



COLORADO STATE UNIVERSITY
— GLOBAL —

MIS542: BUSINESS ANALYTICS

Credit Hours: 3

Contact Hours: This is a 3-credit course, offered in accelerated format. This means that 16 weeks of material is covered in 8 weeks. The exact number of hours per week that you can expect to spend on each course will vary based upon the weekly coursework, as well as your study style and preferences. You should plan to spend 14-20 hours per week in each course reading material, interacting on the discussion boards, writing papers, completing projects, and doing research.

Faculty Information: Faculty contact information and office hours can be found on the faculty profile page.

COURSE DESCRIPTION AND OUTCOMES

Course Description:

This course provides an overview of the tools and techniques for analyzing business data in order to develop comprehensive and functional solutions. Topics include forecasting, simulation, and data modeling for complex problem analysis in medium to large organizations.

Course Overview:

This course presents best practices for organizations to follow in creating and sustaining an effective business analytics function. You will cover a business analytics team structure comprised of a business analytics leader with a strong technical background, the authority to implement change, and hire or manage technical staff and business analysts. This course will also explore the topics of creating business questions, wireframing, dashboards, data visualization best practices, and data manipulation using various tools, including ETL, all within the context of business analytics. The course assignments require you to utilize various tools within the Python ecosystem to solve specific business problems and answer specific business questions.

Course Learning Outcomes:

1. Develop an understanding of the necessary cultural, management, personnel qualifications, statistical tools, and data processing capabilities an organization must attain to create successful decisions using business analytics.
2. Analyze case studies of successful and unsuccessful use of business analytics for decision making.
3. Evaluate the qualities of successful business analytics leaders, managers, and team members.
4. Apply analytics tools to analyze data to make data-driven decisions.

PARTICIPATION & ATTENDANCE

Prompt and consistent attendance in your online courses is essential for your success at CSU Global Campus. Failure to verify your attendance within the first 7 days of this course may result in your withdrawal. If for some reason you would like to drop a course, please contact your advisor.

Online classes have deadlines, assignments, and participation requirements just like on-campus classes. Budget your time carefully and keep an open line of communication with your instructor. If you are having technical problems, problems with your assignments, or other problems that are impeding your progress, let your instructor know as soon as possible.

COURSE MATERIALS

Required:

McKinney, W. (2017). *Python for data analysis: Data wrangling with Pandas, NumPy, and IPython* (2nd ed.). Sebastopol, CA: O'Reilly Media. ISBN: 9781491957660, eISBN-13: 9781491957639

Nelson, G. S. (2018). *The analytics lifecycle toolkit: A practical guide for an effective analytics capability*. Hoboken, NJ: John Wiley & Sons. ISBN: 9781119425069, eISBN-13: 9781119425106

Anaconda with Python and Jupyter Notebook

NOTE: All non-textbook required readings and materials necessary to complete assignments, discussions, and/or supplemental or required exercises are provided within the course itself. Please read through each course module carefully.

COURSE SCHEDULE

Due Dates

The Academic Week at CSU Global begins on Monday and ends the following Sunday.

- **Discussion Boards:** The original post must be completed by Thursday at 11:59 p.m. MT and Peer Responses posted by Sunday 11:59 p.m. MT. Late posts may not be awarded points.
- **Critical Thinking:** Assignments are due Sunday at 11:59 p.m. MT.

WEEKLY READING AND ASSIGNMENT DETAILS

Module 1

Readings

- Chapters 1 & 2 in *The Analytics Lifecycle Toolkit*
- Chapters 1 & 2 in *Python for Data Analysis*
- Berndtsson, M., Forsberg, D., Stein, D., & Svahn, T. (2018). Becoming a data-driven organisation. In *ECIS*, 43-52. Retrieved from <http://ecis2018.eu/wp-content/uploads/2018/09/1722-doc.pdf>
- Vidgen, R., Shaw, S., & Grant, D. B. (2017). Management challenges in creating value from business analytics. *European Journal of Operational Research*, 261(2), 626-639.

Discussion (25 points)

Critical Thinking (65 points)

Choose one of the following two assignments to complete this week. Do not do both assignments. Identify your assignment choice in the title of your submission.

