# <u>OHLONE COLLEGE</u> Ohlone Community College District <u>OFFICIAL COURSE OUTLINE</u>

## I. **Description of Course:**

- 1. Department/Course: <u>CNET 103</u>
- 2. Title: Introduction to Business Intelligence
- 3. Cross Reference:
- 4. Units: <u>4</u> Lec Hrs: <u>3</u> Lab Hrs: <u>3</u> Tot Hrs: <u>108.00</u>
- 5. Repeatability: No
- 6. Grade Options: Letter Grade, May Petition for Pass/No Pass (GC)
- 12. Catalog Description:

- 7. **Degree/Applicability:** Credit, Degree Applicable, Transferable - CSU (T)
- 8. General Education:
- 9. Field Trips: Not Required
- Requisites: Advisory Introduction to programming; general business knowledge

Business Intelligence is a data analysis process which utilizes an integrated set of application systems, processes, and tools that transform raw data into meaningful and useful information for business analysis. Students will learn the fundamentals of business analysis and BI tools and processes that help businesses make strategic and tactical decisions based on data to improve operational efficiency, optimize business processes, identify new market trends, increase revenue, and gain competitive advantages.

## 13. Class Schedule Description:

We will explore Business Intelligence (BI) technologies and processes to help businesses make strategic and tactical decisions based on data.

## 14. Counselor Information:

This course is useful for student wishing to pursue a career in Information Technology and/or Business Analysis. This course credit can be used toward Cyber Security certificate, Healthcare IT and Business Analyst certificate.

# II. Student Learning Outcomes

The student will:

- 1. Employ basic knowledge of Big Data and BI technologies and processes to write dashboard programs.
- 2. Discuss how to turn data into meaningful information utilizing business analysis tools & processes.
- 3. Demonstrate understanding and techniques for creating dashboards and Key Performance Indicator (KPI) reports based on inter-connected data sets from existing enterprise data, external data, structured and unstructured big data.

## III. Course Content:

## Lecture

- A. Big Data (BD), Business Analysis (BA) and Business Intelligence (BI) Overview
- B. The challenges of data management data integration, data warehouse
- C. The business value of BD/BA/BI
- D. The value of dashboard and Key Performance Indicators (KPI)
- E. Predictive analytics overview
- F. BD/BA/BI technology overview emerging technologies, tools and platforms

## Lab Activities

- A. Practice using BI development platforms and other tools
- B. Exercise in the use of data visualization and design methodologies
- C. Develop program to demonstrate dashboard usage
- D. Exercise in creation of dashboard by integrating data from various data sources
- E. Exercise in creation of Key Performance Indicator report (program)
- F. Create and develop sample Business Intelligence reports and dashboards utilizing tools/technologies discussed in class

# IV. Course Assignments:

- A. Reading Assignments
  - 1. Assigned readings from textbook, handouts, technical articles and emerging technologies articles as assigned
- B. Projects, Activities, and other Assignments
  - 1. Final project to assess and reaffirm the student's understanding of the topics. The project would be comprehensive and include all techniques learned in the semester.
- C. Writing Assignments
  - 1. The writing of computer programs will largely belong to the Lab portion of the class as described in the content area.

# V. Methods of Evaluation:

- A. Concept tests to demonstrate fundamental knowledge of big data and BI technologies (SLO 1 and SLO 2)
- B. Lab exercises where they will be putting into practice the techniques in order to successfully create dashboard report programs. (SLO 3)
- C. Project will assess their comprehensive mastery of the techniques that assess each of the topics listed in the SLOs.

# VI. Methods of Instruction:

- A. Lecture
- B. Laboratory
- C. Discussion
- D. Demonstration
- E. Distance Learning

## VII. Textbooks:

Recommended

1. Ramesh Sharda *Business Intelligence* 3rd Edition, Pearson, 2014 ISBN: 9780133051056 <u>Supplemental</u>

# VIII. Supplies:

A. None

Approval Date: CCC Number: TOP Codes: 0702.00 C-ID Number: