Cerro Coso College

Course Outline of Record Report

05/07/2020

BSOTC163 : Advanced Excel

General Information

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Attachments:	MS_Excel_III.docx
Course Code (CB01) (CB01) :	BSOTC163
Course Title (CB02) (CB02) :	Advanced Excel
Department:	Business Information Technolog
Proposal Start:	Fall 2020
TOP Code (CB03) :	(0514.00) Office Technology/Office Computer Applications
SAM Code (CB09) (CB09) :	Clearly Occupational
Distance Education Approved:	Yes
Course Control Number (CB00) (CB00) :	CCC000366809
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 advanced understanding of Microsoft Excel. Financial and what-if analysis, data tables, scenario management, importing and exporting data, enhancing with Visual Basic, sub-routines, modifying default settings, collaborating on shared workbooks, and problem-solving tools are covered. This course completes 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's, and Delivery Methods, Textbook, and Distance Education. Last assessed Spring 2014. Updated instructions for Critical Thinking Post and added rubric. No other changes except updating to 2016 version of Office.

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:	• 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) (CB08)

Course is not a basic skills course.

Course Special Class Status (CB13) (CB13)

Course is not a special class.

Grade Options

- Pass/No Pass
- Letter Grade methods
- Satisfactory Progress

☑ 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

Associated Programs

☑ Course is part of a program (CB24)

Associated Program	Award Type
CC Business Office Technology	A.S. Degree Major
CC Business Office Technology-	Certificate of Achievement

Transferability & Gen. Ed. Options

Transferability

Transferable to CSU only

Transferability Status

Approved

C-ID	Categories	Transferability Status	Comparable Course
Office Technology/Business Information Worker	C-ID discipline	Pending	BSOT132

Units and Hours

Summary

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

Credit / Non-Credit Options

Course Credit Status (CB04) (CB04)

Credit - Degree Applicable

Course Non Credit Category (CB22) (CB22)

Credit Course.

Non-Credit Characteristics

No value

Course Classification Code (CB11) (CB11)

Credit Course.

Funding Agency Category (CB23) (CB23)

Not Applicable.

☐ Cooperative Work Experience Education Status (CB10) (CB10)

☐ Variable Credit Course

Weekly Student Hours

	In Class	Out of Class
Lecture Hours	0.5	1
Lab Hours	1.5	-
Activity Hours	-	-

Course Student Hours

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

Time Commitment Notes for Students

No value

Faculty Load

Extra Duty: -

Faculty Load: -

Units and Hours - Weekly Specialty Hours

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

Requisites

Prerequisite

BSOTC153 - Intermediate Excel

Students entering this cousre should have the following abilities which are outcomes of BSOT C153 Intermediate Excel as a foundation:

The Ability to:

- Analyze data using list management features such as sort and autofilter.
- Manage multiple worksheets and workbooks using 3-D references and worksheet groups.
- Collaborate on a workbook and a web page.
- Develop spreadsheet applications including tables, pivot charts, advanced functions, conditional formatting, and then apply techniques to design an invoice and custom template.

Entrance Skills

Skill	Content Review
No value	No value

Limitations on Enrollment

Limitation	Provide Rationale
No value	No value

Specifications

Methods of Instruction	Methods of Instruction Rationale
Lecture	Lecture notes are provided that include language to describe course concepts. Students also view PowerPoint presentations with content from each module.
Skills Development and Performance	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.
Demonstration	Students complete guided training in a simulated Excel environment.
Problem Solving	Problem-solving is recognized through assigned posts that are shared with other students.
Discussion	Students post reports four times describing problem-solving strategies they have encountered in their work. The writing has a specific structure that is requested.
Laboratory	Students complete four textbook projects, four reviews, four trainings, eight SAM projects, and four exams. A capstone project is also completed.
In-class writing	Students post reports four times 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.

Assignments

A. Text readings: For example, students will read chapters such as Module Nine, Working With Financial Tools and Functions.
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	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.
Project	Projects: At the end of each module, a hands-on project is completed at the mastery level relevant to content for the chapter.
Final Exam	Open book final exams in SAM contribute to practical understanding of the material and the use of available resources (index, help, and tutorials) to find information.
Homework	Creation of spreadsheets: Students create spreadsheets that demonstrate skills throughout the course. Production is graded by rubric. See attached files for sample.
Distance Education Description: how outcomes are evaluated	Students are to complete all weekly assigned activities designated in the learning management software and using SAM as detailed above, which is identical to what would be completed 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. J., & Oja, D.	New Perspectives on Microsoft Excel 365 and 2016 Comprehensive	Cengage Learning	2017	978-1305880405

Other Instructional Materials

Description	Software: Microsoft Word 2016 or better edition. Microsoft Word is part of the Microsoft Office application software package. Word is the primary word processing software used by business and industry.
Author	No value
Citation	No value

Description	Students require one Skills Assessment Management (SAM) 2016 account code or Cengage Unlimited. This code is good for 12 1-unit courses in the BSOT program.
Author	No value
Citation	No value

Materials Fee

No

Learning Outcomes and Objectives

Course Objectives

No value

CSLOs

Develop financial analysis using advanced Excel functions.	Expected SLO Performance: 75.0
Perform What-If analyses to predict financial scenarios for business.	Expected SLO Performance: 75.0
Integrate Excel data through Import and Export.	Expected SLO Performance: 75.0
Use collaboration features on a shared workbook.	Expected SLO Performance: 75.0
Create a Visual Basic project.	Expected SLO Performance: 75.0
Identify and apply appropriate problem-solving techniques using Help and reference material off and online for successful creation of advanced-level documents using Microsoft Excel.	Expected SLO Performance: 75.0

Outline

Outline

A. Exploring Financial Tools and Functions

a. Loan and and investment functions
b. Calculating borrowing costs

c. Creating an amortization schedule
d. Projecting future income and expenses
e. Calculating depreciating of assets
f. Adding taxes and interest expenses to an income statement
g. Calculating Interest rates with RATE function
h. Calculating net present value
i. Using IRR, XNPR, and XIRR functions
j. Adding a workbook

B. Performing what-if analyses
a. Understanding cost-volume relationships
b. Project values using analysis tools.
c. Add, show, close, edit, merge, and summarize scenarios
d. Cost-volume, profit relationships
e. Developing with scenario manager
f. Creating scenario summary reports
g. One and two variable data tables
h. Use the solver add-in.
i.. Goal seek for trial and error

C. Analyzing data using financial tools and functions
a. Writing a data query
b. Transforming data with queries
c. Charting trends
d. Creating a forecast sheet
e. Power pivot and the data model
f. Power view and power pivot

D. Expanding Excel with Visual Basic for Applications
a. Edit macros using the Visual Basic editor.
b. Modify Excel default setting.
c. Create a VB project
d. Sub procedures and modules
e. Macro buttons
f. Custom toolbars and menus
g. Customize graphics and screen elements
h. Visual Basic editor

E. Collaborating on a shared workbook
a. Sharing a workbook among multiple users
b. Tracking changes
c. Merge and compare
d. Preparing a workbook
e. Singing off on a workbook

F. Integrating Excel with other Office applications
a. Object linking and embedding
b. Customizing Excel
c. Saving as .pdf
d. Developing a workbook for international clients

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. Explore financial tools and Functions
b. Perform what-if analyses
c. Analyze data using financial tools and functions
d. Expand Excel with Visual Basic for Applications
e. Collaborate on shared workbooks
f. Integrate Execl with other applications

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 and 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. Grading is by rubric for all 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 up to 45 students.