OPTION #1: Python in a Jupyter Notebook

Install Anaconda with the latest version of Python as directed in the installation instructions. Capture screenshot 1 showing the Anaconda navigator window with your system date and time.

Create a new Jupyter notebook named MIS542. Capture screenshot 2 showing the MIS542 Jupyter notebook with your system date and time.

Perform the following tasks in Python:

- Use a variable
- Use three different data types
- Output an equation and the results of the equation
- Create a *for* loop
- Create an *if, elif, else* block

Capture as many screenshots as necessary to demonstrate successful completion of all the above tasks. One screenshot can be used to demonstrate more than one task. Ensure the code is large enough in the screenshots to be readable in your Word document submission.

All code must be explained in the narrative of your paper.

Submit one Word document with your screenshots demonstrating successful completion of the above items. In addition to the screenshots, include a description of lessons you learned from this exercise.

Your paper should be 2-3 pages in length, not including the title page, and conform to CSU Global Guide to Writing and APA. (No reference page is required for this assignment.)

OPTION #2: Python in the IPython Shell

Install Anaconda with the latest version of Python as directed in the installation instructions. Capture screenshot 1 showing the Anaconda navigator window with your system date and time.

Open the IPython shell. Capture screenshot 2 showing the IPython shell with your system date and time.

Perform the following tasks in Python:

- Use a variable
- Use three different data types
- Output an equation and the results of the equation
- Create a *for* loop
- Create an *if, elif, else* block

Capture as many screenshots as necessary to demonstrate successful completion of all the above tasks. One screenshot can be used to demonstrate more than one task. Ensure the code is large enough in the screenshots to be readable in your Word document submission.

All code must be explained in the narrative of your paper.

Submit one Word document with your screenshots demonstrating successful completion of the above items. In addition to the screenshots, include a description of lessons you learned from this exercise.

Your paper should be 2-3 pages in length, not including the title page, and conform to CSU Global Guide to Writing and APA. (No reference page is required for this assignment.)

PORTFOLIO REMINDER

For the final Portfolio Project in this course, you will be evaluating the business analytics program or the business analytics culture at your employer or an organization with which you are familiar. Review the project requirements and rubric in Module 8 and determine which option you will complete. A milestone for this project will be due in Module 5.

Module 2

Readings

- Chapters 3 & 4 in *The Analytics Lifecycle Toolkit*
- Chapter 3 in *Python for Data Analysis*
- Ashrafi, A., Ravasan, A. Z., Trkman, P., & Afshari, S. (2019). The role of business analytics capabilities in bolstering firms' agility and performance. *International Journal of Information Management*, 47, 1-15.
- Salminen, J., Milenković, M., Jansen, B. J., & Dubai, D. (2017, January). Problems of data science in organizations: An explorative qualitative analysis of business professionals' concerns. In *Proceedings of International Conference on Electronic Business (ICEB 2017)*. Dubai. Retrieved from https://www.researchgate.net/publication/321586946_Problems_of_Data_Science_in_Organizations_An_Explorative_Qualitative_Analysis_of_Business_Professionals'_Concerns

Discussion (25 points)

Critical Thinking (65 points)

Choose one of the following two assignments to complete this week. Do not do both assignments. Identify your assignment choice in the title of your submission.

OPTION #1: Data Strategy Policy Analysis

Analyze three data privacy policies from companies that collect your data. What is similar and what is different about these three policies? In what ways do these three policies comply with and not comply with the California Consumer Privacy Act (2018)? As the consumer whose data is being collected, in what ways are you satisfied with and not satisfied with these three policies?

California Consumer Privacy Act: Fact sheet. (2018). California Department of Justice. Retrieved from https://oag.ca.gov/system/files/attachments/press_releases/CCPA%20Fact%20Sheet%20%2800000002%29.pdf

Your paper should be 2-3 pages in length, not including the title and reference pages, and conform to CSU Global Guide to Writing and APA. Support your assessment of the policies with the California Consumer Privacy Act and a minimum of two scholarly references in addition to the course textbook. The CSU Global Library is a good place to find these references.

