



COLORADO STATE UNIVERSITY
— GLOBAL —

MIS543: ENTERPRISE PERFORMANCE MANAGEMENT

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 in-depth understanding of how business intelligence aligns with the realization of organizational strategy. Topics include key performance indicators, organizational goals, and the role of effective management in meeting enterprise objectives.

Course Overview:

In MIS543, you will learn to delineate enterprise performance management (EPM) and its role to resolve business problems in current high-output environments. The primary focus of this course is to equip you to effectively and efficiently mine data to draw knowledge and meaningful conclusions out of the copious amounts of available raw data in various forms—a critical skill in today’s high-output data environment. In this course, you will examine cases in which organizations utilize techniques and practices in gaining insights and actionable intelligence using big data and analytics.

Course Learning Outcomes:

1. Demonstrate functional knowledge of how enterprise performance management (EPM) can help solve business problems within an enterprise.
2. Demonstrate the ability to follow an EPM process that ensures an enterprise is more highly functional.
3. Demonstrate a functional knowledge of how an EPM turns data into useable information.
4. Analyze approaches to understanding by addressing four fundamental business questions as they relate to concepts such as “big data” and predictive analytics.
5. Recommend a solution for an organization’s business issue or circumstance based on EPM best practices.
6. Recommend approaches for aligning EPM to strategy in support of an enterprise’s strategic objectives.
7. Prioritize initiatives on a developed EPM roadmap.

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:

Marr, B. (2015). *Big data: Using SMART big data, analytics, and metrics to make better decisions and improve performance*. Chichester, West Sussex, UK: John Wiley and Co. ISBN: 9781118965832

Marr, B. (2016). *Big data in practice: How 45 successful companies used big data, analytics, and metrics to make better decisions and improve performance*. Chichester, West Sussex, UK: John Wiley and Co. ISBN: 9781119231387

Elliot, A.C., & Woodward, W.A. (2015) *SAS essentials: Mastering SAS for analytics (2nd ed.)*. Hoboken, NJ: John Wiley and Sons. ISBN: 9781119042167

Required Technology:

Please note the section at the bottom of this syllabus on “SAS Resources and Information on Certification.”

***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

- Chapter 1 in *Big Data: Using SMART Big Data, Analytics, and Metrics to Make Better Decisions and Improve Performance*
- Chapters 1 (Walmart) & 5 (Shell) in *Big Data in Practice: How 45 Successful Companies Used Big Data, Analytics, and Metrics to Make Better Decisions and Improve Performance*
- Alharthi, A., Krotov, V., & Bowman, M. (2017). Addressing barriers to big data. *Business Horizons*, 60(3), 285-292. doi: 10.1016/j.bushor.2017.01.002
- Sorensen, D. (2016). Beyond S&OP and IBP to enterprise planning and performance management. *Foresight: The International Journal of Applied Forecasting*, (40), 27-36.

Discussion (25 points)

Module 2

Readings

- Chapter 2 in *Big Data: Using SMART Big Data, Analytics, and Metrics to Make Better Decisions and Improve Performance*
- Chapters 41 (Twitter) & 42 (UBER) in *Big Data in Practice: How 45 Successful Companies Used Big Data, Analytics, and Metrics to Make Better Decisions and Improve Performance*
- Business strategy and the impact on performance. (2015). *Strategic Direction*, 31(4), 19-21.
- Majeed, M., Jain, V., & Varma, S. (2017). Charting an effective big data strategy. *Pharmaceutical Executive*, 37(9), 54-55.

Discussion (25 points)

Critical Thinking (100 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.

Your organization has collected 20 months of sales data on 2 products, Product X and Product Y, salesperson, and territory. Your task is to conduct descriptive analytics on a sample data set named sales.csv. The variable names can be found in the first row of the file.

You are expected to perform the appropriate descriptive statistics tests and prepare the appropriate tables, charts, and graphs needed to describe data. After conducting the descriptive statistics tests, you must provide two business questions that this data is capable of answering and alternate and null hypotheses for each business question.

Submit the following items for this assignment:

- Screenshots of the results for each statistical test including any charts, graphs, and tables. Include the date and time of the screenshot in the screenshot.
- Two business questions including how this data can answer the questions
- Alternate and null hypotheses for each business question
- Analysis of potential relationships in the data that should be investigated further.

