

# **AIS 072: MICROSOFT EXCEL**

### Formerly known as:

CIS 072D (or if cross-listed - inactivated courses associated with this course)

#### Originator

promero

#### Co-Contributor(s)

#### Name(s)

Marhuenda-Donate, Felix

#### Justification / Rationale

We are separating the pathways in Computer Information Systems. Our CIS designation will remain in place for IT technology Pathway. However, a new designation AIS has been created to lead the Business Pathway of Information Systems. A whole new program will be developed for Applications and Information Systems.

#### **Effective Term**

Fall 2020

#### **Credit Status**

Credit - Degree Applicable

#### Subiect

AIS - Applications and Information Systems

#### **Course Number**

072

### **Full Course Title**

Microsoft Excel

#### **Short Title**

MICROSOFT EXCEL

#### **Discipline**

#### **Disciplines List**

Computer Information Systems (Computer network installation, microcomputer technology, computer applications)

Office Technologies (Secretarial skills, office systems, word processing, computer applications, automated office training)

#### Modality

Face-to-Face 100% Online

#### **Catalog Description**

This course provides basic concepts and practical applications using Excel for Windows. Students receive instruction and computer experience using electronic spreadsheets to solve common numerical and accounting-based problems.

#### **Schedule Description**

Microsoft Excel spreadsheet solutions for numerical and accounting based problems. Advisory: AIS 005

# **Lecture Units**

2

#### **Lecture Semester Hours**

36

# **Lab Units**

1



**Lab Semester Hours** 

54

**In-class Hours** 

90

**Out-of-class Hours** 

72

**Total Course Units** 

3

**Total Semester Hours** 

162

Prerequisite Course(s)

Advisory: AIS 005

# **Required Text and Other Instructional Materials**

**Resource Type** 

Book

**Open Educational Resource** 

No

**Author** 

Randy Nordell, Kathleen Stewart, and Kari Wood

**Title** 

MS Office 2016: In Practice Excel/with SIMnet

**Edition** 

2016

City

New York, New York

**Publisher** 

McGraw Hill/Irwin

Year

2017

**College Level** 

Yes

Flesch-Kincaid Level

11

ISBN#

9781259930317

# **Class Size Maximum**

28

**Entrance Skills** 

File management skills

# **Prerequisite Course Objectives**

AIS 005-Understand types of information systems and their role in business.
AIS 005-Demonstrate the ability to save and retrieve documents on a variety of appropriate storage devices



AIS 005-Understand basic system and application software programs and concepts.

#### **Course Content**

- 1. Basic spreadsheet concepts, terms, and definitions
- 2. Creating and Editing Workbooks
  - a. Creating Saving and Opening Workbooks
  - b. Entering and Editing Data
  - c. Formatting a Worksheet and Appearance of the Workbook
  - d. Naming, saving, printing, and retrieving spreadsheet
- 3. Working with Formulas and Functions
  - a. Building and Editing a Formula
  - b. Setting Mathematical Order of Operations
  - c. Using Absolute, Mixed, Relative and 3D References
  - d. Formula Auditing Tools
  - e. Working with Statistical, Financial, Logical and Look up Functions
- 4. Creating and Editing Charts
  - a. Chart Objects and Chart Sheet
  - b. Quick layouts and styles
  - c. Editing and Formatting Chart Elements
- 5. Organizing and Getting Data
  - a. Applying Conditional Formatting
  - b. Sorting and Filtering
  - c. Using subtotals, groups and outlines
  - d. Importing and Exporting Data
  - e. Building Pivot Tables
- 6. Consolidating, Linking and Inserting Objects
  - a. Creating Static Data Consolidation
  - b. Creating Dynamic Data Consolidation
  - c. Consolidating Data by Category
  - d. Working with Grouped Worksheets
  - e. Linking Workbooks
  - f. Inserting Illustrations and Hyperlinks
  - g. Safeguarding a Workbook
- 7. The Function Library
  - a. Working with Database Functions
  - b. Building AND, OR, Nested, and IFS Functions
  - c. Lookup and Reference Category
  - d. Build Date, Time and Statistical Calculations
  - e. Financial, Text and Multiple Criteria Functions
- 8. Working with Templates and Sharing Work
  - a. Setting Data Validation
  - b. Using Form Controls and Buttons
  - c. Setting Worksheet and Workbook protection
  - d. Sharing and Merging Workbooks
  - e. Checking a Workbook for Distribution Issues.
- 9. Data Analysis and Business Intelligence
  - a. Using Goal Seek and Solve
  - b. Building One and Two variable Data Tables
  - c. Creating a Forecast
  - d. Transforming Data into a Query
  - e. Pivot Tables and Analysis Tool Pak
- 10. Recording and Editing Macros
  - a. Running and Recording
  - b. Assigning Macro to Button
  - c. Editing a Macro with Visual Basic Editor



- d. Recording Macros with Relative References
- e. Creating Macro-Enabled Templates and Workbooks

# **Lab Content**

Hands on practice on all of the concepts listed above.

# **Course Objectives**

	Objectives
Objective 1	Define and describe basic spreadsheet concepts, terms, and definitions.
Objective 2	Start Excel and identify parts of the Excel screen
Objective 3	Create a simple spreadsheet using common formatting and editing commands.
Objective 4	Demonstrate ability to enter numbers, text, formulas, and dates in a spreadsheet
Objective 5	Use Excel formulas and functions
Objective 6	Format a worksheet
Objective 7	Create and use templates and workbooks
Objective 8	Demonstrate ability to link worksheets
Objective 9	Integrate spreadsheets within Excel, and within other applications.
Objective 10	Use Excel to analyze and solve business and accounting problems.
Objective 11	Create and Edit Charts
Objective 12	Use Excel and functions for business analysis.
Objective 13	Create appropriate Macro recording to automate repeated tasks.