OPTION #2: Data Strategy Policy Creation

Write a data privacy policy that complies with the California Consumer Privacy Act (2018). Your policy should be designed for a company that collects your data. Your policy should include the following sections:

- What data we collect
- How we collect your data
- How we use your data (including sharing and selling of data in this section)
- How we store your data (include retention and deletion of data in this section)
- What are your data protection rights

California Consumer Privacy Act: Fact sheet. (2018). California Department of Justice. Retrieved from https://oag.ca.gov/system/files/attachments/press_releases/CCPA%20Fact%20Sheet%20%2800000002%29.pdf

Your paper should be 2-3 pages in length, not including title and reference pages, and conform to CSU Global Guide to Writing and APA. Support your policy with the California Consumer Privacy Act and a minimum of two scholarly references in addition to the course textbook. The CSU Global Library is a good place to find these references.

Module 3

Readings

- Chapter 5 in *The Analytics Lifecycle Toolkit*
- Chapter 4 in *Python for Data Analysis*
- Nam, D., Lee, J., & Lee, H. (2019). Business analytics adoption process: An innovation diffusion perspective. *International Journal of Information Management*, 49, 411-423.
- Weibl, J., & Hess, T. (2018). Success or failure of big data: Insights of managerial challenges from a technology assimilation perspective. *Proceedings of the Multikonferenz Wirtschaftsinformatik (MKWI)*, 12-59. Retrieved from https://www.researchgate.net/publication/323692347_Success_or_Failure_of_Big_Data_Insights_of_Management_Challenges_from_a_Technology_Assimilation_Perspective

Discussion (25 points)

Critical Thinking (65 points)

Choose one of the following two assignments to complete this week. Do not do both assignments. Identify your assignment choice in the title of your submission.

OPTION #1: Matrix in Jupyter

Using a new Jupyter notebook, create a 100 x 100 times table matrix using the following three methods. Use the timeit function to measure the execution time of each method.

1. Nested for loops
2. Numpy fromfunction
3. Numpy broadcasting

Copy a slice of your matrix using the first 12 numbers to create a new 12 x 12 times table matrix.

Perform the following tasks with this new matrix:

4. Save the array to a file.
5. Use one of the unary ufuncs (Table 4-3, McKinney, 2017, p.109).
6. Use two of the basic array statistical methods (Table 4-5, McKinney, 2017, p.114).
7. Load the array file saved in step 4.

Capture as many screenshots as necessary to demonstrate successful completion of all the above tasks. One screenshot can be used to demonstrate more than one task. Ensure the code is large enough in the screenshots to be readable in your Word document submission.

All code must be explained in the narrative of your paper.

Submit one Word document with your screenshots demonstrating successful completion of the above items. In addition to the screenshots, include a description of lessons you learned from this exercise.

Your paper should be 2-3 pages in length, not including the title and reference pages, and conform to CSU Global Guide to Writing and APA. Support your lessons learned with at least two scholarly references in addition to the course textbook. The CSU Global Library is a good place to find these references.

OPTION #2: Matrix in IPython Shell

Using the IPython shell, create a 100 x 100 times table matrix using the following three methods. Use the timeit function to measure the execution time of each method.

1. Nested for loops
2. Numpy fromfunction
3. Numpy broadcasting

Copy a slice of your matrix using the first 12 numbers to create a new 12 x 12 times table matrix.

Perform the following tasks with this new matrix:

4. Save the array to a file.
5. Use one of the unary ufuncs (Table 4-3, McKinney, 2017, p.109).
6. Use two of the basic array statistical methods (Table 4-5, McKinney, 2017, p.114).
7. Load the array file saved in step 4.

Capture as many screenshots as necessary to demonstrate successful completion of all the above tasks. One screenshot can be used to demonstrate more than one task. Ensure the code is large enough in the screenshots to be readable in your Word document submission.

All code must be explained in the narrative of your paper.

Submit one Word document with your screenshots demonstrating successful completion of the above items. In addition to the screenshots, include a description of lessons you learned from this exercise.

Your paper should be 2-3 pages in length, not including the title and reference pages, and conform to CSU Global Guide to Writing and APA. Support your lessons learned with at least two scholarly references in addition to the course textbook. The CSU Global Library is a good place to find these references.

Module 4

Readings

- Chapters 6 & 7 in *The Analytics Lifecycle Toolkit*
- Chapter 5 in *Python for Data Analysis*
- Duan, Y., Cao, G., & Edwards, J. S. (2018). Understanding the impact of business analytics on innovation. *European Journal of Operational Research*. <https://doi.org/10.1016/j.ejor.2018.06.021>
- Ransbotham, S., & Kiron, D. (2017). Analytics as a source of business innovation. *MIT Sloan Management Review*, 58(3).

