# <u>AMBERTON UNIVERSITY</u> e-COURSE SYLLABUS

# MGT6460.E1 Applied Business Analytics Spring 2023

## **PROFESSOR INFORMATION:**

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## **COURSE INFORMATION:**

MGT6460.E1 Applied Business Analytics

Level: Graduate

Beginning Date of Session: Saturday, March 11, 2023 Ending Date of Session: Thursday, May 18, 2023

Student access is available to the Student Portal: Saturday, March 18, 2023

Students enrolled in distance learning courses are not assessed any additional fees for security or identity verification.

## **COURSE PREREQUISITES:**

None

# TEXTBOOK(S) AND REQUIRED MATERIALS:

Title: Predictive Analytics for Business Strategy: Reasoning from Data to Actionable Knowledge

Author: Prince, Jeff Publisher: McGraw Hill Year Published: 2019

Edition: 1st

ISBN: 10: 1259191516 or 13: 9781259191510 Price: Available at http://amberton.ecampus.com

Amberton University has an agreement with eCampus.com to provide a full-service online bookstore to students. The Amberton University Virtual Bookstore is accessible through the University's website, www.Amberton.edu. There is also a bookstore link in the Student Portal.

The AU Virtual Bookstore provides an easy to use interface, online buyback of books, and same day shipment of most titles with an average delivery time of 2-3 days depending on the student's location. Textbook options include new, used, rental, and electronic media as available.

Since no books are sold on campus, students should plan accordingly and purchase their books in advance of the first day of class, allowing time for shipping. Be certain <u>you are enrolled</u> in the course before purchasing your book(s). All textbook information (Title, Author, ISBN, etc.) is available in the course syllabi so students can shop competitively. Most textbooks can be purchased from many different textbook vendors. Some textbooks may only be available on the University's Virtual Bookstore. Students should be careful to obtain the exact resource(s) required for the course.

## **APA** Requirement

APA (American Psychological Association) style is most commonly used to cite sources within the social sciences. This resource, revised according to the 7th edition, offers examples for the general format of APA research papers, in-text citations, endnotes/footnotes, and the reference page. For more information, please consult the Publication Manual of the American Psychological Association, (7th ed.). All coursework at Amberton University will comply with the standards contained in the APA Publication Manual.

#### **COURSE COMPETENCIES:**

This course is the introductory course for the Master of Science in Enterprise Analytics. Students will become familiar with an overview and framework for understanding business analytics principles. Students will also be introduced to the theories, strategies, tools, and applied statistical techniques necessary to master the implementation of enterprise analytics to gain competitive advantage. The course will focus on applying predictive analytics methods, processes, and best practices to common problems faced by organizations. Students will acquire knowledge of the tools, techniques, and processes needed to effectively employ enterprise analytics applications such as statistical modeling, machine learning, artificial intelligence, linear/non-linear programming, optimization, and root cause analysis.

# UPON COMPLETION OF THE COURSE, THE STUDENT WILL BE COMPETENT IN:

- 1. Identifying and evaluating influential literature relevant to Business Analytics topics.
- 2. Synthesizing and applying universal ethical principles to Business Analytics in modern organizations.
- 3. Identifying, evaluating, and applying Business Analytics principles and techniques within the context of the modern organization.
- 4. Understanding the implications of producing valuable insights for decision-making based on in-depth analyses of large amounts of internal and external data.
- 5. Discussing the importance of engaging current and future stakeholders through building an organizational environment that balances decision support needs and expectations against the validity of the data sources available.
- 6. Managing the challenges associated with data science personnel and resources.
- 7. Analyzing, evaluating, and applying stakeholders' feedback to prioritize and improve future Business Analytics applications.
- 8. Analyzing, evaluating, and applying Business Analytics best practices for effective coordination and informed decision making in modern organizations.
- 9. Creating and cultivating an environment of transparency, trust, and conflict resolution, and high performance in the application of Business Analytics.
- 10. Producing and maintaining an evolving Business Analytics plan, from initiation to closure, based on organizational goals, values, risks, constraints, stakeholder feedback, and review of findings.
- 11. Discussing the importance of evidenced based learning (inspection and adaptation) in Business Analytics applications.
- 12. Integrating continuous quality improvement, effectiveness, value of the product, process, and team concepts into Business Analytics.

