BIS M23A: MICROSOFT EXCEL – INTERMEDIATE

Originator
fmasci

College
Moorpark College

Discipline (CB01A)
BIS - Business Information Systems

Course Number (CB01B)
M23A

Course Title (CB02)
Microsoft Excel – Intermediate

Banner/Short Title
MS Excel – Intermediate

Credit Type
Credit

Honors
No

Start Term
Fall 2020

Catalog Course Description
Provides a basic understanding of spreadsheets with Microsoft Excel including spreadsheet creation, formatting, and editing. Covers creating, editing, and formatting financial information, using mathematical formulas and functions to summarize and report numerical information. Includes creation of charts to visually present data.

Additional Catalog Notes
This course begins preparation for the Microsoft Office User certification exam (Excel)

Taxonomy of Programs (TOP) Code (CB03)
0702.10 - *Software Applications

Course Credit Status (CB04)
D (Credit - Degree Applicable)

Course Transfer Status (CB05) (select one only)
C (Not transferable);

Course Basic Skills Status (CB08)
N - The Course is Not a Basic Skills Course

SAM Priority Code (CB09)
C - Clearly Occupational

Course Cooperative Work Experience Education Status (CB10)
N - Is Not Part of a Cooperative Work Experience Education Program

Course Classification Status (CB11)
Y - Credit Course

Educational Assistance Class Instruction (Approved Special Class) (CB13)
N - The Course is Not an Approved Special Class

Course Prior to Transfer Level (CB21)
Y - Not Applicable

Course Noncredit Category (CB22)
Y - Credit Course

Funding Agency Category (CB23)
B - Partially Developed Using Economic Development Funds

Course Program Status (CB24)
1 - Program Applicable

General Education Status (CB25)
Y - Not Applicable

Support Course Status (CB26)
N - Course is not a support course

Field trips
Will not be required

Grading method
Letter Graded

Alternate grading methods
Student Option- Letter/Pass

Does this course require an instructional materials fee?
No

Repeatable for Credit
No

Is this course part of a family?
No

Units and Hours

Carnegie Unit Override
No

In-Class

Lecture
Minimum Contact/In-Class Lecture Hours
26.25
Maximum Contact/In-Class Lecture Hours
26.25

Activity
Minimum Contact/In-Class Activity Hours
0
Maximum Contact/In-Class Activity Hours
0

Laboratory
Minimum Contact/In-Class Laboratory Hours
0
Maximum Contact/In-Class Laboratory Hours
0

Total in-Class

Total in-Class
Total Minimum Contact/In-Class Hours
26.25
Total Maximum Contact/In-Class Hours
26.25

Outside-of-Class

Internship/Cooperative Work Experience

Paid
Minimum Paid Internship/Cooperative Work Experience Hours
0
Maximum Paid Internship/Cooperative Work Experience Hours
0

Unpaid
Minimum Unpaid Internship/Cooperative Work Experience Hours
0
Maximum Unpaid Internship/Cooperative Work Experience Hours
0

Total Outside-of-Class

Total Outside-of-Class
Minimum Outside-of-Class Hours
52.5
Maximum Outside-of-Class Hours
52.5

Total Student Learning

Total Student Learning
Total Minimum Student Learning Hours
78.75
Total Maximum Student Learning Hours
78.75

Minimum Units (CB07)
1.5
Maximum Units (CB06)
1.5

Advisories on Recommended Preparation
BIS M20

Entrance Skills

Entrance Skills
Preferred understanding of the use of MS Excel as an application within the Business Information Environment.

Entrance Skills
Preferred understanding of the function of MS Excel in the business environment.

Entrance Skills
Preferred completion of BIS M20 Microsoft Office – Introduction

Student Learning Outcomes (CSLOs)

	Upon satisfactory completion of the course, students will be able to:
1	plan, create, edit, and complete production of business spreadsheets.
2	use Excel tools and formulas to quickly summarize numeric information.
3	utilize graph and table tools to visually highlight important information.

Course Objectives

	Upon satisfactory completion of the course, students will be able to:
1	create worksheets and workbooks.
2	navigate in worksheets and workbooks.
3	format worksheets and workbooks.
4	customize options and views for worksheets and workbooks.
5	configure worksheets and workbooks for distribution.
6	insert data in cells and ranges.
7	format cells and ranges.
8	summarize and organize data.
9	create and manage tables.
10	manage table styles and options.
11	filter and sort a table.
12	summarize data by using functions.
13	perform conditional operations by using functions.
14	format and modify text by using functions.
15	create charts.
16	format graphic elements.
17	insert and format objects.