Your paper should be 3-5 pages in length and conform to *CSU Global Guide to Writing and APA*.

Option #2: Descriptive Statistics in SAS Studio: Monthly Product Sales

Your organization has collected monthly sales data on one product along with the promotional expense dollars for radio, newspaper, TV, and Point of Sale ads spent in advertising the company's product. Your task is to conduct descriptive analytics on a sample data set named prod_sales.csv. The variable names can be found in the first row of the file.

You are expected to perform the appropriate descriptive statistics tests and prepare the appropriate tables, charts, and graphs needed to describe data. After conducting the descriptive statistics tests, you must provide two business questions that this data is capable of answering and alternate and null hypotheses for each business question.

Submit the following items for this assignment:

- Screenshots of the results for each statistical test including any charts, graphs, and tables.
- Two business questions including how this data can answer the questions
- Alternate and null hypotheses for each business question
- Analysis of potential relationships in the data that should be investigated further.

Your paper should be 3-5 pages in length and conform to *CSU Global Guide to Writing and APA*.

Module 3

Readings

- Chapter 3 (pp. 57-79) in *Big Data: Using SMART Big Data, Analytics, and Metrics to Make Better Decisions and Improve Performance*
- Chapters 26 (Sprint) & 27 (Dickey's Barbeque Pit) in *Big Data in Practice: How 45 Successful Companies Used Big Data, Analytics, and Metrics to Make Better Decisions and Improve Performance*
- Scuotto, V., Ferraris, A., & Bresciani, S. (2016). Internet of things. *Business Process Management Journal*, 22(2), 357-367.

Discussion (25 points)

Critical Thinking (100 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: Sprint Case

Create a presentation that analyzes the Sprint case from our reading assignment using the new forms of data under datification. Identify what forms of data were used by Sprint in their big data project and why. What value did each form of data bring to the big data project? Use the following data forms in your analysis:

- Activity data
- Conversation data
- Photo and Video data
- Sensors data
- Internet of Things

Your presentation should:

- Be 10-12 slides in length (not including title and reference slides).
- Use outline format and include presenter's notes for each slide to further detail the key text that is included on each slide.

Your presentation should be 10-12 pages in length and conform to *CSU Global Guide to Writing and APA*. 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: Dickey's Barbeque Pit Case

Create a presentation that analyzes the Dickey's Barbeque case from our reading assignment using the new forms of data under datification. Identify what forms of data were used by Dickey's Barbeque in its big data project and why. What value did each form of data bring to the big data project? Use the following data forms in your analysis:

- Activity data
- Conversation data
- Photo and video data
- Sensors data
- Internet of Things

Your presentation should:

- Be 10-12 slides in length (not including title and reference slides).
- Use outline format and include presenter's notes for each slide to further detail the key text that is included on each slide.

Your paper should be 10-12 slides in length and conform to [*CSU Global Guide to Writing and APA*](#). Include 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 milestones to complete this week based on the option you have selected to complete for the Portfolio Project. Do not do both assignments. Identify your assignment choice in the title of your submission.

Option #1: Business Question/Hypotheses for Retail Company

If you selected Option #1 to complete for your Portfolio Project, be sure to complete this milestone. Review the background information for Option 1 of the Portfolio Project in Module 8.

For this milestone assignment, you are to state your understanding of the organization's business problem including the company's strategic goals. Next, you will create a minimum of 4 business questions which, if answered, will solve the organization's business problem and achieve the organization's strategic goals. You are expected to explain why you selected those specific business questions. In addition, you must create the alternate and null hypotheses for each business question. The business questions and hypotheses will become the primary framework for your Portfolio Project due in Module 8. Finally, you will discuss any concerns you have in completing this assignment.

Deliverables for this assignment are:

- Description of the business problem including the organization's strategic goals.
- List, at a minimum, 4 business questions. Justify how these business questions will solve the organization's business problem and achieve their strategic goals.
- List the alternate and null hypotheses for each business question
- Describe concerns in completing the Portfolio Project.

Your paper should be 2-3 pages in length and conform to *CSU Global Guide to Writing and APA*. 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: Business Question/Hypotheses for Distribution Company

If you selected Option #2 to complete for your Portfolio Project, be sure to complete this milestone. Review the background information for Option 2 of the Portfolio Project in Module 8.