Discussion (25 points)

Critical Thinking (65 points)

Choose one of the following two assignments to complete this week. Do not do both assignments. Identify your assignment choice in the title of your submission.

OPTION #1: Analytics-Driven Innovation in a Company

Create a PowerPoint about an organization that is using their business analytics capabilities to successfully drive innovation. You should include the following items:

- One or more examples of the company's successful innovation.
- How the selected organization used analytics to determine which innovations they would attempt to implement.
- Capabilities of the business analytics program developed by the organization and the characteristics that enabled it to drive innovation.

The speaker notes on each slide should be thorough enough that another student in this course could use the slides to tell the story of this organization's use of business analytics.

Your presentation should be 5-8 slides in length (not including the title and reference slides) and conform to CSU Global Guide to Writing and APA. For guidance on creating PPT presentations, visit:

Creating A Visual Presentation. Include at least two scholarly references in addition to the course textbook. The CSU Global Library is a good place to find these references.

OPTION #2: Analytics-Driven Innovation in a Business Sector

Create a PowerPoint describing four examples from one business sector (e.g. health care, finance, etc.) of business analytics capabilities successfully driving innovation. The examples should come from different companies within the sector. The speaker notes on each slide should be thorough enough that another student in this course could use the slides to tell the story of these analytics-driven innovations.

Your presentation should be 5-8 slides in length (not including the title and reference slides) and conform to CSU Global Guide to Writing and APA. For guidance on creating PPT presentations, visit: Creating A Visual Presentation. Include at least two scholarly references in addition to the course textbook. The CSU Global Library is a good place to find these references.

Module 5

Readings

- Chapter 8 in *The Analytics Lifecycle Toolkit*
- Chapters 6 & 7 in *Python for Data Analysis*
- Andrienko, N., Lammarsch, T., Andrienko, G., Fuchs, G., Keim, D., Miksch, S., & Rind, A. (2018, September). Viewing visual analytics as model building. *Computer Graphics Forum*, 37(6), 275-299.
- Llave, M. R., & Olsen, D. (2018). Drivers of business intelligence-based value creation: The experts' view. In *Proceedings of Mediterranean Conference on Information Systems (MCIS 2018)*. Retrieved from https://www.researchgate.net/publication/330765543_Drivers_of_Business_Intelligence-based_Value_Creation_The_Experts'_View

Discussion (25 points)

Critical Thinking (65 points)

Choose one of the following two assignments to complete this week. Do not do both assignments. Identify your assignment choice in the title of your submission.

OPTION #1: Python Data Analysis with Jupyter

Using a new Jupyter notebook, analyze the partial list of Titanic passengers (titanic.csv) with pandas.

Answer the following three questions:

1. What was the average cost in U.S. dollars of a first-class ticket? (See Note 1.)
2. How many passengers over 20 had siblings onboard? (See Note 2.)
3. What was the median age of those who did not survive?

Then, create and answer three additional questions using the Titanic passengers' data.

Create the following three graphs and three additional graphs of your own choice using matplotlib. Use colors to enhance your graphs.

1. Use a pie chart to show the number of males and females.

2. Use a bar chart to show the count of male survivors and the count of female survivors.
3. Use a bar chart to show the count of each age.

Note 1: Use £1.00 British pound = \$1.28 U.S. dollars.

Note 2: The dataset contains two fields that have mixed data: The *Siblings/Spouse Aboard* and the *Parents/Children Aboard*. Use the age of 20 as the threshold for differentiating the data in both fields. For example, if the age is 19, then interpret the number in *Siblings/Spouse Aboard* as siblings aboard. But if the age is 20, then interpret the number as spouse aboard unless the number is greater than 1, then interpret the number as siblings aboard.

Capture as many screenshots as necessary to demonstrate successful completion of all the assigned tasks. One screenshot can be used to demonstrate more than one task. Ensure the code is large enough in the screenshots to be readable in your Word document submission.

All code must be explained in the narrative of your paper.

Submit one Word document with your screenshots demonstrating successful completion of the above items. In addition to the screenshots, include a description of lessons you learned from this exercise.

