BUS 3700 - Business Analytics

Fall 2026 Syllabus, Section 03, CRN 41696,

Credit hours: 3

Instructor

Courtney Borruso

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Public Instructor Information

Instructor Title: Principal Lecturer
Instructor Professional Qualifications:

MS, Management – Business Analytics, University of Akron, 2024

MS, Med Education, Lake Erie College of Osteopathic Medicine, 2009

DO, Osteopathic Medicine, Lake Erie College of Osteopathic Medicine, 2006

Salesforce Certified Tableau Desktop Foundations, 2026

Google AI Professional Certificate, 2026

Instructor Office Location: WCBA 3336
Instructor Office Phone: 330-941-3165

Course Description

3700. Business Analytics. Business analytics involves the acquisition, evaluation, and analysis of information for decision-making. This course introduces students to the application of business statistics enabling evidence-based decision-making and problem solving and will cover the four areas of analytics. These are: 1) descriptive (what happened?); 2) diagnostic (why did it happen?); 3) predictive (what will happen and is there a pattern?); and prescriptive (how can we make it happen?). Prereq.: BUS 2600, 2.5 GPA. 3 s.h.

Course Readings

Group	Title	Author	ISBN
Optional	Business Analytics		

Author: Evans, James

Edition: 3rd

Publisher: Pearson+

ISBN: 8220145132486

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning.

Schedule of Topics and Assignments

Week of	Reading(s)	Proposed Topic	Due/To Prepare for Class
8/24	Module 1: What is Business Analytics	Tuesday: Course Introduction, Syllabus Review, & Course Expectations Thursday: Module 1 What is Business Analytics?	Due 8/27 @ End of Class: ICA # 1 & 2

8/31	Module 2: Descriptive Statistics	Tuesday: Module 2 Types of data, Central Tendency, Frequency Tables, & Proportions Thursday: Module 2 Dispersion of Data, Visualize Data, & Outlier	Due 9/1 @ End of Class: ICA # 3 Due 9/3 @ End of Class: ICA # 4
9/7		Tuesday: Module 2 Descriptive Statistics Excel Lab & Group Project Sign-Ups Thursday: Introducing Group Project and Discuss Expectations: Q & A	Due 9/8 @ End of Class: ICA # 5 Due 9/10 @ End of Class: ICA # 6
9/14	Module 3: Data Quality, Preparation, & Data Cleaning	Tuesday: Module 3 Data Quality, Preparation, & Data Cleaning Thursday: Module 3 Data Quality, Preparation, & Data Cleaning Excel Lab	Due 9/15 @ End of Class: ICA # 7 Due 9/17 @ End of Class: ICA # 8
9/21	Module 4: Probability Distributions	Tuesday: Module 4 Probability Distributions Thursday: Module 4 Probability Distributions Excel Lab	Due 9/22 @ End of Class: ICA # 9 Due 9/24 @ End of Class: ICA # 10 Due SUNDAY, 9/27/26 @ 11:59 PM in Blackboard: Group Project Phase 1 & Peer Feedback Phase 1
9/28	Module 5: Confidence Intervals and Correlation	Tuesday: Special Topics TBD Thursday: Module 5 Confidence Intervals and Correlation	Due 9/29 @ End of Class: ICA # 11 Due 10/1 @ End of Class: ICA # 12
10/5	Module 6: Up to an including One Sample t-Test	Tuesday: Module 5 Confidence Intervals and Correlation Excel Lab Thursday: Module 6 Hypothesis Testing Part 1: Hypothesis Testing Basics and One-Sample t-Test	Due 10/6 @ End of Class: ICA # 13 Due 10/8 @ End of Class: ICA # 14 Due SUNDAY, 10/11/26 @ 11:59 PM in Blackboard: Group Project Phase 2 & Peer Feedback 2
10/12	Module 6: From Two-Sample & Paired t-Test, ANOVA, Chi-Squared	Tuesday: Module 6 Hypothesis Testing Part 2: Two Sample & Paired t-Test, ANOVA, Chi-Squared Thursday: Module 6 Hypothesis Testing Excel Lab	Due 10/13 @ End of Class: ICA # 15 Due 10/15 @ End of Class: ICA # 16
10/19	Module 7 Simple Linear Regression Part 1: Regression Basics, Building Model, and Interpreting Output and Equation	Tuesday: In-Class Group Project Workday Thursday: Module 7 Simple Linear Regression Part 1: Regression Basics, Building a Model, and Interpreting Output and Equation	Due 10/20 @ End of Class: ICA # 17 Due 10/22 @ End of Class: ICA # 18 Due SUNDAY, 10/25/26 @ 11:59 PM in Blackboard: Group Project Phase 3 Peer Feedback Phase 3

10/26	Module 7 Simple Linear Regression Part 2: Regression Residuals, Assumptions, Predictions, and Limitations	Tuesday: Midterm Case Study and Mock Trial In-Person Presentations Thursday: Module 7 Simple Linear Regression Part 2: Regression Residuals, Assumptions, Predictions, and Limitations	Due 10/27 @ End of Class: ICA # 19 Due 10/29 @ End of Class: ICA # 20 Due SUNDAY, 11/1/26 @ 11:59 PM in Blackboard: Midterm Case Study and Mock Trial Analysis and Reflections
11/2	Module 8 Multiple Linear Regression	Tuesday: Module 7 Simple Linear Regression Excel Lab Thursday: Module 8 Multiple Linear Regression: Extend Simple Linear Regression, Dummy Variables, Interpreting Output, Multicollinearity, Predictions, Limitations	Due 11/3 @ End of Class: ICA # 21 Due 11/5 @ End of Class: ICA # 22 Due SUNDAY, 11/8/26 @ 11:59 PM in Blackboard: Group Project Phase 4 & Peer Feedback Phase 4
11/9	Module 9: Descriptive & Diagnostic Analytics Module 10: Predictive & Prescriptive Analytics	Tuesday: Module 9 Descriptive & Diagnostic Analytics Applied Business Case Examples Thursday: Module 10 Predictive & Prescriptive Analytics Applied Business Case Examples	Due 11/10 @ End of Class: ICA # 23 Due 11/12 @ End of Class: ICA # 24
11/16		Tuesday: In-Class Workday for Group Project Thursday: In-Class Workday for Group Project	Due 11/17 @ End of Class: ICA # 25 Due 11/19 @ End of Class: ICA # 26 Due SUNDAY, 11/22/26 @ 11:59 PM in Blackboard: Group Project Phase 5 & Peer Feedback Phase 5
11/23		Tuesday: NO CLASS: Remote Workday for Group Project Thursday: NO CLASS UNIVERSITY HOLIDAY	Due SUNDAY, 11/29/26 @ 11:59 PM in Blackboard: OPTIONAL EXTRA CREDIT # 1
11/30		Tuesday: In-Class Workday for Group Project Thursday: In-Class Workday for Group Project	Due 12/1 @ End of Class: ICA # 27 Due 12/3 @ End of Class: ICA # 28 Due FRIDAY, 12/4/26 @ 11:59 PM in Blackboard: OPTIONAL EXTRA CREDIT #2
12/7		Final Group Project In-Person Presentations: THURSDAY, 12/10/26 from 10:30 AM – 12:30 PM	Due WEDNESDAY, 12/9/26 @ 11:59 PM in Blackboard: Group Project Phase 6 Final Peer Feedback & Phase 6 Final Final Group Project In-Person Presentations: THURSDAY, 12/10/26 from 10:30 AM – 12:30 PM

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