# **Student Learning Outcomes**

	Upon satisfactory completion of this course, students will be able to:		
Outcome 1	Design and format an appropriate spreadsheet solution to a business problem.		
Outcome 2	Demonstrate use of Excel tools at an advanced level		

# **Methods of Instruction**

Method	Please provide a description or examples of how each instructional method will be used in this course.
Discussion	In class discussion and/or online Canvas discussions
Demonstration, Repetition/Practice	Practice using different computer features according to the class content
Collaborative/Team	Creation of cooperative learning tasks such as a small group or paired activities.
Technology-based instruction	Use of hardware and software according to objectives
Lecture	Presentation of topic in content

# **Methods of Evaluation**

Method	Please provide a description or examples of how each evaluation method will be used in this course.	Type of Assignment
Self-paced testing, Student preparation	Interactive book and simulations	In Class Only
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Mid-term and final evaluations	Exam	In Class Only
Tests/Quizzes/Examinations	Timed Quizzes	In and Out of Class
Computational/problem-solving evaluations	Projects using Excel features	In and Out of Class
Laboratory projects	Lab demonstration of skills covering all the content of the course.	In and Out of Class

# Assignments



#### **Other In-class Assignments**

- 1. Move and copy Excel spreadsheets from one folder to another
- 2. Rename spreadsheets
- 3. Create, move, and delete folders
- 4. Create backups on diskettes
- 5. Open, modify and save an existing Excel spreadsheet
- 6. Format large Excel spreadsheets using:
  - a. Fonts
  - b. Colors
  - c. Column and row heights
  - d. Hide columns
  - e. Alignment
  - f. Text wrap
  - g. Auto Format
  - h. Custom number formats
  - i. Styles
- 7. Print a large, multi-workbook excel spreadsheet using Print Areas and Page setup
- 8. Create a spreadsheet with formulas using absolute and relative cell addressing
- 9. Create several spreadsheets using Built-in Functions for.
  - a. Statistical functions
  - b. Accounting functions
  - c. Text functions
  - d. Arithmetic functions
  - e. Lookup functions
  - f. Financial Functions
  - q. Date Functions
- 10. Create a workbook with multiple worksheets
- 11. Create and modify charts
- 12. Use outlining, consolidation and subtotals to create summary Excel spreadsheets
- 13. Complete a comprehensive Final Project using all of the above Excel skills in a business situation

#### Other Out-of-class Assignments

- 1. Spreadsheet projects to demonstrate proficiency with all of the in-class assignments
- 2. Readings in the textbook and in recommended supplementary literature
- 3. Creation and maintenance of personal budgets
- 4. Research projects involving the collection of financial data from a public company and using spreadsheets to analyze the company's health and performance

# **Grade Methods**

Letter Grade Only

# **Distance Education Checklist**

#### Instructional Materials and Resources

If you use any other technologies in addition to the college LMS, what other technologies will you use and how are you ensuring student data security?

All data referent to student work done outside of Canvas is encrypted and synced by the access pairing created by College of the Desert IT Department.

# **Effective Student/Faculty Contact**

Which of the following methods of regular, timely, and effective student/faculty contact will be used in this course?

#### Within Course Management System:

Discussion forums with substantive instructor participation Regular virtual office hours Private messages



Online quizzes and examinations Video or audio feedback Weekly announcements

#### **External to Course Management System:**

Direct e-mail

Posted audio/video (including YouTube, 3cmediasolutions, etc.)

# Briefly discuss how the selected strategies above will be used to maintain Regular Effective Contact in the course.

This class if online is being taught via Canvas. Instructors will use asynchronous text and video messages to interact with the students. Also, discussions boards, constant announcements will be used. Zoom virtual office hours with screen sharing and interaction capabilities will be available.

# If interacting with students outside the LMS, explain how additional interactions with students outside the LMS will enhance student learning.

Canvas is used for external interaction as well.

#### **Online Course Enrollment**

### Maximum enrollment for online sections of this course

28

# Other Information

# **MIS Course Data**

#### **CIP Code**

52.0401 - Administrative Assistant and Secretarial Science, General.

#### TOP Code

051400 - Office Technology/Office Computer Applications

#### **SAM Code**

C - Clearly Occupational

# **Basic Skills Status**

Not Basic Skills

#### **Prior College Level**

Not applicable

### **Cooperative Work Experience**

Not a Coop Course

# **Course Classification Status**

**Credit Course** 

#### **Approved Special Class**

Not special class

# **Noncredit Category**

Not Applicable, Credit Course

#### **Funding Agency Category**

Not Applicable

#### **Program Status**

Program Applicable

#### **Transfer Status**

Transferable to CSU only





**Allow Audit** 

No

Repeatability

No

**Materials Fee** 

No

**Additional Fees?** 

No

# **Approvals**

**Curriculum Committee Approval Date** 4/02/2019

**Academic Senate Approval Date** 4/11/2019

**Board of Trustees Approval Date** 5/17/2019

**Chancellor's Office Approval Date** 7/27/2019

Course Control Number CCC000607682

# Programs referencing this course

Accounting Certificate of Achievement (http://catalog.collegeofthedesert.eduundefined?key=114/)
Human Resource Generalist Certificate of Achievement (http://catalog.collegeofthedesert.eduundefined?key=118/)
Accounting AS Degree (http://catalog.collegeofthedesert.eduundefined?key=58/)