Your paper should be 2-3 pages in length, not including the title and reference pages, and conform to CSU Global Guide to Writing and APA. Support your lessons learned with at least two scholarly references in addition to the course textbook. The CSU Global Library is a good place to find these references.

OPTION #2: Python Data Analysis with IPython Shell

Using the IPython shell, analyze the partial list of Titanic passengers (titanic.csv) with pandas.

Answer the following three questions and three additional questions of your own choice:

1. What was the average cost in U.S. dollars of a first-class ticket? (See Note 1.)
2. How many passengers over 20 had siblings onboard? (See Note 2.)
3. What was the median age of those who did not survive?

Create the following three graphs and three additional graphs of your own choice using matplotlib. Use colors to enhance your graphs.

1. Use a pie chart to show the number of males and females.
2. Use a bar chart to show the count of male survivors and the count of female survivors.
3. Use a bar chart to show the count of each age.

Note 1: Use £1.00 British pound = \$1.28 U.S. dollars.

Note 2: The dataset contains two fields that have mixed data: The *Siblings/Spouse Aboard* and the *Parents/Children Aboard*. Use the age of 20 as the threshold for differentiating the data in both fields. For example, if the age is 19, then interpret the number in *Siblings/Spouse Aboard* as siblings aboard. But if the age is 20, then interpret the number as spouse aboard unless the number is greater than 1, then interpret the number as siblings aboard.

Capture as many screenshots as necessary to demonstrate successful completion of all the above tasks. One screenshot can be used to demonstrate more than one task. Ensure the code is large enough in the screenshots to be readable in your Word document submission.

All code must be explained in the narrative of your paper.

Submit one Word document with your screenshots demonstrating successful completion of the above items. In addition to the screenshots, include a description of lessons you learned from this exercise.

Your paper should be 2-3 pages in length, not including the title and reference pages, and conform to CSU Global Guide to Writing and APA. Support your lessons learned with at least two scholarly references in addition to the course textbook. The CSU Global Library is a good place to find these references.

Portfolio Milestone (50 points)

Choose one of the following two assignments to complete this week. Do not do both assignments. Identify your assignment choice in the title of your submission.

OPTION #1:

In this module, you will complete a milestone assignment for your Portfolio Project. If you selected Option 1 of the Portfolio Project, write a one-page summary of the business analytics program you selected for your project. Also, provide an annotated bibliography of 3-4 scholarly references that will be used to support your project analysis. Each annotation should include the complete APA reference of the source and a paragraph that summarizes the work, its conclusions, and its relevance to your project. See additional tips and a sample annotated bibliography on the Annotated Bibliography page of the Writing Center.

Your milestone (summary and annotations) should be 2-3 pages in length, not including the title page, and conform to CSU Global Guide to Writing and APA. The CSU Global Library is a good place to find the scholarly sources for your annotated bibliography.

OPTION #2:

In this module, you will complete a milestone assignment for your Portfolio Project. If you selected Option 2 of the Portfolio Project, write a one-page summary of the business analytics culture you selected for your project. Also, provide an annotated bibliography of 3-4 scholarly references that will be used to support your project analysis. Each annotation should include the complete APA reference of the source and a paragraph that summarizes the work, its conclusions, and its relevance to your project. See additional tips and a sample annotated bibliography on the Annotated Bibliography page of the Writing Center.

Your milestone (summary and annotations) should be 2-3 pages in length, not including the title page, and conform to CSU Global Guide to Writing and APA. The CSU Global Library is a good place to find the scholarly sources for your annotated bibliography.

Module 6

Readings

- Chapters 9 & 10 in *The Analytics Lifecycle Toolkit*
- Chapter 9 in *Python for Data Analysis*
- Chen, S., Li, J., Andrienko, G., Andrienko, N., Wang, Y., Nguyen, P. H., & Turkay, C. (2015). Supporting story synthesis: Bridging the gap between visual analytics and storytelling. *Journal of Latex Class Files*, 14(8). Retrieved from <https://www.microsoft.com/en-us/research/uploads/prod/2019/08/08585048.pdf>
- Dremel, C., Herterich, M. M., Wulf, J., & Vom Brocke, J. (2018). Actualizing big data analytics affordances: A revelatory case study. *Information & Management*. <https://doi.org/10.1016/j.im.2018.10.007>

Discussion (25 points)

Mastery Exercise (10 points)

Critical Thinking (65 points)

Choose one of the following two assignments to complete this week. Do not do both assignments. Identify your assignment choice in the title of your submission.