Course Content

Lecture/Course Content

- **30% - Create and manage worksheets and workbooks**
  - Create a workbook, import data from a delimited text file, add a worksheet to an existing workbook, copy and move a worksheet
  - Search for data within a workbook; navigate to a named cell, range, or workbook element; insert and remove hyperlinks
  - Change worksheet tab color, rename a worksheet, change worksheet order, modify page setup, insert and delete columns or rows, change workbook themes, adjust row height and column width, insert headers and footers
  - Hide or unhide worksheets, hide or unhide columns and rows, customize the Quick Access Toolbar, change workbook views, change window views, modify document properties, change magnification by using zoom tools, display formulas
  - Set a print area, save workbooks in alternative file formats, print all or part of a workbook, set print scaling, display repeating row and column titles on multi-page worksheets, inspect a workbook for hidden properties or personal information, inspect a workbook for accessibility issues, inspect a workbook for compatibility issues
- **15% - Manage data cells and ranges**
  - Replace data; cut, copy, or paste data; paste data by using special paste options; fill cells by using Auto Fill; insert and delete cells
  - Merge cells, modify cell alignment and indentation, format cells by using Format Painter, wrap text within cells, apply number formats, apply cell formats, apply cell styles
  - Insert sparklines, outline data, insert subtotals, apply conditional formatting
- **20% - Create tables**
  - Create an Excel table from a cell range, convert a table to a cell range, add or remove table rows and columns
  - Apply styles to tables, configure table style options, insert total rows
  - Filter records, sort data by multiple columns, change sort order, remove duplicate records
- **15% - Perform operations with formulas and functions**
  - Insert references, perform calculations by using the SUM function, perform calculations by using MIN and MAX functions, perform calculations by using the COUNT function, perform calculations by using the AVERAGE function

  - Perform logical operations by using the IF function, perform logical operations by using the SUMIF function, perform logical operations by using the AVERAGEIF function, perform statistical operations by using the COUNTIF function
  - Format text by using RIGHT, LEFT, and MID functions; format text by using UPPER, LOWER, and PROPER functions; format text by using the CONCATENATE function
- **20% - Create charts and objects**
  - Create a new chart, add additional data series, switch between rows and columns in source data, analyze data by using Quick Analysis
  - Resize charts, add and modify chart elements, apply chart layouts and styles, move charts to a chart sheet
  - Insert text boxes and shapes, insert images, modify object properties, add alternative text to objects for accessibility

Laboratory or Activity Content

None.

Methods of Evaluation

Which of these methods will students use to demonstrate proficiency in the subject matter of this course? (Check all that apply):

Problem solving exercises
Skills demonstrations
Written expression

Methods of Evaluation may include, but are not limited to, the following typical classroom assessment techniques/required assignments (check as many as are deemed appropriate):

Computational homework
Essay exams
Group projects
Individual projects
Objective exams
Problem-solving exams
Quizzes
Reports/papers
Research papers
Skills demonstrations
Skill tests

Instructional Methodology

Specify the methods of instruction that may be employed in this course

Audio-visual presentations
Computer-aided presentations
Class activities
Class discussions
Distance Education
Demonstrations
Instructor-guided interpretation and analysis
Instructor-guided use of technology

Describe specific examples of the methods the instructor will use:

- Demonstrate the program's frequently used option; such as editing a pre-existing client document for spelling, grammar and punctuation.
- Show how specific tools are available to address common needs of a business, such as
  - using templates for common documents like an inventory report.
  - using mathematical functions to summarize data in financial reporting.
  - using Excel output embedded within a document such as the client's billing statement.
- Use PowerPoint to demonstrate possible examples of documents used in the business environment and how to customize them.
- Lecture on possible pitfalls of using MS Excel, and explore common misconceptions, common mistakes and inconsistencies within the program.
- Create lab assignments that can be done in class to show mastery of the topic or area being covered, such as
  - creating a bank reconciliation for a business.
  - alphabetizing a list of clients in the process of creating mailing labels.
  - updating a monthly revenue report.

Representative Course Assignments

Writing Assignments

1. Compare and contrast word processing with spreadsheets.
2. Detail the changes made to Excel from version 2016 to 365 (2019).

Critical Thinking Assignments

1. Create a worksheet that can calculate the present value of a bond.
2. Build a break-even analysis in Excel on a proposed business.
3. Determine how much of a bonus each employee would earn if a specific budget amount and policy were given.

Reading Assignments

1. Read an article on how to present a multi-step income statement.
2. Read about alternate spreadsheet programs available online that are competing with Excel.

Skills Demonstrations

1. Create a year-to-date forecast and a next year budget from existing year-to-date (YTD) business information.
2. Create a depreciation worksheet for a company's fixed assets.
3. Use excel functions to translate data from one format to another. (e.g. Last, First to First Last.)
4. Create a trend analysis on the U.S. population given birthrate data.
5. Use the subtotal function to summarize groups within a set of data.

Outside Assignments

Representative Outside Assignments

1. Build a spreadsheet that will determine how long it will take to pay off a credit card balance at the minimum payment; determine the principal and the interest. Recalculate with twice the payment.
2.