## **COURSE POLICIES:**

## **Weekly Assignments:**

Each week begins on a Sunday and ends on Saturday. All assignments must be submitted before midnight Saturday night (apart from discussions, for which students must consistently engage throughout the week). Assignments will be comprised of chapter questions, threaded discussions, a midterm reflection paper, and a Harvard case study. Students will also complete three competency-based examinations. Assignment details will be provided in Moodle.

# **Late Assignments:**

Students are expected to complete and submit written assignments on the assigned due date. Any assignment submitted late (regardless of circumstances) will be assessed a 10% penalty and a 10% penalty for each additional week the assignment is late. For example, if an assignment is submitted 1 week late a 20% late penalty will be applied to the grade earned. Exceptions will be considered case-by-case, only in the event of unexpected catastrophic events. Specific assignment due dates and other requirements are listed in the assignment details. There are no extra-credit assignments.

## Student's Responsibilities

This syllabus contains information, policies and procedures for a specific course. By enrolling, the student agrees to read, understand and abide by the policies, rules, regulations, and ethical standards of Amberton University as contained in the current university catalog and schedule of classes.

# Attendance Policy:

Regular and punctual class attendance and engagement is expected at Amberton University. In case of an absence, it is the student's responsibility to contact the professor as soon as possible. If a student intends on withdrawing from a course, it is the student's responsibility to follow the university's policy on formally withdrawing from a course. **Ceasing to attend classes does not constitute an official withdrawal.** 

Attendance in a lecture course is defined as punctual arrival to, and engagement in, a full lecture session. Attendance in a distance learning course is defined as active participation in the weekly online class sessions. "Active participation" can be defined as: submitting an academic assignment, taking an exam, engaging in an interactive tutorial, participating in an online discussion forum (or chat session), or initiating (or responding to) a communication with a faculty member about an academic assignment or the subject matter of the course. A student not meeting these requirements may be dropped at the discretion of Amberton University.

# Plagiarism Policy

Plagiarism is the presentation of someone else's work as though it were your own. If you use another person's words, ideas, or information; or if you use material from an outside source – whether a book, magazine, newspaper, business publication, broadcast, speech, or electronic media – you must acknowledge that source. Plagiarism is a violation of the University's code of student ethical conduct and is one that is taken seriously. Amberton University operates on an honor system; therefore, honesty and integrity are essential characteristics of all who are associated with the institution. All Amberton students are expected to abide by the honor system and maintain academic integrity in all their work. Amberton University and its instructors monitor student work for plagiarism and reserve the right to submit such work to technology-based plagiarism detection services and applications at any time.

Students agree that by taking this course, all required assignments may be subject to submission for a textual similarity review to Turnitin.com for the detection of plagiarism. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism in future papers. Use of Turnitin.com service is subject to the Usage Policy posted on the Turnitin.com website.

Turnitin is a writing improvement and plagiarism prevention tool which uses special algorithms, to compare text-based student submissions to the Turnitin database and other online sources. Turnitin produces a detailed **similarity report** that can be customized and viewed by instructors and students.

Turnitin "Draft Coach" is a Google based add-on to Turnitin which supports students in developing high-quality academic writing; and serves as an integrity coach. Draft Coach, helps address errors and improve the quality of student's writing by highlighting grammar mistakes, identifying incorrectly cited sources, and scanning for similarity across several databases. By providing formative feedback on how to address citation issues, incorrect grammar, and matches with the Turnitin database, Draft Coach provides explanations to help students become more confident writers, capable of producing higher quality work both in academics and in the workplace.

#### **COURSE OUTLINE AND CALENDAR:**

| Week                      | Topic             | Course<br>Competencies | Assignments     | Due Date |
|---------------------------|-------------------|------------------------|-----------------|----------|
| Week 1:<br>March 11, 2023 | Statistics Review | 1, 2, 5, 9, 6, 12      | Reading:        |          |
|                           | Welcome and       |                        | Course          |          |
| March 18, 2023            | Introductions     |                        | Expectations    |          |
|                           |                   |                        | Acknowledgement |          |
|                           |                   |                        | Textbook        |          |
|                           |                   |                        | Prince (2019):  |          |
|                           |                   |                        | Chapter 1       |          |