OPTION #1: Python Visualization

Complete an online Python visualization tutorial of your choice. The tutorial should enable you to create 6-10 visualizations. For example, you might include the following visualizations:

- Scatter plot
- Histogram
- Box plot
- Line graph
- Heat map
- Area chart
- Bar chart

This is only a partial list and is not intended to limit your choices.

Capture screenshots of both your Python code and your visualizations – include the date and time in your screenshots. Ensure the code is large enough in the screenshots to be readable in your Word document submission.

All code must be explained in the narrative of your paper.

Submit one Word document with your screenshots, as well as a description of lessons you learned from this exercise.

Your paper should be 2-3 pages in length, not including the title and reference pages, and conform to CSU Global Guide to Writing and APA. Support your lessons learned with at least two scholarly

references in addition to the course textbook. The CSU Global Library is a good place to find these references.

OPTION #2: Storytelling Through Visualization

Complete the Subplots tutorial (Galarnyk, 2019) to compare subsets of data side-by-side.

Capture screenshots of both your Python code and your visualizations – include the date and time in your screenshots. Ensure the code is large enough in the screenshots to be readable in your Word document submission.

All code must be explained in the narrative of your paper.

Submit one Word document with your screenshots, as well as a description of lessons you learned from this exercise.

Your paper should be 2-3 pages in length, not including the title and reference pages, and conform to CSU Global Guide to Writing and APA. Support your evaluation with at least two scholarly references in addition to the course textbook. The CSU Global Library is a good place to find these references.

Reference

Galarnyk, M. (2019). Subplots [LinkedIn Learning video file]. Retrieved from <https://www.linkedin.com/checkpoint/enterprise/login/2245842?pathWildcard=2245842&application=learning&redirect=https%3A%2F%2Fwww%2Elinkedin%2Ecom%2Flearning%2Fpython-for-data-visualization%2Fsubplots%3Fu%3D2245842>

Module 7

Readings

- Chapter 11 in *The Analytics Lifecycle Toolkit*
- Chapter 10 in *Python for Data Analysis*
- Aydiner, A. S., Tatoglu, E., Bayraktar, E., Zaim, S., & Delen, D. (2019). Business analytics and firm performance: The mediating role of business process performance. *Journal of Business Research, 96*, 228-237.
- Maroufkhani, P., Wagner, R., Wan Ismail, W. K., Baroto, M. B., & Nourani, M. (2019). Big data analytics and firm performance: A systematic review. *Information, 10*(7), 226. Retrieved from <https://www.mdpi.com/2078-2489/10/7/226/htm>

Discussion (25 points)

Critical Thinking: Career Development Criteria (60 points)

Write a paper evaluating your data science skills and include a plan for improving the skills you need to develop. Your plan should include courses you intend to take, books you intend to read, and other resources and activities that will help you achieve your goals (e.g., projects in Tableau, SAS, Python, R, or

other tools). Use Figure 2.6 (Nelson, 2018, Critical Competencies for Analytics section) and the subsequent paragraphs of our text as a general guide for the skills needed in data science.

Your paper should be 2-3 pages in length, not including title and reference pages, and conform to CSU Global Guide to Writing and APA. (Since this is a personal reflection, you may write your paper in first person.) Support your plan with citations from the textbook and include the citations of at least two scholarly references that will help you develop the skills you have identified. The CSU Global Library is a good place to find these references.

Module 8

Readings

- Chapters 12 & 13 in *The Analytics Lifecycle Toolkit*
- Chapter 11 in *Python for Data Analysis*
- Nelson, G. S., & Horvath, M. (2017). The elusive data scientist: Real-world analytic competencies. *ThatWave Technologies, Chapel Hill, NC*. Retrieved from <https://support.sas.com/resources/papers/proceedings17/0832-2017.pdf>
- Radovilsky, Z., Hegde, V., Acharya, A., & Uma, U. (2018). Skills requirements of business data analytics and data science jobs: A comparative analysis. *Journal of Supply Chain and Operations Management, 16*(1), 82. Retrieved from <https://www.csupom.com/uploads/1/1/4/8/114895679/v16n1p5.pdf>

Discussion (25 points)

Portfolio Project (300 points)

Choose one of the following two assignments to complete this week. Do not do both assignments. Identify your assignment choice in the title of your submission.

