IT 212 Business Intelligence, Data Warehousing and Reporting

Course Description: A course on concepts, technologies, and techniques used to effectively consolidate, arrange, and analyze large amounts of data. Topics include: decision support systems, data mining, and how to derive business value from large amounts of data.

Prerequisites(s): IT 112 **Corequisite(s):** No corequisite

Lecture Hours: 2	Lab Hours: 3	Credit Hours: 3
Lab Fee: 35	Supplemental Fee: 0	Purpose:
☐ Transfer Assurance Guide Course (TAG)	☐ Transfer Module Course (TM)	
Course Format: Lec/Lab	Grading: A/B/C/D/F/I	
Delivery Method: X Web	□ Hybrid	X Classroom
Semesters Offered: X Fall	X Spring	X Summer

Course Primary Text:

Title: Big Data, Mining, and Analytics: Components of Strategic Decision Making	Edition:
Author(s): Stephan Kudyba	
Publisher: Auerbach Publications	

Supplemental Materials:

Online resources

Course Outcomes:

1	Explain key concepts and techniques related to business intelligence.
2	Explain key concepts and techniques related to data warehousing
3	Analyze data to generate information for decision making.
4	Extract, maintain, summarize, and visualize information.
5	Analyze and utilize data trends related to information
6	Create reports for business use
7	Explain the value of business intelligence and data warehousing systems and technologies
8	Explain data selection for business reporting

Course Topics:

Week	Topic
1	Introduction to Data Mining
2	Analytics
3	Big Data Analytics
4	Data Mining Methods

5	Data Mining Methods
6	Data Mining Methods
7	Midterm Project and Midterm Exam
8	Data Analytics Using Apache Spark - Introduction
9	Data Analytics Using Apache Spark - SQL
10	Data Analytics Using Apache Spark – Streaming
11	Data Analytics Using Apache Spark – Data Flows
12	Data Analytics Using Apache Spark – Structured Streaming
13	Data Analytics Using Apache Spark – Recommended Systems
14	Final Project
15	Final Project and Final Exam

Methods of Evaluation/Assessment

Grading:
Assignments - 30%
Midterm Exam – 20-%
Final Project – 25%
Final Exam – 25%

Course Keeper: Robert Nields

Date Completed: 5/21/2019