|   |   |                     | Case-Study Read and become familiar with the Harvard Business Review Case Study |   |
|---|---|---------------------|---|---|
|   |   |                     | Course<br>Expectations<br>Acknowledgement                                       | Due Saturday of<br>Week 1   |
|   |   |                     | Discussion-1:<br>Getting to Know<br>Each Other                                  | Initial post due<br>Saturday of Week<br>1, replies due<br>Saturday of Week<br>2 |
| Week 2:<br>March 19, 2023                       | Reasoning with<br>Data                        | 1, 3, 4, 5, 6, 7, 8 | Textbook<br>Prince (2019):<br>Chapters 2 & 3                                    |   |
| March 25, 2023                                  | Reasoning from<br>Sample to<br>Population     |                     |   |   |
|   |   |                     | Quiz:<br>Problem Set 1<br>(chapters 1 & 2)                                      | Due Saturday of<br>Week 2   |
|   |   |                     | Discussion-2<br>Business Analytics<br>Topics                                    | Initial post due<br>Saturday of Week<br>2, replies due<br>Saturday of Week<br>3 |
| Week 3:<br>March 26, 2023<br>-<br>April 1, 2023 | The Scientific<br>Method<br>Linear Regression | 1, 2, 3, 7, 8       | Textbook<br>Prince (2019):<br>Chapters 4 & 5                                    |   |
|   |   |                     | Exams Midterm Exam 1 (chapters 1, 2, 3, & 4)                                    | Due Saturday of<br>Week 3   |
| Week 4:<br>April 2, 2023                        | The Scientific<br>Method (continued)          | 1, 3, 4, 5, 6, 7, 8 | Textbook<br>Prince (2019):<br>Chapters 5 & 6                                    |   |
| April 8, 2023                                   | Linear Regression (continued)                 |                     | Shaptoro o a o  |   |
|   | Regression:<br>Correlation vs.<br>Causality   |                     |   |   |
|   |   |                     | Quiz:<br>Problem Set 2<br>(chapter 5)   | Due Saturday of<br>Week Due<br>Saturday of                                      |

|  |  |                      |  | Week 3  |
|--|--|----------------------|--|---|
|  |  |                      | Discussion-3 The Scientific Method                                       | Initial post due<br>Saturday of Week<br>4, replies due<br>Saturday of Week<br>5 |
| Week 5:<br>April 9, 2023<br>-<br>April 15, 2023  | Regression: Correlation vs. Causality (continued)  Mid-Course Reflection  Harvard Case Study | 1, 3, 4, 7, 8, 12    | Textbook<br>Prince (2019):<br>Chapter 6                                  |   |
|  |  |                      | Assignment<br>Midterm Reflection<br>Paper                                | Due Saturday of<br>Week 4   |
|  |  |                      | Assignment<br>Case Study Groups  | Due Saturday of<br>Week 4   |
| Week 6:<br>April 16, 2023<br>-<br>April 22, 2023 | Establishing Causal<br>Inference   | 1, 2, 3, 7, 8, 12    | Textbook<br>Prince (2019):<br>Chapters 7 & 8                             |   |
|  |  |                      | Exams Midterm Exam 1 (chapters 5, 6, & 7)                                | Due Saturday of<br>Week 6   |
| Week 7:<br>April 23, 2023<br>-<br>April 29, 2023 | Establishing Causal<br>Inference<br>(continued)  | 1, 2, 3, 7, 8, 12    | Textbook<br>Prince (2019):<br>Chapter 8                                  |   |
|  |  |                      | Quiz:<br>Problem Set 3<br>(chapter 8)                                    | Due Saturday of<br>Week 7   |
| Week 8:<br>April 30, 2023<br>-<br>May 6, 2023    | Dichotomous<br>Dependent<br>Variable   | 1, 3, 5, 6, 7, 8, 12 | Textbook Prince (2019): Chapters 7 & 8  Video Statistics with GooodBelly |   |
|  |  |                      | Discussion-4 Programming in Business Analytics                           | Initial post due<br>Saturday of Week<br>8, replies due<br>Saturday of Week      |

|   |  |                              |   | 9   |
|---|--|------------------------------|---|---|
| Week 9:<br>May 7, 2023<br>-<br>May 13, 2023                 | Identification & Data Assessment Instructor / Course Evaluations | 1, 3, 7, 8, 12               | Textbook<br>Prince (2019):<br>Chapter 10  |   |
|   |  |                              | Quiz:<br>Problem Set 4<br>(chapter 10)    | Due Saturday of<br>Week 9                         |
|   |  |                              | Assignment<br>Case Study – Final<br>Draft | Due Saturday of<br>Week 9                         |
| Week 10:<br>May 14, 2023<br>-<br>(Thursday)<br>May 18, 2023 | Final Exam  End of Course Retrospective                          | 1, 2, 4, 5, 9, 10, 11,<br>12 |   |   |
|   |  |                              | Exams Final Exam (chapters 8, 9, & 10)    | Due Thursday of<br>Week 10 (Last Day<br>of Class) |
|   |  |                              | Discussion<br>End of Course<br>Reflection | Due Thursday of<br>Week 10 (Last Day<br>of Class) |

