DIVISION: Workforce Development

COURSE: CSP 2213 Advanced Business Applications I

Date: Fall 2023

Credit Hours: 3

Complete all that apply or mark “None” where appropriate:
Prerequisite(s): CSP 1203

Enrollment by assessment or another measure? ☒ Yes     ☐ No
If yes, please describe: CSP 1203 proficiency exam score of 85%.

Corequisite(s): None

Pre- or Corequisite(s): None

Consent of Instructor: ☐ Yes ☒ No

Delivery Method:
☒ Lecture  2 Contact Hours (1 contact = 1 credit hour)
☐ Seminar 0 Contact Hours (1 contact = 1 credit hour)
☒ Lab  2 Contact Hours (2-3 contact = 1 credit hour)
☐ Clinical 0 Contact Hours (3 contact = 1 credit hour)

Offered: ☒ Fall ☐ Spring ☐ Summer

CATALOG DESCRIPTION and IAI NUMBER (if applicable):
This course is a continuation of Microsoft Office (CSP 1203) and is designed to further develop skills in Microsoft Office applications of Excel and Access and the integration of office programs. The course prepares students for the Microsoft Office Specialist (MOS) certification exam. A Microsoft Office Specialist Voucher is included. The Microsoft desktop applications are required and free to students.
ACCREDITATION STATEMENTS AND COURSE NOTES:
None

COURSE TOPICS AND CONTENT REQUIREMENTS:
Microsoft Excel Data Tools, Data Types, and Illustrations
Microsoft Excel Logical, Statistical, Financial, and Lookup Functions
Microsoft Excel Templates and Collaboration Microsoft Excel
Microsoft Excel Macros
Microsoft Excel Data Analysis Tools
Microsoft Excel Business Intelligence
Microsoft Excel Customize, OneDrive, and Office Online
Microsoft Access Templates, Advanced Relationships, and Macros
Microsoft Access Advanced Queries and Reports
Microsoft Access Advanced Forms
Microsoft Access Integrating Applications
Microsoft Access Design and Manage Databases, Using SQL
Microsoft Access Customizing Options, and Account

INSTRUCTIONAL METHODS:
Demonstrations
Discussion
Hands-on Activities
Lecture
Simulation
Videos

EVALUATION OF STUDENT ACHIEVEMENT:
Attendance
Capstone Projects
Case Studies
Final Exam
Homework
Participation
Tests

INSTRUCTIONAL MATERIALS:
Textbooks
Textbooks used in the course are at the discretion of the full-time faculty. Part-time faculty members are to use the textbook designated for Advanced Business Applications by the Program Coordinator for Office Professional and the Dean of Workforce Development.

The customized textbook includes chapter material from:
Resources

Computer Applications:
1. Microsoft Excel Desktop Application
2. Microsoft Access Desktop Application
3. IVCC student email account
6. Brightspace course management system

Other:
1. McGraw-Hill ReadAnywhere app
2. Audio/video resources
3. Online resources

LEARNING OUTCOMES AND GOALS:
Institutional Learning Outcomes
☐ 1) Communication – to communicate effectively;
☒ 2) Inquiry – to apply critical, logical, creative, aesthetic, or quantitative analytical reasoning to formulate a judgment or conclusion;
☐ 3) Social Consciousness – to understand what it means to be a socially conscious person, locally and globally;
☐ 4) Responsibility – to recognize how personal choices affect self and society.

Course Outcomes and Competencies
Excel Data Tools, Data Types, and Illustrations
1. Link data and consolidate data by position and category.
2. Insert Illustration, hyperlinks.
3. Apply workbook security.

Excel Functions Logical, Statistical, Financial, and Lookup
1. Apply DSUM and DAVERAGE functions
2. Apply Logical Functions: AND, OR, nested, IFS, SWITCH.
3. Apply Reference Functions: XMATCH, INDEX, UNIQUE, SORT.
4. Apply Date and Time functions: TODAY, LOCALE, WEEKDAY, WORKDAY..
5. Apply Text Functions: TEXT, REPT, UPPER, LOWER, PROPER.
6. Apply Financial functions: PV, FV, NPER.
7. Apply Statistical, Math, and Trig functions: SUMIFS, AVERAGEIFS, STDEV.P.

Excel Templates and Collaboration
1. Create custom templates.
2. Create data validation and form controls.
3. Create worksheet/workbook protection.
4. Create shared workbook properties in OneDrive.

Excel Develop and Use Macros
1. Create and record macros.
2. Create relative references.
3. Assign Excel form control.
4. Edit VBA macro code.
5. Apply Active X control.
6. Display user forms.
7. Use macro-only workbook.

Excel Data Analysis Tools
1. Create and manage scenarios
2. Use goal seek, solver, analysis toolpak, 3-d maps.
4. Apply array formulas.
5. Create a forecast worksheet.

Excel Business Intelligence
1. Build Excel queries and use power query editor.
2. Merge, append, and manipulate data queries.
3. Explore data models in power query editor.
4. Apply PivotTable slicer, timeline, custom calculation, and named set.
5. Design dashboards with PivotTables, and PivotCharts.
6. Explore Power Pivot, measure, KPI, and DAX.

Excel Customize Excel, OneDrive, and Office Online
1. Customize the Ribbon, Quick Access toolbar and working environment.
2. Modify account settings.
3. Share files and folders in OneDrive and Excel Online.
4. Explore Forms, Outlook, People, Calendar, and OneNote.

Microsoft Access Templates, Advanced Relationships, and Macros
1. Customize a template database.
2. Use Lookup Wizard.
3. Implement many-to-many relationship with junction table and intersection table.
4. Create macros and submacros using events, actions, arguments, and program flow.

Microsoft Access Creating Advanced Queries and Reports
1. Create action, update, and delete queries.
2. Use query wizard to find duplicate records and unmatched records.
3. Create subquery using use top value query property.
4. Create report sections.
5. Create parameter report.

Microsoft Access Creating Advanced Forms
1. Create and edit in design view by enhancing appearance.
2. Modify form properties, enable and lock controls.
3. Explore one-to-many form, create and link main form to subform.
4. Use calculated and reference controls
5. Add tab control and modify navigation.
6. Capture parameter data.
Microsoft Access Integrating Applications
   1. Importing data.
   2. Exporting data to other applications and format.
   3. Create mail merge.

Microsoft Access Integrating Applications.
   1. Analyze and document database design.
   2. Use performance analyzer tool, splitter tool, security tool.
   3. Modify database using SQL.

Microsoft Access Customizing
   1. Customize account options
   2. Using Office Online
   3. Exploring Microsoft 365 applications