OPTION #1: Business Analytics Program

Evaluate the business analytics program at your employer or an organization with which you are familiar. Use Figure 11.1 and Table 11.1 (Nelson, 2018, Ch. 11, Efficient and Effective Analytics Programs section) as the foundation of your analysis. Your written analysis should be divided into the five stages in Table 11.1:

1. Problem Framing
2. Data Sensemaking
3. Analytics Model Development
4. Results Activation
5. Analytics Product Management

Include a plan of action that your chosen organization could use to improve their business analytics program.

Your paper should be 7-8 pages in length, not including the title and reference pages, and conform to CSU Global Guide to Writing and APA. Include at least six scholarly references in addition to the course textbook. The CSU Global Library is a good place to find these references.

OPTION #2: Business Analytics Culture

Evaluate the business analytics culture at your employer or an organization with which you are familiar. Use the Organizational Culture section (Nelson, 2018, Ch. 3) as the foundation of your analysis. Your written analysis should be divided into the five sections of Figure 3.4 (Nelson, 2018, Ch. 3, Organizational Culture section):

1. Data-Centrism
2. Innovation
3. Learning
4. Service
5. Team Engagement

Include a plan of action that your chosen organization could use to improve their business analytics culture.

Your paper should be 7-8 pages in length, not including the title and reference pages, and conform to CSU Global Guide to Writing and APA. Include at least six scholarly references in addition to the course textbook. The CSU Global Library is a good place to find these references.

COURSE POLICIES

Grading Scale	
A	95.0 – 100
A-	90.0 – 94.9
B+	86.7 – 89.9
B	83.3 – 86.6
B-	80.0 – 83.2
C+	75.0 – 79.9
C	70.0 – 74.9
D	60.0 – 69.9
F	59.9 or below

Course Grading

20% Discussion Participation
45% Critical Thinking Assignments
35% Final Portfolio Project

IN-CLASSROOM POLICIES

For information on late work and incomplete grade policies, please refer to our [In-Classroom Student Policies and Guidelines](#) or the Academic Catalog for comprehensive documentation of CSU Global institutional policies.

Academic Integrity

Students must assume responsibility for maintaining honesty in all work submitted for credit and in any other work designated by the instructor of the course. Academic dishonesty includes cheating, fabrication, facilitating academic dishonesty, plagiarism, reusing/re-purposing your own work (see *CSU Global Guide to Writing and APA* for percentage of repurposed work that can be used in an assignment), unauthorized possession of academic materials, and unauthorized collaboration. The CSU Global Library provides information on how students can avoid plagiarism by understanding what it is and how to use the Library and Internet resources.

Citing Sources with APA Style

All students are expected to follow the *CSU Global Guide to Writing and APA* when citing in APA (based on the APA Style Manual, 6th edition) for all assignments. For details on CSU Global APA style, please review the APA resources within the CSU Global Library under the “APA Guide & Resources” link. A link to this document should also be provided within most assignment descriptions in your course.

Disability Services Statement

CSU–Global is committed to providing reasonable accommodations for all persons with disabilities. Any student with a documented disability requesting academic accommodations should contact the Disability Resource Coordinator at 720-279-0650 and/or email ada@CSUGlobal.edu for additional information to coordinate reasonable accommodations for students with documented disabilities.

Netiquette

Respect the diversity of opinions among the instructor and classmates and engage with them in a courteous, respectful, and professional manner. All posts and classroom communication must be conducted in accordance with the student code of conduct. Think before you push the Send button. Did you say just what you meant? How will the person on the other end read the words?

Maintain an environment free of harassment, stalking, threats, abuse, insults, or humiliation toward the instructor and classmates. This includes, but is not limited to, demeaning written or oral comments of an ethnic, religious, age, disability, sexist (or sexual orientation), or racist nature; and the unwanted sexual advances or intimidations by email, or on discussion boards and other postings within or connected to the online classroom. If you have concerns about something that has been said, please let your instructor know.