Miami Dade College

Course Description

GEB3522 | Applied Business Analytics | 3.00 credits

This upper division course is for students majoring in Data Analytics. Students will learn how to design and develop business analytic solutions to real-world problems using case studies. Students will gain experience working in small teams in deadline-driven environments and will present their results in class. Prerequisite: GEB2100.

Course Competencies:

Competency 1: The student will demonstrate an understanding of how to develop and execute projects utilizing business analytics by:

1. Formulating the questions needed by the organization that will drive the data requirements
2. Using the appropriate data source(s) in various business analytic solutions
3. Choosing the appropriate statistical model for problem resolution
4. Applying data analytics solutions to real-world business problems

Competency 2: The student will demonstrate how to apply business analytic solutions to problems in a variety of industries and business disciplines by:

1. Performing a variety of data mining techniques specific to business problems in different industries and business disciplines
2. Using descriptive analytics to understand the data and draw reasonable conclusions
3. Applying essential tools (e.g., spreadsheets) to understand the data and draw conclusions
4. Applying advanced tools (i.e., visualization) to refine further and describe the data
5. Performing predictive analytics utilizing essential software tools (e.g., Excel)
6. Applying advanced tools to validate the prediction(s) further
7. Utilizing prescriptive analytics solutions to formulate recommendations

Competency 3: The student will demonstrate an understanding of project management techniques by:

1. Describing project management techniques
2. Defining project deliverables
3. Creating a project plan utilizing a GANNT Chart to keep track of the project and identify/rectify jeopardies
4. Working in small teams to develop a project plan
5. Applying project management techniques to projects to meet project deliverables
6. Meeting specified deadlines and milestones

Competency 4: The student will demonstrate how to present the results of a data analysis by:

1. Analyzing the information needs of the client audience
2. Identifying the level of detail that will be required
3. Communicating data analytics solutions by describing methodology and outcomes
4. Drawing conclusions and developing recommendations

Learning Outcomes:

- Communicate effectively using listening, speaking, reading, and writing skills
- Solve problems using critical and creative thinking and scientific reasoning
- Use computer and emerging technologies effectively