Articulation

C-ID Descriptor Number

BSOT 122 X

Status

Aligned

Comparable Courses within the VCCCD

CAOT R123 - Microsoft Excel

Equivalent Courses at other CCCs

College	Course ID	Course Title	Units
Los Medanos College	BUS 19	Intermediate MS Excel	3
College of Marin	CIS 128	Intermediate MS excel Spreadsheet Desgin	1.5

District General Education

A. Natural Sciences

B. Social and Behavioral Sciences

C. Humanities

D. Language and Rationality

E. Health and Physical Education/Kinesiology

F. Ethnic Studies/Gender Studies

CSU GE-Breadth

Area A: English Language Communication and Critical Thinking

Area B: Scientific Inquiry and Quantitative Reasoning

Area C: Arts and Humanities

Area D: Social Sciences

Area E: Lifelong Learning and Self-Development

CSU Graduation Requirement in U.S. History, Constitution and American Ideals:

IGETC

Area 1: English Communication

Area 2A: Mathematical Concepts & Quantitative Reasoning

Area 3: Arts and Humanities

Area 4: Social and Behavioral Sciences

Area 5: Physical and Biological Sciences

Area 6: Languages Other than English (LOTE)

Textbooks and Lab Manuals

Resource Type
Textbook

Classic Textbook
Yes

Description
McFedries, Paul. *Microsoft Excel 2019 Formulas and Functions*. Pearson, 2019.

Resource Type
Textbook

Classic Textbook
Yes

Description
Wermers, Lynn. *Illustrated Microsoft® Office 365® and Excel 2019 Comprehensive.* Cengage, 2019.

Resource Type
Textbook

Classic Textbook
Yes

Description
Carey, Patrick. *New Perspectives Microsoft® Office 365® and Excel 2019 Comprehensive*. Cengage, 2019.

Library Resources

Assignments requiring library resources
Research using the Library's print and online periodical resources.

Sufficient Library Resources exist
Yes

Example of Assignments Requiring Library Resources
Read an article in a business periodical or industry publication on a topic such as the emergence of Google Sheets and the impact it may have on Microsoft's Excel in the future.

Distance Education Addendum

Definitions

Distance Education Modalities
Hybrid (51–99% online)
Hybrid (1–50% online)
100% Online

Faculty Certifications

Faculty assigned to teach Hybrid or Fully Online sections of this course will receive training in how to satisfy the Federal and state regulations governing regular effective/substantive contact for distance education. The training will include common elements in the district-supported learning management system (LMS), online teaching methods, regular effective/substantive contact, and best practices.
Yes

Faculty assigned to teach Hybrid or Fully Online sections of this course will meet with the EAC Alternate Media Specialist to ensure that the course content meets the required Federal and state accessibility standards for access by students with disabilities. Common areas for discussion include accessibility of PDF files, images, captioning of videos, Power Point presentations, math and scientific notation, and ensuring the use of style mark-up in Word documents.
Yes

Regular Effective/Substantive Contact

Hybrid (1%–50% online) Modality:

Method of Instruction	Document typical activities or assignments for each method of instruction
Face to Face (by student request; cannot be required)	Student will have partial course time that is face to face
Asynchronous Dialog (e.g., discussion board)	Discussions will cover various topics on the use of Excel along with feedback and potential solutions.
Other DE (e.g., recorded lectures)	Lectures will be recorded showing examples of specific tools in Excel and how they can be used to solve problems and provide useful information.
E-mail	Email can be used for individual interaction with the professor.
Asynchronous Dialog (e.g., discussion board)	Projects assignments and quizzes will test the students ability to use Excel.

Hybrid (51%–99% online) Modality:

Method of Instruction	Document typical activities or assignments for each method of instruction
Asynchronous Dialog (e.g., discussion board)	Discussions will cover various topics on the use of Excel along with feedback and potential solutions.
Other DE (e.g., recorded lectures)	Lectures will be recorded showing examples of specific tools in Excel and how they can be used to solve problems and provide useful information.
E-mail	Email can be used for individual interaction with the professor.
Asynchronous Dialog (e.g., discussion board)	Projects assignments and quizzes will test the students ability to use Excel.

100% online Modality:

Method of Instruction	Document typical activities or assignments for each method of instruction
Asynchronous Dialog (e.g., discussion board)	Discussions will cover various topics on the use of Excel along with feedback and potential solutions.
Other DE (e.g., recorded lectures)	Lectures will be recorded showing examples of specific tools in Excel and how they can be used to solve problems and provide useful information.
E-mail	Email can be used for individual interaction with the professor.
Asynchronous Dialog (e.g., discussion board)	Projects assignments and quizzes will test the students ability to use Excel.

Examinations

Hybrid (1%–50% online) Modality
Online
On campus

Hybrid (51%–99% online) Modality
Online

Primary Minimum Qualification
COMPUTER INFORMATION SYS

Review and Approval Dates

Department Chair
11/20/2019

Dean
11/22/2019

Technical Review
12/05/2019

Curriculum Committee
01/21/2020

DTRW-I
02/13/2020

Curriculum Committee
MM/DD/YYYY

Board
03/10/2020

CCCCO
MM/DD/YYYY

DOE/accreditation approval date
MM/DD/YYYY