MNGT 136
Business Analytics
3 Credits

Community College of Baltimore County
Common Course Outline

Description

MNGT 136 – Business Analytics: is a course in which students are introduced to the concept of business analytics and provides students with a sound conceptual understanding of the role that business analytics plays in the decision-making process. Data-driven decision making and the use of analytical approaches in the decision-making process are explored. Various tools will be used to create, manipulate, and report data. Statistical theories and models will be integrated into objective decision-making.

Pre-requisites: MATH 153

Overall Course Objectives

Upon completion of this course, students will be able to:

1. define decision making;
2. identify various data types and their specific usage;
3. explain the need for data collection;
4. explain how data can be used in decision making;
5. explore techniques and tools related to data visualization;
6. identify important data relations and patterns;
7. introduce descriptive data mining methods and related concepts;
8. discuss sampling methods;
9. introduce sampling distributions;
10. discuss the linear regression models and their uses;
11. explore basic methods of time series analysis and forecasting;
12. introduce predictive data mining concepts and techniques;
13. discuss the legal and ethical issues in the use of data and analytics;
14. demonstrate data analysis processes, functions, and transformation to data sets; and
15. discuss principles of building adequate spreadsheet models.

Major Topics

I. Descriptive statistics
II. Roles of data analysis
III. Summarizing and presenting data
IV. Data types
V. Data visualization techniques
VI. Data dashboard
VII. Probability
    a. Conditional probability

b. Probability distributions

VIII. Sampling
IX. Sampling distribution
X. Big data
XI. Linear regression
XII. Predictive data mining
XIII. Spreadsheet models
    a. What-if analysis
    b. Functions

Course Requirements

Grading will be determined by the individual faculty member, but shall include the following, at minimum:

- Six projects
- Two exams
- Comprehensive final exam and/or comprehensive final project

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