Cerro Coso College

Course Outline of Record Report

10/18/2021

BSOTC153 : Intermediate Excel

General Information

Author:	• Karen O'Connor • Hightower, Matthew • Timpone, Frank
Course Code (CB01) :	BSOTC153
Course Title (CB02) :	Intermediate Excel
Department:	Business Information Technolog
Proposal Start:	Fall 2020
TOP Code (CB03) :	(0514.00) Office Technology/Office Computer Applications
SAM Code (CB09) :	Clearly Occupational
Distance Education Approved:	Yes
Course Control Number (CB00) :	CCC000357982
Curriculum Committee Approval Date:	10/18/2019
Board of Trustees Approval Date:	12/12/2019
External Review Approval Date:	12/12/2019
Course Description:	This course provides an intermediate understanding of Microsoft Excel, covering data analysis, multiple worksheets and functions, pivot tables, conflict resolution, change-tracking, data validation, chart formatting, template usage, and macro operation. Problem solving for Excel solutions is also emphasized. This course continues preparation for the Microsoft Office User Certification exam for Excel.
Submission Type:	Change to Content Revise Course Description, Input C-ID, Method of Instruction, Method of Evaluation, SLO achievement level, and Delivery Methods, Textbook, and Distance Education. Add credit by exam. Previous advisory changed to pre-requisite (BSOT C123). Last assessed Spring 2014: Updated instructions for Critical Thinking Post and added rubric. No other changes except updating to 2016 version of Office.
Author:	No value

Faculty Minimum Qualifications

Master Discipline Preferred:	No value
Alternate Master Discipline Preferred:	No value
Bachelors or Associates Discipline Preferred:	• Office Technologies (Secretarial skills, office systems, word processing, computer applications, automated office training)
Additional Bachelors or Associates Discipline Preferred:	• Computer Information Systems (Computer network installation, microcomputer technology, computer applications)

Course Formerly Known As

Course Formerly Known As

No Value

Course Development Options

Basic Skills Status (CB08)

Course is not a basic skills course.

Course Special Class Status (CB13)

Course is not a special class.

Grade Options

- Pass/No Pass
- Letter Grade Methods

☑ Allow Students to Gain Credit by Exam/Challenge

Allowed Number of Retakes

0

Course Prior To College Level (CB21)

Not applicable.

Rationale For Credit By Exam/Challenge

It is possible that students may come into the program with MS Excel Certification and if so, we want to recognize existing skills.

Retake Policy Description

Type:|Non-Repeatable Credit

☑ Allow Students To Audit Course

Course Support Course Status (CB26)

No value

Associated Programs

☑ Course is part of a program (CB24)

Associated Program	Award Type	Active
CC Business Office Technology	A.S. Degree Major	Summer 2018

Transferability & Gen. Ed. Options

Course General Education Status (CB25)

No value

Transferability

Transferable to CSU only

Transferability Status

Approved

C-ID	Categories	Status	Approval Date	Comparable Course
Office Technology/Business Information Worker	C-ID discipline	Approved	No value	BSOT122

Units and Hours

Summary

Minimum Credit Units (CB07)	1
Maximum Credit Units (CB06)	1
Total Course In-Class (Contact) Hours	36
Total Course Out-of-Class Hours	18
Total Student Learning Hours	54
Faculty Load	0

Credit / Non-Credit Options

Course Credit Status (CB04)

Credit - Degree Applicable

Course Non Credit Category (CB22)

Credit Course.

Non-Credit Characteristic

No Value

Course Classification Status (CB11)

Credit Course.

☐ Variable Credit Course

Funding Agency Category (CB23)

Not Applicable.

☐ Cooperative Work Experience Education Status (CB10)

Weekly Student Hours

	In Class	Out of Classs
Lecture Hours	0.5	1
Laboratory Hours	1.5	0
Activity Hours	0	0

Course Student Hours

Course Duration (Weeks)	18
Hours per unit divisor	54
Course In-Class (Contact) Hours	
Lecture	9
Laboratory	27
Activity	0
Total	36
Course Out-of-Class Hours	
Lecture	18
Laboratory	0
Activity	0
Total	18

Time Commitment Notes for Students

No value

Faculty Load

Extra Duties: 0

Faculty Load: 0

Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No Value	No Value	No Value	No Value

Pre-requisites, Co-requisites, Anti-requisites and Advisories

Prerequisite

BSOTC123 - Beginning Excel

Students enrolling in BSOT C153 Intermediate Excel must have knowledge of the underlying workings of Excel as taught in the BSOT C123 Beginning Excel course.

Students should have the skills to:

- Plan, create, edit, and print spreadsheet files using basic spreadsheet features for cells, worksheets, and workbooks.
- Apply formulas and functions to produce solutions.
- Create a variety of charts and graphs to represent data.

Entrance Skills

Entrance Skills	Description
No value	No value

Limitations on Enrollment

Limitations on Enrollment	Description
No value	No value

Specifications

Methods of Instruction

Methods of Instruction	Lecture
Rationale	Lecture notes are provided that include language to describe course concepts. Students also view PowerPoint presentations with content from each module.

