

AIS 072: SPREADSHEET SOFTWARE

Originator

mrichards

Justification / Rationale

Updating course materials, adding hybrid option, increasing class size, added spreadsheet modalities (Advisory Committee and Office Professional research indicated the need to add in alternate spreadsheet programs as well).

Effective Term

Fall 2023

Credit Status

Credit - Degree Applicable

Subject

AIS - Applications and Information Systems

Course Number

072

Full Course Title

Spreadsheet Software

Short Title

SPREADSHEETS

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

Hybrid

Catalog Description

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

Schedule Description

Spreadsheet software 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**

Web/Other

Open Educational Resource

No

Year

2022

Description

Author: TestOut Corporation

Publisher: TestOut Corporation

Platform eBook Title: TestOut Microsoft Office Library, 978-1-935080-80-0

*Special ISBN issued for eBook and online resources package

Online resources integrated with the e-textbook including online virtual computer labs which allow students to practice, explore and try different solutions using a simulated labs, assignments, and projects.

Class Size Maximum

35

Entrance Skills

File management skills

Requisite Course Objectives

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

AIS 005-Demonstrate the ability to save and retrieve documents on a variety of appropriate storage devices

AIS 005-Understand types of information systems and their role in business.

AIS 005-Understand the basics about computers and their role in business

Course Content**Beginning to Intermediate**

- Explore spreadsheet current modalities
- Common Office Features
- Creating and Managing Workbooks
- Organizing and Entering Data
- Changing Properties and Printing Worksheets
- Formatting Cells
- Entering Simple Formulas
- Using Advanced Functions
- Displaying Data in Charts
- Organizing Data in Tables

Advanced

- Managing Workbooks
- Preparing Workbooks for Collaboration

- Formatting Cells Based on Existing Data
- Formatting and Validating Data
- Advanced Conditional Formatting and Filtering
- Performing Logical Operations in Formulas
- Looking Up Data by Using Functions
- Using Advanced Date and Time Functions
- Performing Data Analysis
- Troubleshooting Formulas
- Creating and Modifying Simple Macros
- Creating and Modifying Advanced Charts
- Creating and Modifying PivotTables
- Creating and Modifying PivotCharts

Lab Content

Beginning-Intermediate

- Create and Manage Workbooks
- Import, Enter, & Organize Data
- Change Properties and Print Worksheets
- Format Cells
- Enter Simple Formulas
- Use Advanced Functions
- Display Data in Charts
- Organize Data in Tables

Advanced

- Manage Workbooks
- Fill Cells Based on Existing Data
- Format and Evaluate Data
- Apply Advanced Conditional Formatting
- Perform Logical Operations in Formulas
- Look Up Data Using Functions
- Perform Data Analysis
- Create and Modify Simple Macros
- Create and Modify Advanced Charts
- Create and Modify PivotTables
- Create and Modify PivotCharts

Course Objectives

| | Objectives |
|--------------|---|
| Objective 1 | Define and describe basic spreadsheet concepts, terms, and definitions. |
| Objective 2 | Start and identify parts of a spreadsheet 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 spreadsheets 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 other applications. |
| Objective 10 | Use spreadsheets to analyze and solve business and accounting problems. |
| Objective 11 | Create and edit charts. |
| Objective 12 | Use spreadsheet 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 |
| Outcome 3 | Create and use of workbooks. |

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 LMS 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 | Interactive book and simulations (50% in class, 50% out of class, approximately 30 minutes per week) | In and Out of Class |
| Self-paced testing | Interactive book and simulations (50% in class, 50% out of class, approximately 1 hour per week) | In and Out of Class |
| Mid-term and final evaluations | Chapter quizzes, final exam (50% in class, 50% out of class, approximately 30 minutes per week) | In and Out of Class |
| Computational/problem-solving evaluations | Projects using Excel features (50% in class, 50% out of class, approximately 1 hour per week) | In and Out of Class |
| Laboratory projects | Lab demonstration of skills covering all the content of the course (50% in class, 50% out of class, approximately 2 hours per week) | In and Out of Class |

Assignments

Other In-class Assignments

- Move and copy Excel spreadsheets from one folder to another
- Rename spreadsheets
- Create, move, and delete folders
- Create backups on diskettes
- Open, modify and save an existing Excel spreadsheet
- Format large Excel spreadsheets using:
 - Fonts
 - Colors
 - Column and row heights
 - Hide columns
 - Alignment
 - Text wrap
 - Auto Format
 - Custom number formats
 - Styles
- Print a large, multi-workbook excel spreadsheet using Print Areas and Page setup
- Create a spreadsheet with formulas using absolute and relative cell addressing
- Create several spreadsheets using Built-in Functions for:
 - Statistical functions
 - Accounting functions

- Text functions
- Arithmetic functions
- Lookup functions
- Financial Functions
- Date Functions
- Create a workbook with multiple worksheets
- Create and modify charts
- Use outlining, consolidation and subtotals to create summary Excel spreadsheets
- Complete a comprehensive Final Project using all of the above Excel skills in a business situation

Other Out-of-class Assignments

- Spreadsheet projects to demonstrate proficiency with all of the in-class assignments
- Readings in the textbook and in recommended supplementary literature
- Creation and maintenance of personal budgets
- 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

Include the percentage of online and on-campus instruction you anticipate.

Online %

100

On-campus %

0

What will you be doing in the face-to-face sections of your course that necessitates a hybrid delivery vs a fully online delivery?

Nothing necessitates a hybrid delivery. However, student needs may indicate hybrid would be beneficial for orientations, study sessions, and individual &/or group meetings

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.

If used, explain how specific materials and resources outside the LMS will be used to enhance student learning.

n/a

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

Online quizzes and examinations

Private messages

Regular virtual office hours

Video or audio feedback

Weekly announcements

External to Course Management System:

Direct e-mail

Posted audio/video (including YouTube, 3cm mediasolutions, 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.

Other Information

Provide any other relevant information that will help the Curriculum Committee assess the viability of offering this course in an online or hybrid modality.

n/a

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

General Education Status

Y = Not applicable

Support Course Status

N = Course is not a support course

Allow Audit

No

Repeatability

No

Materials Fee

No

Additional Fees?

No

Files Uploaded**Attach relevant documents (example: Advisory Committee or Department Minutes)**

Office Professional Advisory Meeting Minutes SP22.docx

Approvals**Curriculum Committee Approval Date**

11/01/2022

Academic Senate Approval Date

11/10/2022

Board of Trustees Approval Date

12/16/2022

Chancellor's Office Approval Date

12/22/2022

Course Control Number

CCC000635128

Programs referencing this courseBIW II Office Support and Technologies Certificate of Achievement (<http://catalog.collegeofthedesert.eduundefined/?key=200>)Applications and Information Systems AS Degree (<http://catalog.collegeofthedesert.eduundefined/?key=223>)BIW IV Marketing Office Specialist Certificate of Achievement (<http://catalog.collegeofthedesert.eduundefined/?key=224>)BIW III Remote Office Support and Technologies Certificate of Achievement (<http://catalog.collegeofthedesert.eduundefined/?key=339>)Office Technology Essentials Certificate of Achievement (<http://catalog.collegeofthedesert.eduundefined/?key=383>)