



El Camino College
COURSE OUTLINE OF RECORD – Official

Course Acronym:	BUS
Course Number:	165D
Descriptive Title:	Accounting Data Analytics
Division:	Business
Department:	Accounting
Course Disciplines:	Accounting
Catalog Description:	This course is an introduction to data analytics used in accounting. The course will provide students with basic skills to organize and analyze data used for important business and accounting decisions. Students will learn techniques for data preparation, data manipulation and statistical analysis using analysis tools such as Microsoft Excel, Microsoft Access, Structured Query Language (SQL) and Tableau.
Prerequisite:	BUS 150 with a minimum grade of C
Co-requisite:	
Recommended Preparation:	CIS 28
Enrollment Limitation:	
Hours Lecture (per week):	1.5
Hours Laboratory (per week):	1.5
Outside Study Hours:	3
Total Course Hours:	54
Course Units:	2
Grading Method:	Letter Grade and Pass/No Pass
Credit Status:	Credit, degree applicable
Transfer CSU:	yes
Effective Date:	11/15/2021
Transfer UC:	no
Effective Date:	
General Education: ECC	
Term:	
Other:	
CSU GE:	
Term:	

Other:	
IGETC:	
Term:	
Other:	
Student Learning Outcomes:	<p>SLO #1 Introduction to Business and Accounting Data</p> <p>Describe how data are stored and organized in an accounting information system.</p> <p>SLO #2 Introduction to Data Analysis</p> <p>Utilize data analysis tools such as Microsoft Excel, Microsoft Access, Structured Query Language (SQL) and Tableau to extract, transform and evaluate data.</p> <p>SLO #3 Concepts and Terminology</p> <p>Understand the concepts and terminology utilized in data analytics.</p>
Course Objectives:	<ol style="list-style-type: none"> 1. Define data analytics. 2. Explain potential accounting questions to be analyzed. 3. Explain how data are used and stored in accounting 4. Define relationships in a database. 5. Extract and transform data from the accounting system. 6. Perform vertical and horizontal analyses on financial statements. 7. Calculate financial ratios. 8. Evaluate the sales process. 9. Evaluate the purchasing process. 10. Utilize charts and pivot tables to communicate results of an analysis. 11. Utilize other analysis tools to organize and present results of an analysis.
Major Topics:	<ol style="list-style-type: none"> I. Introduction to Data Analytics (4 hours, lecture) <ol style="list-style-type: none"> A. Data analytics defined B. Data analytics in accounting C. Data questions identified II. Understanding Data (10 hours, lecture) <ol style="list-style-type: none"> A. How data are used and stored in accounting B. Relationships in a relational database C. Extracting and transforming data III. Understanding Data (10 hours, lab) <ol style="list-style-type: none"> A. How data are used and stored in accounting B. Relationships in a relational database C. Extracting and transforming data IV. Financial Statement Analysis (4 hours, lecture) <ol style="list-style-type: none"> A. Horizontal analysis B. Vertical analysis C. Using ratios V. Financial Statement Analysis (4 hours, lab) <ol style="list-style-type: none"> A. Horizontal analysis B. Vertical analysis C. Using ratios VI. Evaluating Business Processes (4 hours, lecture) <ol style="list-style-type: none"> A. Sales B. Purchases

	<p>VII. Evaluating Business Processes (4 hours, lab)</p> <p>A. Sales</p> <p>B. Purchases</p> <p>VIII. Analyzing and Communicating the Results (5 hours, lecture)</p> <p>A. Determine the purpose of your analysis</p> <p>B. Choose the right chart or program</p> <p>C. Using charts</p> <p>D. Using Excel pivot tables</p> <p>E. Using Tableau</p> <p>IX. Analyzing and Communicating the Results (9 hours, lab)</p> <p>A. Determine the purpose of your analysis</p> <p>B. Choose the right chart or program</p> <p>C. Using charts</p> <p>D. Using Excel pivot tables</p> <p>E. Using Tableau</p>
Total Lecture Hours:	27
Total Laboratory Hours:	27
Total Hours:	54
Primary Method of Evaluation:	Skills demonstration
Typical Assignment Using Primary Method of Evaluation:	<p>Review the data file provided by your instructor and export it into a spreadsheet.</p> <p>Required:</p> <ol style="list-style-type: none"> 1. Select three possible questions that could be asked by management about the data. 2. Perform an analysis of the data to address each question. 3. Use pivot tables and/or charts to communicate the results of your analysis.
Critical Thinking Assignment 1:	<p>Consider the order-to-cash process or sales cycle.</p> <p>Required:</p> <p>Prepare a one-page paper discussing the types of questions that might be of concern to managers, financial accountants and auditors. Compare and explain why each would have different concerns.</p>
Critical Thinking Assignment 2:	<p>Consider the procure-to-pay process or purchasing cycle.</p> <p>Required:</p> <p>Prepare a one-page paper discussing the types of questions that might be of concern to managers, financial accountants and auditors. Compare and explain why each would have different concerns.</p>
Other Evaluation Methods:	Class Performance, Completion, Homework Problems, Laboratory Reports, Matching Items, Multiple Choice, Other Exams, Performance Exams, Quizzes, True/False
Instructional Methods:	Demonstration, Lab, Lecture

If other:	
Work Outside of Class:	Answer questions, Problem solving activity, Required reading, Skill practice, Written work (such as essay/composition/report/analysis/research)
If Other:	
Up-To-Date Representative Texts:	Richardson, Teeter and Terrell. Data Analytics for Accounting. 3rd Ed. McGraw-Hill Education, 2023
Alternative Texts:	
Required Supplementary Readings:	
Other Required Materials:	
Requisite:	prerequisite
Category:	standard
Requisite course(s): List both prerequisites and corequisites in this box.	BUS 150
Requisite and Matching skill(s): Bold the requisite skill. List the corresponding course objective under each skill(s).	In order to use accounting data, students must already have knowledge of fundamental financial accounting and accounting transactions. BUS 150 - Define accounting terminology. BUS 150 - Interpret, analyze, record, and process a wide array of business transactions in accordance with acceptable accounting theory, principles and practices as well as government regulation, federal tax laws, and generally accepted accounting principles.
Requisite Skill:	
Requisite Skill and Matching Skill(s): Bold the requisite skill(s). If applicable	
Requisite course:	CIS 28
Requisite and Matching skill(s): Bold the requisite skill. List the corresponding course objective under each skill(s).	In order to extract, transform and evaluate data from an accounting system, it is recommended that students have some knowledge of the use of database software. CIS 28 - Understand database concepts and terminology. CIS 28 - Design, create, and modify table structures.
Requisite Skill:	
Requisite Skill and Matching skill(s): Bold the requisite skill. List the corresponding course objective under each skill(s). If applicable	

Enrollment Limitations and Category:	
Enrollment Limitations Impact:	
Course Created by:	Sidney Porter
Date:	05/19/2021
Original Board Approval Date:	11/15/2021
Last Reviewed and/or Revised by:	SIDNEY PORTER
Date:	11/02/2023
Last Board Approval Date:	01/17/2024
Effective Term:	FALL 2024