Methods of Instruction	Problem Solving
Rationale	Problem-solving is recognized through assigned posts that are shared with other students.
Methods of Instruction	Skills Development and Performance
Rationale	Students complete module work in the form of projects that are followed by review. Opportunity is given to repeat work to the level of a pass. Students then proceed to further training and projects using Skills Assessment Management, giving opportunity to repeat newly learned skills to the point of mastery.
Methods of Instruction	Laboratory
Rationale	Students complete four textbook projects, four reviews, four trainings, eight SAM projects, and four exams. A capstone project is also completed.
Methods of Instruction	In-class writing
Rationale	Students post reports four times (minimum) describing problem-solving strategies they have encountered in their work. The writing has a specific structure that is requested. All written communication is graded for proofreading skills. Grammar and spelling tips are provided.
Methods of Instruction	Discussion
Rationale	Students post reports four times (minimum) describing problem-solving strategies they have encountered in their work. The writing has a specific structure that is requested.
Methods of Instruction	Instruction through examination or quizzing
Rationale	A practical exam is completed on module concepts via a simulated Excel environment.
Methods of Instruction	Demonstration
Rationale	Students complete guided training in a simulated Excel environment.

Assignments

A. Text readings: For example, students will read modules such as Module Five, Working with Excel Tables, PivotTables, and PivotCharts.
B. Preparation of project work: Students complete spreadsheet preparation from Module instructions. This work is graded by the instructor and feedback is provided.
C. SAM Training, Projects, and Exams: Students complete training at SAM (Skills Assessment Management) software. The training provides an environment in which students perform tasks on the computer using an Excel simulated environment. Training includes demonstration leading to mastery of specific skills.

Methods of Evaluation	**Rationale**
Other	

Problem-solving and critical-thinking reports: Students report on special instances of engaging in the process of problem-solving, exploring beyond basic features, and troubleshooting when performing application software tasks.	
Final Exam	Open book final exams in SAM contribute to practical understanding of the material and the use of available resources (index, help, and modules) to find information.
Project	Students complete module work in the form of projects that are followed by review. Opportunity is given to repeat work to the level of a pass. Students then proceed to further training and projects using Skills Assessment Management, giving opportunity to repeat newly-learned skills to the point of mastery.
Homework	Creation of spreadsheets: Students create spreadsheets that demonstrate skills throughout the course. Production is graded by rubric.
Distance Education Description: how outcomes are evaluated	Students are to complete all weekly assigned activities designated in the learning management software including discussions and completion of assignments from the textbook which are graded by the instructor and also through the Skills Assessment Management environment (SAM). The evaluation process is identical to what would be applied if the course were offered in a classroom. Assignments are linked to outcomes assessment.

Equipment

No Value

Textbooks

Author	Title	Publisher	Date	ISBN
Parsons, J.	New Perspectives Microsoft Office 365 and Excel 2016 Comprehensive	Cengage Learning	2017	978-1-305-88141-9

Other Instructional Materials

Description	Students require a SAM (Skills Assessment Management Account Code). This code is good for twelve one-unit BSOT courses.
Author	No value
Citation	No value

Description	Microsoft Excel, 2016 or better edition. Microsoft Excel is part of the Microsoft Office application program package. Excel is the primary spreadsheet software used by business and industry.
Author	No value
Citation	No value

Materials Fee

No

Learning Outcomes and Objectives

Course Objectives

No value

CSLOs

Analyze data using list management features such as sort and autofilter. Expected SLO Performance: 75.0

Manage multiple worksheets and workbooks using 3-D references and worksheet groups. Expected SLO Performance: 75.0

Collaborate on a workbook and a web page. Expected SLO Performance: 75.0

Develop spreadsheet applications including tables, macros, pivot charts, advanced functions, conditional formatting, and then apply techniques to design an invoice and custom template. Expected SLO Performance: 75.0

Identify and apply appropriate problem-solving techniques using Help and reference material off and online for successful creation of intermediate-level documents using Microsoft Excel. Expected SLO Performance: 75.0

Outline

Course Outline

A. Working with Excel Tables, Pivot Tables, and Pivot Charts
- a. Planning a structured range of data (freezing rows and columns)
- b. Creating an Excel table (renaming, formatting)
- c. Maintaining an Excel table (adding, finding, editing, and deleting records)
- d. Sorting data using sort buttons, multiple columns, and a custom list
- e. Filtering data
- f. Sorting data (columns and lists)
- g. Using the total row and summary statistics
- h. Inserting subtotals
- i. Analyzing data with pivot tables
- j. Creating a pivot table
- k. Refreshing a pivot table
- l. Grouping pivot table items
- m. Creating a pivot table chart

