



## Course Syllabus

**Course Number | Name:** BUS455NT – Business Analytics

**Course Credits:** 3

**Course Duration:** 8 weeks

### Course Description:

This course is an introduction to business analytics. Students will learn the basics of transforming data into useful information for decision-making by mining, preparing, analyzing, and visualizing data. The course emphasizes skill development with Excel.

### Applied Business Program Learning Outcomes (PLOs\*):

#	PLOs
1	Communicate effectively in a professional and diverse global environment.
2	Analyze business problems using appropriate theories and techniques.
3	Demonstrate digital literacy throughout their program.
4	Demonstrate foundational knowledge of the functional areas of business.
5	Work effectively in a team situation.
6	Articulate a biblical understanding of key business concepts.
7	Integrate discipline, specific knowledge, and skills into a complete business plan.

**\*Every business course must include assessments of some, but not all, of the PLOs. The highlighted ones are assessed in this course.**

**Course Learning Outcomes (CLOs):**

#	CLOs	Bloom's*	PLO(s)~
1	Explain major concepts in business analytics.	2	4
2	Demonstrate effective use of business analytics tools for data analysis.	3	3
3	Evaluate business situations and provide recommendations and trends through data analysis.	4	2
4	Apply biblical philosophies to support business decisions recommended by in-depth quantifiable information.	5	6

\*Indicates Bloom's Taxonomy cognitive domain level.

~Indicates which PLO(s) are aligned with the CLO.

**Biblical Worldview Integration Plan:**

You will explore a biblical view of technology through the work of John Dyer, and write your developing biblical view of technology in multiple discussions in this course. Your study and writing on this topic will give you the opportunity to continue to mature your biblical worldview.

**Required to Purchase Media:**

Manzo, J.M. (2021). Data analytics using Excel Microsoft 365: With accounting and finance datasets, version 3.0. Flatworld. ISBN-13: 978-1-4533-3759-2

(Student Link: <https://students.flatworldknowledge.com/course/2603564>)

**Grading Grid:**

Assessments (# in parentheses) - # pts. each if > 1	Total Points
Discussions (8) – 25 pts. each	<b>200</b>
Quizzes (8) – 40 pts. each	<b>320</b>
Data Practice (7) – 50 pts. each	<b>350</b>
Week 8 Skills Test	<b>75</b>
Query Assignment	<b>55</b>
<b>Total Points:</b>	<b>1,000</b>

**Course Schedule:**

**Week 1**

Media:

1. Manzo, Chapters 1 & 2
2. ByteScout (n.d.) CSV format: History, advantages, and why it is still popular.
3. Williams, B. (2016), Introduction to Databases.
4. Dyer, J. (2013). Thinking theologically about technology and culture. Dallas Theological Seminary. (Video)

Assignments:

1. Assignment 1-1 Quiz
2. Assignment 1-2 Data Practice – See Instructions in the course
3. Wk1 Discussion – See Instructions in the course

**Week 2**

Media:

1. Manzo, Chapters 3 & 4
2. Hill, K. (Feb 16, 2012). How Target figured out a teen girl was pregnant before her father did. Forbes.
3. Ovide, S. (May 12, 2022). The messy progress on data privacy. New York Times.
4. Stratvert, K. (2021). Pivot table Excel tips & tricks. (Video)

Assignments:

1. Assignment 2-1 Quiz
2. Assignment 2-2 Data Practice – See Instructions in the course
3. Wk2 Discussion – See Instructions in the course

**Week 3**

Media:

1. Manzo, Chapter 5
2. Reed, E. (n.d.) 12 common Excel errors and solutions. RepairIT.
3. Kobie, N. (2020). Meet the Excel warriors saving the world from spreadsheet disaster. Wired.
4. Bricklin, D. (2017) Meet the inventor of the electronic spreadsheet. TEDx. (Video)

Assignments:

1. Assignment 3-1 Quiz
2. Assignment 3-2 Data Practice – See Instructions in the course
3. Wk3 Discussion – See Instructions in the course

**Week 4**

Media:

1. Manzo, Chapter 6
2. Dyer, J. (2016). Theological reflections on artificial intelligence.

Assignments:

1. Assignment 4-1 Data Practice – See Instructions in the course
2. Assignment 4-2 Quiz
3. Wk4 Discussion – See Instructions in the course

**Week 5**

Media:

1. Manzo, Chapter 7
2. Hillier, W. (2021). What is data cleaning and why does it matter? Career Foundry.
3. Hillier, W. (2021). What is data wrangling. Career Foundry.
4. ExcelKid (2022). 15 ways to clean data in Excel. ExcelKid.
5. Urlacher, B. (2021). Excel 102: Data wrangling in Excel. (Video)
6. Alex (2022). Cleaning data in Excel. Alex the Analyst. (Video)

Assignments:

1. Assignment 5-1 Data Practice – See Instructions in the course
2. Assignment 5-2 Quiz
3. Wk5 Discussion – See Instructions in the course

**Week 6**

Media:

1. Manzo, Chapter 8
2. Mackinlay, J., Kosara, R. & Wallace, M. (n.d.) Data storytelling: Using visualization to share the human impact of numbers. Tableau Software.
3. Explore several (2-4) of the example projects at Information is Beautiful. You may find this information helpful when addressing the discussion prompt for the week.
4. Cairo, A. (2017) Visual trumpery: Fighting against fake data and visualizations – from the left and the right. (Video)

Assignments:

1. Assignment 6-1 Data Practice – See Instructions in the course
2. Assignment 6-2 Quiz
3. Wk6 Discussion – See Instructions in the course

**Week 7**

Media:

1. Manzo, Chapter 9
2. Kirk, A. (2018). Data visualization – A game of decisions with Andy Kirk. SAGE Ocean. (Video)

Assignments:

1. Assignment 7-1 Data Practice – See Instructions in the course
2. Assignment 7-2 Quiz
3. Assignment 7-3 Query Assignment – See Instructions in the course
4. Wk7 Discussion – See Instructions in the course

**Week 8**

Media:

1. Manzo, Chapter 10
2. Stratvert, K. (2021). How to build Excel interactive dashboards. (Video)
3. Dyer, J. (2022, Nov 21). Bible apps are the new printing press. Christianity Today.

Assignments:

1. Assignment 8-1 Chapter 10 Skills Test – See Instructions in the course
2. Assignment 8-2 Quiz
3. Wk8 Discussion – See Instructions in the course