For this milestone assignment, you are to state your understanding of the organization's business problem including the company's strategic goals. Next, you will create a minimum of 4 business questions which, if answered, will solve the organization's business problem and achieve the organization's strategic goals. You are expected to explain why you selected those specific business questions. In addition, you must create the alternate and null hypotheses for each business question. The business questions and hypotheses will become the primary framework for your Portfolio Project due in Module 8. Finally, you will discuss any concerns you have in completing this assignment.

Deliverables for this assignment are:

- Description of the business problem including the organization's strategic goals.
- List, at a minimum, 4 business questions. Justify how these business questions will solve the organization's business problem and achieve their strategic goals.
- List the alternate and null hypotheses for each business question
- Describe concerns in completing the Portfolio Project.

Your paper should be 2-3 pages in length and conform to *CSU Global Guide to Writing and APA*. 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 4

Readings

- Chapter 3 (pp. 79-103) in *Big Data: Using SMART Big Data, Analytics, and Metrics to Make Better Decisions and Improve Performance*
- Chapters 11 (Facebook) & 14 (LinkedIn) in *Big Data in Practice: How 45 Successful Companies Used Big Data, Analytics, and Metrics to Make Better Decisions and Improve Performance*
- Ertemel, A. V. (2015). Consumer insight as competitive advantage using big data and analytics. *International Journal of Commerce and Finance*, 1(1), 45-51. Retrieved from http://ijcf.ticaret.edu.tr/index.php/ijcf/article/view/9/pdf_5

Discussion (25 points)

Critical Thinking (100 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: Predictive Statistics in SAS Studio: Annual Motor Sales

Your organization has collected sales data on their small engine product sold and distributed from 6 different locations: Kansas City, Chicago, Houston, Oklahoma City, Omaha, and Little Rock. The organization wants to predict motor sales for the next three months for each location. Your task is to conduct predictive analytics statistical tests on a sample data set named `motor_sales.csv`. The variable names can be found in the first row of the file.

You are expected to perform the appropriate predictive statistics tests and prepare the appropriate tables, charts, and graphs needed to predict future sales. You may choose to conduct descriptive statistics tests to better understand the data. You must provide 1-2 business questions that this data is capable of answering and alternate and null hypotheses for each business question.

Submit the following items for this assignment:

- Screenshots of the results for each statistical test including any charts, graphs, and tables.
- 1-2 business questions including how this data can answer the questions
- Alternate and null hypotheses for each business question
- Projections for 3 months of future sales for each location
- Recommendations for additional predictor variables the organization should obtain data for to better predict future sales.

Your paper should be 3-5 pages in length and conform to *CSU Global Guide to Writing and APA*. 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: Predictive Statistics in SAS Studio: Monthly Product Sales

Your organization has collected monthly sales data on one product along with the promotional expense dollars for radio, newspaper, TV, and Point of Sale ads spent in advertising the company's product. The

business problem is how to allocate a fixed budget of advertising dollars to maximize future product sales. In order to maximize future sales, the organization needs to understand the behavior of product sales based on sales promotion efforts using radio, newspaper, TV, and Point of Sale ads.

Your task is to conduct predictive analytics tests on a sample data set named prod_sales.csv. The variable names can be found in the first row of the file.

You are expected to perform the appropriate predictive statistics tests and prepare the appropriate tables, charts, and graphs needed to support your predictions. You may choose to conduct descriptive statistics tests to better understand the data. You must provide 1-2 business questions that this data is capable of answering and alternate and null hypotheses for each business question.

Submit the following items for this assignment:

- Screenshots of the results for each statistical test including any charts, graphs, and tables.
- 1-2 business questions including how this data can answer the questions
- Alternate and null hypotheses for each business question
- Which promotional expense categories can best predict future sales and why.
- Recommendations for additional predictor variables the organization should obtain data for to better predict future sales.

Your paper should be 3-5 pages in length and conform to *CSU Global Guide to Writing and APA*. 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 4 (pp. 105-133) in *Big Data: Using SMART Big Data, Analytics, and Metrics to Make Better Decisions and Improve Performance*
- Chapters 45 (Amazon) & 34 (Experian) in *Big Data in Practice: How 45 Successful Companies Used Big Data, Analytics, and Metrics to Make Better Decisions and Improve Performance*
- Akter, S., Wamba, S. F., Gunasekaran, A., Dubey, R., & Childe, S. (2016). How to improve firm performance using big data analytics capability and business strategy alignment? *International Journal of Production Economics*, 182, 113-131.

Discussion (25 points)

Critical Thinking (75 points)

OPTION #1: Big Data Case

Find an article about an organization that either successfully or unsuccessfully implemented a Big Data program in their organization. You may also use an organization you are familiar with as a source.

Write a paper analyzing the organization's implementation of Big Data. Use the following format to guide your analysis:

- What problem was Big Data targeted to solve?
- How was Big Data used within the organization?
- What were the results?
- What were the technical details: technologies used, infrastructure, etc.?
- Any key challenges that had to be overcome?

- What were the key lessons learned and takeaways?

Your paper should be 3-5 pages in length and conform to *CSU Global Guide to Writing and APA*. 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: Enterprise Performance Management Case

Find an article about an organization that either successfully or unsuccessfully implemented an Enterprise Performance Management program in their organization. You may also use an organization you are familiar with as a source.

Write a paper analyzing the organization's implementation of Enterprise Performance Management. Use the following format to guide your analysis:

- What problem was EPM targeted to solve?
- How was EPM used within the organization?
- What were the results?
- What were the technical details: technologies used, infrastructure, etc.?
- Any key challenges that had to be overcome?
- What were the key lessons learned and takeaways?

Your paper should be 2-3 pages in length and conform to *CSU Global Guide to Writing and APA*. 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 6

Readings

- Chapter 4 (pp. 133-154) in *Big Data: Using SMART Big Data, Analytics, and Metrics to Make Better Decisions and Improve Performance*
- Chapters 13 (Royal Bank of Scotland) & 15 (Microsoft) in *Big Data in Practice: How 45 Successful Companies Used Big Data, Analytics, and Metrics to Make Better Decisions and Improve Performance*
- Senter, R., & Frantz, J. (2015). Do you really know your numbers? It's time for an enterprise performance management tool. *Financial Executive*, 31(3), 66-68, 70, 4.

Discussion (25 points)

Critical Thinking (100 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: Microsoft Case

In the Microsoft case, the author indicated that the company was focusing its strategy on gathering as much data as possible about its users. The data will be used as feedback on products and services and to sell to advertisers. Find an article on a company with a similar strategy. You may use a company with

which you are familiar in lieu of researching for an article. Write a paper on the company's successful or unsuccessful attempt to implement its strategy. Organize your paper to include the following:

- What is the relevant background information about the case?
- What business problem was the company trying to solve?
- How was big data used?
- What challenges had to be overcome?
- What were the lessons learned and takeaways?

Your paper must be 3-5 pages in length, organized and well written in conformity with the CSU-Global Guide to Writing & APA.

In support of your response, cite and integrate at least **two credible outside scholarly sources**, as well as **your textbook**, for a total of **three or more scholarly sources**. Place these in a reference page formatted in accordance with APA style. This reference page does not count toward the total page requirement. The CSU-Global Library is a great place to find these resources.

Examine the Critical Thinking grading rubric, found in the Module 6 folder, to see how you will be graded for this assignment.

Option #2: Combined Analytics

Find an article on a company using combined analytics in their business analytics program. You may use a company with which you are familiar in lieu of researching an article. Write a paper on the company's successful or unsuccessful attempt to implement combined analytics. Organize your paper to include the following:

- What is the relevant background information about the case?
- What business problem was the company trying to solve?
- How was big data used?
- Which analytics were used?
- What challenges had to be overcome?
- What were the lessons learned and takeaways?

Your paper must be 3-5 pages in length, organized and well written in conformity with the CSU-Global Guide to Writing & APA.

In support of your response, cite and integrate at least **two credible outside scholarly sources**, as well as **your textbook**, for a total of **three or more scholarly sources**. Place these in a reference page formatted in accordance with APA style. This reference page does not count toward the total page requirement. The CSU-Global Library is a great place to find these resources.

Examine the Critical Thinking grading rubric, found in the Module 6 folder, to see how you will be graded for this assignment.

