web resources that are designed to support your classes and generally not available through search engines on the open Web. In addition, the Online Library provides access to special learning resources, which the University has contracted to assist with your studies. Questions can be directed to librarian@apus.edu.

- **Charles Town Library and Inter Library Loan:** The University maintains a special library with a limited number of supporting volumes, collection of our professors' publication, and services to search and borrow research books and articles from other libraries.
- **Electronic Books:** You can use the online library to uncover and download over 50,000 titles, which have been scanned and made available in electronic format.
- **Electronic Journals:** The University provides access to over 12,000 journals, which are available in electronic form and only through limited subscription services.
- **Tutor.com:** AMU and APU Civilian & Coast Guard students are eligible for 10 free hours of tutoring provided by APUS. [Tutor.com](http://tutor.com) connects you with a professional tutor online 24/7 to provide help with assignments, studying, test prep, resume writing, and more. Tutor.com is tutoring the way it was meant to be. You get expert tutoring whenever you need help, and you work one-to-one with your tutor in your online classroom on your specific problem until it is done.
- **Disability Accommodations:** Students are encouraged email dsa@apus.edu to discuss potential academic accommodations and begin the review process.

Request a Library Guide for your course (<http://apus.libguides.com/index.php>)

The AMU/APU Library Guides provide access to collections of trusted sites on the Open Web and licensed resources on the Deep Web. The following are specially tailored for academic research at APUS:

- Program Portals contain topical and methodological resources to help launch general research in the degree program. To locate, search by department name, or navigate by school.
- Course LibGuides narrow the focus to relevant resources for the corresponding course. To locate, search by class code (e.g., SOC111), or class name.

If a guide you need is not available yet, please email the APUS Library: librarian@apus.edu.

Turnitin.com

Faculty may require assignments be submitted to Turnitin.com. Turnitin.com will analyze a paper and report instances of potential plagiarism for the student to edit before submitting it for a grade. In some cases professors may require students to use Turnitin.com. This is automatically processed through the Assignments area of the course.

University Policies

[Student Handbook](#)

- [Drop/Withdrawal policy](#)
- [Extension Requests](#)
- [Academic Probation](#)
- [Appeals](#)
- [Disability Accommodations](#)

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affordable, and student-focused online programs that prepare students for service and leadership in a diverse, global society.

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