# **GRADING CRITERIA:**

| Assignment          | % of Grade |
|---------------------|------------|
| Discussions         | 20         |
| Quizzes             | 25         |
| Exams               | 30         |
| Written Assignments | 25         |
| Total               | 100%       |

Graduate

92 - 100 A

82 – 91 B

72 – 81 C 62 – 71 D

62 – 71 D Below 62 F

# **GRADE NOTIFICATION AND INSTRUCTOR FEEDBACK:**

A successful distance learning experience requires a flow of communication between instructor and student throughout the session. Instructor comments are considered essential to the learning process. Therefore, each assignment/exam submitted will be reviewed, graded and returned to the student in a timely manner along with the appropriate commentary. Students should carefully review all comments.

Final grades are processed approximately one week after the last day of the session and may be located in the My Grades section of the online registration portal as well as being emailed to the student's Amberton University email. Amberton University staff will not release grades over the phone. University instructors will not leave a message with comments or grades in any type of media that is not secure.

For questions regarding grades after the semester has ended, students should use their university email account and contact the instructor at the faculty email address as provided above in *Professor Information* area.

# Incomplete Grades

An "I" (incomplete grade) is given at the discretion of the professor and may be given only when an emergency or illness prevents the student from completing course requirements. Should an "I" be granted, the student has 30 days from the end of the session to complete the conditions of the incomplete. An "I" which is not properly removed within 30 days following the session enrolled will become an "F" grade.

#### How To Withdraw From a Course

To be official, the class withdrawal must be in writing and signed by the student requesting the withdrawal; no withdrawal is accepted verbally. Please review the "Schedule of Classes" (online or in-print) for procedures for class changes or withdrawals and the refund policy and schedule.

#### **COURSE DELIVERY METHODOLOGY:**

This course is offered as a distance-learning course through the Moodle Learning Platform. Amberton's distance learning courses, called e-Courses, are identical to classroom courses in terms of learning outcomes, competencies, and instructor expectations. A student choosing to take an e-Course must have the following skills and technical capabilities:

- 1. Access to the Internet
- General knowledge in:
   Internet browser settings and configuration e-mail and file attachments
   Uploading and downloading files
   Using a word processing package
- 3. Ability to conduct on-line research

Students who have not mastered these skills should not enroll for this course, but should consider enrolling in MIS2110 Computer Concepts and Internet Technologies for instruction in these areas.

### **HOW TO ACCESS YOUR COURSE:**

#### Through the Amberton University Student Portal

Students enrolled in distance learning courses using the Moodle Learning Platform may access the course through the Amberton University Student Portal. The site may be accessed through the University's main page (http://www.Amberton.edu) or at http://apps.Amberton.edu. After selecting the "Student Portal" link, you will be prompted for a Username and Password.

Use your assigned username and password (AUID) as described below to enter the AU Student Portal:

**Username** = your capitalized firstname initial+lastname+last 3 digits of your SSN.

\* Use your name exactly as it is listed on the University's records, including any suffixes or hyphenations, such as Jr, Sr, or II, as a part of your username.

For example: James Jones, Jr. SSN: 123-45-6789

Username: JJonesJr789

Password = your Amberton University ID# (AUID) including the dashes

For example: 04-999-999

Once your login has been validated, you may select from a variety of menu options, including your individual E-Course, email account, Remote Research, General Tools, all Syllabi, Research Tutorials and Electronic Instructor Folders (FTP).

If you are accessing the Student Portal from a public or shared computer, close the browser completely when finished, or click on the Logout button. For security purposes, no other person should have access to your Username or Password. If you feel your information has been compromised or if you experience technical difficulties, contact the e-course system administrator at: e-sysop@amberton.edu

If you have lost or do not know your Amberton ID#, please contact the Student Services Office 972/279-6511 or advisor@Amberton.edu for a replacement AUID card. You must know your Amberton ID# to gain access to the course and to send email to your professor.