Portfolio Milestone (50 points)

OPTION #1: Planning for Data Analysis in SAS Studio for Retail Company

If you selected Option #1 to complete for your Portfolio Project, be sure to complete this milestone. Review the background information for Option 1 of the Portfolio Project in Module 8.

For Module 3 Portfolio Milestone assignment, you stated your understanding of the organization's business problem including the company's strategic goals. Next, you were to create a minimum of 4 business questions which, if answered, will solve the organization's business problem and achieve the organization's strategic goals. You were to explain why you selected those specific business questions. In addition, you were to create the alternate and null hypotheses for each business question. The business questions and hypotheses will become the primary framework for your Portfolio Project due in Module 8. Finally, you discussed any concerns you have in completing this assignment.

In this assignment you are to expand on your deliverables from Module 3 by including your approach for conducting the analysis in the Portfolio Project in Module 8. Your approach should include which statistical tests you intend to conduct and why. How will these tests answer the business questions and prove or disprove your hypotheses? Also, your approach should include which visualizations you intend to use and why. Why are these visualizations the best formats for communicating the story the data is telling us?

Deliverables for this assignment are:

- Description of the business problem including the organization's strategic goals (incorporating any feedback from your instructor).
- List, at a minimum, 4 business questions. Justify how these business questions will solve the organization's business problem and achieve their strategic goals. Incorporate any feedback from your instructor.
- List the alternate and null hypotheses for each business question. Incorporate any feedback from your instructor
- List the statistical tests you intend to use and why.
- List the visualizations you intend to use and why.
- Describe concerns in completing the Portfolio Project.

Your paper should be 4-5 pages in length and conform to *CSU Global Guide to Writing and APA*. 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: Planning for Data Analysis in SAS Studio for Distribution Company

If you selected Option #2 to complete for your Portfolio Project, be sure to complete this milestone. Review the background information for Option 2 of the Portfolio Project in Module 8.

For Module 3 Portfolio Milestone assignment, you stated your understanding of the organization's business problem including the company's strategic goals. Next, you were to create a minimum of 4 business questions which, if answered, will solve the organization's business problem and achieve the organization's strategic goals. You were to explain why you selected those specific business questions. In addition, you were to create the alternate and null hypotheses for each business question. The business questions and hypotheses will become the primary framework for your Portfolio Project due in Module 8. Finally, you discussed any concerns you have in completing this assignment.

In this assignment you are to expand on your deliverables from Module 3 by including your approach for conducting the analysis in the Portfolio Project in Module 8. Your approach should include which statistical tests you intend to conduct and why. How will these tests answer the business questions and prove or disprove your hypotheses? Also, your approach should include which visualizations you intend

to use and why. Why are these visualizations the best formats for communicating the story the data is telling us?

Deliverables for this assignment are:

- Description of the business problem including the organization's strategic goals (incorporating any feedback from your instructor).
- List, at a minimum, 4 business questions. Justify how these business questions will solve the organization's business problem and achieve their strategic goals. Incorporate any feedback from your instructor.
- List the alternate and null hypotheses for each business question. Incorporate any feedback from your instructor
- List the statistical tests created in SAS studio that you intend to use and why.
- List the visualizations created in SAS studio that you intend to use and why.
- Describe concerns in completing the Portfolio Project.

Your paper should be 4-5 pages in length and conform to *CSU Global Guide to Writing and APA*. 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 7

Readings

- Chapter 5 in *Big Data: Using SMART Big Data, Analytics, and Metrics to Make Better Decisions and Improve Performance*
- Chen, H. M. (2017). Information visualization principles, techniques, and software. *Library Technology Reports*, 53(3), 8-16.
- Chen, H. M. (2017). An overview of information visualization. *Library Technology Reports*, 53(3), 5-7.

Discussion (25 points)

Module 8

Readings

- Chapter 6 in *Big Data: Using SMART Big Data, Analytics, and Metrics to Make Better Decisions and Improve Performance*
- Chapters 6 (Apixio) & 38 (Google) in *Big Data in Practice: How 45 Successful Companies Used Big Data, Analytics, and Metrics to Make Better Decisions and Improve Performance*
- Dremel, C., Wulf, J., Herterich, M. M., Waizmann, J., & Brenner, W. (2017). How AUDI AG established big data analytics in its digital transformation. *MIS Quarterly Executive*, 16(2), 81-100.

