

**College of San Mateo
Official Course Outline**

1. **COURSE ID:** BUSW 418 **TITLE:** Spreadsheets
Units: 3.0 units **Hours/Semester:** 48.0-54.0 Lecture hours; and 96.0-108.0 Homework hours
Method of Grading: Grade Option (Letter Grade or Pass/No Pass)
Recommended Preparation:
 Eligibility for ENGL 100, or Eligibility for ENGL 105

2. **COURSE DESIGNATION:**
Degree Credit
Transfer credit: CSU
AA/AS Degree Requirements:
 CSM - GENERAL EDUCATION REQUIREMENTS: E5d. Career Exploration and Self-Development

3. **COURSE DESCRIPTIONS:**
Catalog Description:
 (Formerly BUSW 415 and BUSW 416) Creation and use of spreadsheets, including spreadsheet design, use of menu systems, basic and advanced formulas and functions, relative and absolute addressing, formatting, printing and graphing. Also includes design and optimization of large and complex spreadsheets, database features, macros, and linking of spreadsheets with other software programs.

4. **STUDENT LEARNING OUTCOME(S) (SLO'S):**
 Upon successful completion of this course, a student will meet the following outcomes:
 1. Create spreadsheets which use basic and advanced formulas, functions, formatting, and graphing to solve business problems.
 2. Use macros to enhance the power and ease of use of a spreadsheet.
 3. Build PivotTables to aggregate raw data into useful business insight

5. **SPECIFIC INSTRUCTIONAL OBJECTIVES:**
 Upon successful completion of this course, a student will be able to:
 1. Create, save, edit, and print spreadsheets.
 2. Create spreadsheets which use basic and advanced formulas, functions, formatting and graphing to solve business problems.
 3. Design and optimize large and complex spreadsheets.

6. **COURSE CONTENT:**
Lecture Content:
 1. Spreadsheet planning and design
 2. Menu system
 3. Moving, copying, and inserting data
 4. Sorting
 5. SUMIF, COUNTIF, and related functions for quick data analysis
 6. Relative and absolute addressing
 7. Vlookup
 8. Formatting
 9. Graphing
 10. Text, date and numeric filters
 11. Totals and subtotals
 12. Error prevention and detection
 13. Advanced formulas and functions
 14. PivotTable
 15. Database features
 16. Macros

7. **REPRESENTATIVE METHODS OF INSTRUCTION:**
 Typical methods of instruction may include:
 - A. Lecture
 - B. Individualized Instruction

C. Other (Specify): Typical daily online assignments include reading of chapter sections, working on homework computer assignments, and individualized instruction, where needed.

8. REPRESENTATIVE ASSIGNMENTS

Representative assignments in this course may include, but are not limited to the following:

Writing Assignments:

Writing assignments in this course center around creating spreadsheets. The following examples are provided.

1. Create a worksheet, by entering formulas, calculating an average, finding the highest and the lowest numbers in a range, verifying formulas and other specific techniques unique to EXCEL. In addition, such techniques as spell check a worksheet, printing a section of a worksheet and printing formulas are implemented.
2. Further writing skills are encountered by allowing students to enhance their ability to create worksheets and draw charts based on a pattern of values that are created and formatted. This method includes learning how to write formulas based on assumptions to perform what-if analysis.
3. Create and utilize an array of functions to organize answers to What-if questions. Creating and using financial functions to determine monthly payments for a loan and determining monthly payments for a loan, as well as using PV functions to determine present value of an investment. Writing and creating worksheets with the other options of printing them using the printing of range names and print area.
4. Create and utilize the power of consolidation, summarize data gathered from multiple worksheets on one worksheet.
5. Create styles, customize formats, format 3-D pie charts and consolidate workbooks by linking.
6. Create tables or databases, a collection of organized data.
7. Use the worksheet's row and column structure to organize and store a table or database, with the additional techniques of adding and deleting records, changing the values of fields, sorting records so that EXCEL can display them in different order, determine subtotals for numeric fields and display records that meet comparison criteria.
8. Learn how to utilize EXCEL capability of using and analyzing data from a wide variety of sources, such as importing or bring data in from various external sources into an EXCEL worksheet and then analyze the data.
9. Learn how to create and utilize advanced features of EXCEL, including Pivot Table reports, a kind of interactive chart that allows a student to change the groupings that graphically present data, and trendlines.
10. Create worksheets that can audit formulas, validate data and solve complex problems.

Reading Assignments:

Students will be required to read each chapter and follow instructions so that they can complete the textbook assignments.

9. REPRESENTATIVE METHODS OF EVALUATION

Representative methods of evaluation may include:

- A. Exams/Tests
- B. Homework
- C. Projects
- D. Quizzes
- E. Representative methods of evaluation may include: A. Selected student exercises will be evaluated by the instructor and assigned percentage point values for completeness, correctness and timeliness.

10. REPRESENTATIVE TEXT(S):

Possible textbooks include:

- A. Freund, Steven and Stark, Joy. *Microsoft® Office 365® & Excel 2019 Comprehensive*, 1st ed. Cengage Learning, Inc., 2020

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Course Originator: Philip Tran