B. Managing Multiple Worksheets and Workbooks
- a. Using multiple worksheets
- b. Grouping worksheets
- c. Copying worksheets
- d. Referencing cells and ranges in other worksheets
- e. Using 3-D references
- f. Printing a worksheet group
- g. Linking workbooks
- h. Updating linked workbooks
- i. Opening destination workbooks with source
- j. Workbooks closed
- k. Creating an Excel workspace
- l. Creating a hyperlink
- m. Creating templates
- n. Creating custom workbook template
- o. Saving a workbook as a web page

C. Using Advanced Functions, Conditional Formatting, and Filtering
- a. Working with logical functions
- b. Using lookup tables and functions
- c. Checking for data entry errors

d. Summarizing data conditionally
e. Using advanced filtering
f. Using database functions to summarize data
g. Developing an Excel Application

D. Planning an Excel Application
a. Naming cells and ranges
b. Validating data entry
c. Protecting a worksheet and a workbook
d. Adding worksheet comments
e. Working with macros
f. Protecting against macro viruses
g. Recording a macro
h. Working with the macro editor
i. Creating macro buttons
j. Saving workbooks with macros

E. Working with Text Functions and Creating Custom Formats
a. Opening and saving workbooks created in earlier versions of Excel
b. Using text functions
c. Adding special and custom formatting
d. Using special formats
e. Creating custom formats
f. Formatting dates

Lab Outline

A. In lab hours, students create projects demonstrating the ability to master topics presented in the course.

B. Students complete reinforcement for specific skills covered in SAM training (Skills assessment management)

C. Students use skills covered in the lecture portion of the course to develop the ability to perform the following skills in Excel:

a. Work with Excel tables, pivot tables, and pivot charts
b. Manage multiple worksheets and workbooks
c. Use advanced functions and conditional formatting
d. Develop an Excel application

D. Students write critical thinking reports in memorandum format stemming from problem solving the features and uses of Excel.

Delivery Methods

Delivery Method: Please list all that apply -Face to face -Online (purely online no face-to-face contact) -Online with some required face-to-face meetings (“Hybrid”) -Online course with on ground testing -iTV – Interactive video = Face to face course with significant required activities in a distance modality -Other

- Face to face
- Online (purely online no face-to-face contact)
- Online with some required face-to-face meetings (“Hybrid”)
- iTV – Interactive video = Face to face course with significant required activities in a distance modality

Rigor Statement: Assignments and evaluations should be of the same rigor as those used in the on-ground course. If they are not the same as those noted in the COR on the Methods of Evaluation and out-of-class assignments pages, indicate what the differences are and why they are being used. For instance, if labs, field trips, or site visits are required in the face to face section of this course, how will these requirements be met with the same rigor in the Distance Education section? Describe the ways in which instructor-student contact and student-student contact will be facilitated in the distance ed environments.

All assignments are identical to those in an onsite class, except that they are uploaded to the course shell into a learning management system as an attachment. Weekly class discussions including student to student contact are conducted by means of online discussion

forums within a learning management system. Uploaded quizzes or exams accessible through the class web site are used. Feedback in online discussion forums and through e-mail is used. Substantive critiques of all projects and at least general responses to discussion posts are provided. Rubrics, stated in the syllabus, are used to evaluate online discussion work but are not required. As with any on-ground class, departmental rubrics are used to guide the assessment of assignments.

- Student-Instructor contact will include the following: discussion forums, learning management system messages, announcements, and feedback for each student's work.
- Student-Instructor contact MAY include the following: chat/Zoom, newsgroup/discussion board, phone, and iTV. Student-Student contact will include the following: discussion forums.
- Student-Student contact MAY include the following: chat/Zoom, learning management system messages, group work, and peer reviewed projects.

Good practice requires both asynchronous and synchronous contact for effective contact. List the methods expected of all instructors teaching the course. -Learning Management System -Discussion Forums -Message -Other Contact -Chat/Instant Messaging -E-mail -Face-to-face meeting(s) -Newsgroup/Discussion Board -Proctored Exam -Telephone -iTV - Interactive Video -Other

- Discussion Forums
- Message
- Chat/Instant Messaging
- E-mail
- Newsgroup/Discussion Board

Software and Equipment: What additional software or hardware, if any, is required for this course purely because of its delivery mode? How is technical support to be provided?

The learning management system is accessible and compatible with support programs such as Kurzweil 3000.
Faculty will use the Canvas accessibility checker, along with other resources provided by our Distance Education Director, to ensure all learning materials are accessible, including but not limited to documents, pdfs, OERs, external websites, and videos.

Accessibility: Section 508 of the Rehabilitation Act requires access to the Federal government's electronic and information technology. The law covers all types of electronic and information technology in the Federal sector and is not limited to assistive technologies used by people with disabilities. It applies to all Federal agencies when they develop, procure, maintain, or use such technology. Federal agencies must ensure that this technology is accessible to employees and the public to the extent it does not pose an "undue burden". I am using -iTV—Interactive Video only -Learning management system -Publisher course with learning management system interface.

- Learning management system

Class Size: Good practice is that section size should be no greater in distance ed modes than in regular face-to-face versions of the course. Will the recommended section size be lower than in on-ground sections? If so, explain why.

The class size is from 25 to 45 students.