Discussion (25 points)

Portfolio Project (275 points)

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

Option #1: Business Analytics in SAS Studio – Retail Clothing Store

Your organization is striving to increase sales while maximizing profits through more effective direct marketing promotions. Ultimately the organization is looking to identify those customers who respond to marketing promotions. In addition, the organization wants to gain insights into how they can better predict future business growth.

Your task is to analyze the data from the Portfolio_Clothing_Store.csv dataset. You are provided links to the dataset and to a document describing the variables in the dataset. Your analysis should include the necessary descriptive analytics tests to communicate your understanding of what story the data is telling us. Also, your analysis should include the necessary predictive analytics tests to assist decision makers in achieving their business goals.

Your deliverables for this Portfolio Project are:

1. Business questions
2. Hypotheses
3. Descriptive statistics to include charts, graphs, and tables and analysis of your findings
4. Predictive statistics to include charts, graphs, and tables, and analysis of your findings
5. Analysis of findings with respect to business questions and hypotheses
6. Recommendations for further analysis: what other data sources, including big data sources, could the organization utilize to help them achieve their business goals.

Limit the charts, graphs, and tables in your analysis report to only those figures needed to support your findings and analysis. Do not include statistics outputs that are not relevant to your analysis. Your analysis report should be comprehensive yet concise, specific, and most importantly, insightful.

In previous Portfolio Milestone assignments, you submitted business questions, hypotheses, and a preliminary list of descriptive and predictive statistics tests. You are expected to incorporate your instructor's feedback into this final submission.

Your paper should be 8-10 pages in length and conform to *CSU Global Guide to Writing and APA*. Include at least three scholarly references in addition to the course textbook. The CSU Global Library is a good place to find these references.

Option #2: Business Analytics in SAS Studio – Retail Clothing Store

Your organization is striving to increase the quantity and profitability of orders. In addition, the organization wants to gain insights into how they can better predict future business growth.

Your task is to analyze the data from the Orders_Northwind.csv dataset. You are provided links to the dataset and to a document describing the variables in the dataset. Your analysis should include the necessary descriptive analytics tests to communicate your understanding of what story the data is telling us. Also, your analysis should include the necessary predictive analytics tests to assist decision makers in achieving their business goals.

Your deliverables for this Portfolio Project are:

1. Business questions
2. Hypotheses
3. Descriptive statistics to include charts, graphs, and tables and analysis of your findings
4. Predictive statistics to include charts, graphs, and tables, and analysis of your findings
5. Analysis of findings with respect to business questions and hypotheses

6. Recommendations for further analysis: what other data sources, including big data sources, could the organization utilize to help them achieve their business goals.

Limit the charts, graphs, and tables in your analysis report to only those figures needed to support your findings and analysis. Do not include statistics outputs that are not relevant to your analysis. Your analysis report should be comprehensive yet concise, specific, and most importantly, insightful.

In previous Portfolio Milestone assignments, you submitted business questions, hypotheses, and a preliminary list of descriptive and predictive statistics tests. You are expected to incorporate your instructor's feedback into this final submission.

Your paper should be 8-10 pages in length and conform to *CSU Global Guide to Writing and APA*. Include at least three 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 & 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 & 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.

Information about SAS Certification

Taking SAS certification exams help you validate your skills and increase your value to an employer. You can choose SAS certifications across many subjects, including programming, data management, and analytics, to name a few. For more information on SAS certification go here: https://www.sas.com/en_us/certification.html.

All students, teachers, professors or staff associated with an academic institution qualify for 50% discount on all SAS certification exams. Please contact certification@sas.com to receive the discount code that will reduce the exam fee by 50% during the registration process.

Resources for Learning SAS

SAS Certification Prep Guides: https://www.sas.com/store/books/categories/certification-guide/cBooks-cbooks_categories-cbooks_categories_12-p1.html

Visit SAS Communities Visit our online sites to share and connect with other SAS users and build your SAS skills. Don't miss key communities including: SAS Certification, SAS Training, SAS Academy for Data Science, SAS Programming, New SAS User, SAS Analytics U and SAS Viya for Learners. <https://communities.sas.com/t5/Learn-SAS/ct-p/learn>