# Through the Amberton University Moodle Website

Students enrolled in distance learning courses using the Moodle Learning Platform may also access the course by going to: http://moodle.Amberton.edu

For those utilizing Moodle for the first time, the <u>username and password</u> for the Moodle Learning Platform will be emailed to the student's University email account prior to the start of the course. For those returning to Moodle who do not remember their username and password, click on the link "Forgotten your username or password" available on the Moodle log in page (http://moodle.Amberton.edu). Otherwise use the same username and password as previous session.

#### **Moodle Tutorial:**

Upon successful log in and access to the Moodle learning platform, there is a *Student Moodle Tutorials* course available, to learn about the basics of Moodle. Simply click on the link for the *Student Moodle Tutorials* and read through the various learning topics: Navigating; Communicating; Assignments & Exams; Grades; and Student Resources.

## **COURSE COMMUNICATIONS:**

Students will communicate with faculty through the Moodle Learning Platform or the Amberton University email system. Each student enrolled is assigned an Amberton email account, which gives the student access to the Amberton email system (my.Amberton.edu). This email account is provided by Google Apps for Education. Students are encouraged to check their email regularly for University news, notices, and to communicate with instructors.

The student's assigned email address would be Username@my.Amberton.edu

Example: LJones-Smith789@my.Amberton.edu

The student Username is determined by:

firstname initial+lastname+last 3 digits of student ssn.

For example: Linda Jones-Smith SSN: 123-45-6789 Email Address = LJones-Smith789@my.Amberton.edu

Students will be prompted for a Username and Password when accessing their email account. Use the Username portion of the email address as the username (Example: LJones-Smith789) and your Amberton ID# (including the dashes) as the password.

If you already have a Google gmail account, you might be prompted to add this account to your current account. Click 'Yes' and you will be logged into your my. Amberton. edu email account. It will be a separate email account from your personal gmail account.

If you need assistance with your email account, please visit https://support.google.com/mail

Students are responsible for reviewing the "Communication Guidelines" provided on the individual E-Course for specific instructor requirements.

Upon completion of a session, all communication and course specific information is removed from the Moodle system. If a student needs to maintain a record of communications or assignments, the student is strongly encouraged to print out or download these items to a disk for their own records.

#### FORMAT AND SUBMISSION OF ASSIGNMENTS:

Assignments are to be submitted to the appropriate assignment Drop Box in the Moodle system. Specific directions and guidelines for submission of assignments are located on-line in the "Communication Guidelines" of the e-course. Due to compatibility issues, Office 2007 files cannot be read by earlier versions of Microsoft Office. Before submitting an exercise file, confirm the file is in the proper format for grading by the instructor.

## **INSTRUCTOR/COURSE EVALUATION:**

Each session, all Amberton students are provided with the opportunity to evaluate their courses and instructors. The evaluation process is an important one and provides students with an anonymous and confidential way to give meaningful feedback to the University. Summary information and comments are provided to faculty after the close of the session. All information provided is anonymous.

The Instructor/Course Evaluation will be open for completion during week 9 of the session. An evaluation assignment will be placed in week 9 of the Moodle course, along with the instructions on how to complete the evaluation. Prior to week 9, the University will send out an email containing instructions and dates for the evaluation period.

#### **RESEARCH RESOURCES:**

The Library provides access to full-text, and peer reviewed articles, and digital research tools. Students can search Library holdings through the online catalog and databases search engines available on the Library website or browse the physical library space and holdings located at the Garland campus.

Research items not contained in the Amberton Library collection can be located through interlibrary Loan (ILL) or through the TexShare program with the help of the Library staff. Students with questions about available services, resources, or research, may contact the Library via email at <a href="mailto:Library@amberton.edu">Library@amberton.edu</a>.

## **RESEARCH ACCESS:**

Databases can only be accessed by authorized users, and students at Amberton must enter their Amberton ID credentials-same as Moodle login-to gain access when off-campus. Use an Amberton website, such as the University site (<u>Amberton.edu</u>) or the library site (<u>Library.amberton.edu</u>) to find links to databased and digital books. Online resources are available all day, every day.

# Library Live Chat Feature

Library staff are available to assist students with research problems or questions during Library hours through a live online chat feature, telephone, email, "How-to" videos, or in person. The Library telephone is (972-279-6511 ext. 136, 137, or 138. You can email questions to <a href="mailto:library@amberton.edu">library@amberton.edu</a> or visit the Library in person on the Garland campus for assistance.