Course Title: Computer Applications Level 3	**Length of Course:** 15 cycles
Grade Level(s): 10-12	**Periods Per Cycle:** 6
Units of Credit: .50 credit	**Length of Period:** 43 minutes
Classification: Elective	**Total Instructional Time:** 64.5 hours

Course Description

This course prepares students with content needed to obtain the Microsoft Office Specialist (MOS) Access Certification. Students are presented the opportunity to earn the MOS Access Certification after successful completion of the course and at no cost to the student.

Instructional Strategies, Learning Practices, Activities, and Experiences

Access Software Exploration	Hands On Practice Through Completion Of "Steps"	Final Project
Content Introductions	Hands On Review Through Completion of "Skills Review"	Professional Certifications
Teacher Demonstrations		Guest Speakers/Success Stories
		Online Competitions

Assessments

Access, Review	Access MOS Review Packet	DB#1 FINAL PROJECT
Access, Schoology Intro. (8)	Access MOS Certification	DB#2 FINAL PROJECT
Access, Steps and Skills Review (8)		FINAL PROJECT

Materials/Resources

Microsoft® Office: Illustrated Introductory, First Course
    DAVID BESKEEN
    1st Edition [Course Technology, Cengage Learning 2014]
	Microsoft® Office: Illustrated, Second Course
	    DAVID BESKEEN
	    1st Edition [Course Technology, Cengage Learning 2014]
		Microsoft® Office Specialist Training Seat License
		Microsoft® Office Specialist Cite License
		iPad, VMware Horizon (Virtual Desktop) App

Adopted: 5/15/2017
Revised: 5/21/18

Access	
CONTENT/KEY CONCEPTS	**OBJECTIVES/STANDARDS**
Unit A: Getting Started With Access 2013 Related Vocabulary: relational database software access objects navigation pane access table query access form access report access template fields table design view data type datasheet view datasheet field names primary key field record one-to-many relationship subdatasheet	The students will be able to: • Understand relational databases. • Explore and assess a database. • Create a database. • Create a table. • Create primary keys. • Relate and compare two tables. • Select and enter data. • Select and edit data. **15.4.12.A** ~ Apply the creative and productive use of emerging technologies for educational and personal success. **15.4.12.B** ~ Evaluate the impact of social, legal, ethical, and safe behaviors on digital citizenship. **15.4.12.C** ~ Develop criteria for analyzing hardware options to meet defined needs. **15.4.12.D** ~ Evaluate emerging input technologies. **15.4.12.F** ~ Compare and contrast network environments, including the function of network devices and connectivity issues. **15.4.12.G** ~ Create an advanced digital project using sophisticated design and appropriate software/applications. **15.4.12.J** ~ Create a complex computer program to solve a problem. **15.4.12.L** ~ Find and use primary documentation; employ an accepted protocol for citation. **15.4.12.M** ~ Evaluate the impact of emerging technologies on various career paths and provide examples of industry certifications within the field.

Access	
CONTENT/KEY CONCEPTS	**OBJECTIVES/STANDARDS**

CONTENT/KEY CONCEPTS	OBJECTIVES/STANDARDS
Unit B: Building and Using Queries Related Vocabulary: logical view structured query language (SQL) query design view field lists join line query design grid field selector filtering filter by selection filter by form "AND" criteria criteria syntax "OR" criteria	The students will be able to: • Use the query wizard. • Work with data in a query. • Use query design view. • Sort and find data. • Filter data. • Apply "AND" criteria. • Apply "OR" criteria. • Format a datasheet. **15.4.12.A** ~ Apply the creative and productive use of emerging technologies for educational and personal success. **15.4.12.B** ~ Evaluate the impact of social, legal, ethical, and safe behaviors on digital citizenship. **15.4.12.C** ~ Develop criteria for analyzing hardware options to meet defined needs. **15.4.12.D** ~ Evaluate emerging input technologies. **15.4.12.F** ~ Compare and contrast network environments, including the function of network devices and connectivity issues. **15.4.12.G** ~ Create an advanced digital project using sophisticated design and appropriate software/applications. **15.4.12.J** ~ Create a complex computer program to solve a problem. **15.4.12.L** ~ Find and use primary documentation; employ an accepted protocol for citation. **15.4.12.M** ~ Evaluate the impact of emerging technologies on various career paths and provide examples of industry certifications within the field.

Access	
CONTENT/KEY CONCEPTS	**OBJECTIVES/STANDARDS**

CONTENT/KEY CONCEPTS	OBJECTIVES/STANDARDS
Unit C: Using Forms Related Vocabulary: form database user database designer form wizard form view control label control text box combo box layout view split form orphan records properties property sheet syntax text align property control source property expression tab order tab stop tab stop property tab index property name property auto order graphic images form sections	The students will be able to: • Use the form wizard. • Create a split form. • Use form layout view. • Add fields to a form. • Modify form controls. • Create calculations. • Modify tab order. • Insert an image. **15.4.12.A** ~ Apply the creative and productive use of emerging technologies for educational and personal success. **15.4.12.B** ~ Evaluate the impact of social, legal, ethical, and safe behaviors on digital citizenship. **15.4.12.C** ~ Develop criteria for analyzing hardware options to meet defined needs. **15.4.12.D** ~ Evaluate emerging input technologies. **15.4.12.F** ~ Compare and contrast network environments, including the function of network devices and connectivity issues. **15.4.12.G** ~ Create an advanced digital project using sophisticated design and appropriate software/applications. **15.4.12.J** ~ Create a complex computer program to solve a problem. **15.4.12.L** ~ Find and use primary documentation; employ an accepted protocol for citation. **15.4.12.M** ~ Evaluate the impact of emerging technologies on various career paths and provide examples of industry certifications within the field.

Access

CONTENT/KEY CONCEPTS	OBJECTIVES/STANDARDS
Unit D: Using Reports Related Vocabulary: report report wizard record source print preview read-only objects landscape orientation portrait orientation report sections grouping calculation function arguments label wizard	The students will be able to: - Use the report wizard. - Use report layout view. - Review and evaluate report sections. - Apply group and sort orders. - Add subtotals and counts. - Resize and align controls. - Format a report. - Create mailing labels. **15.4.12.A** ~ Apply the creative and productive use of emerging technologies for educational and personal success. **15.4.12.B** ~ Evaluate the impact of social, legal, ethical, and safe behaviors on digital citizenship. **15.4.12.C** ~ Develop criteria for analyzing hardware options to meet defined needs. **15.4.12.D** ~ Evaluate emerging input technologies. **15.4.12.F** ~ Compare and contrast network environments, including the function of network devices and connectivity issues. **15.4.12.G** ~ Create an advanced digital project using sophisticated design and appropriate software/applications. **15.4.12.J** ~ Create a complex computer program to solve a problem. **15.4.12.L** ~ Find and use primary documentation; employ an accepted protocol for citation. **15.4.12.M** ~ Evaluate the impact of emerging technologies on various career paths and provide examples of industry certifications within the field.

Access	
CONTENT/KEY CONCEPTS	**OBJECTIVES/STANDARDS**
Unit E: Modify The Database Structure Related Vocabulary: primary key field foreign key field table design view one-to-many line relationship report lookup field lookup properties row source lookup wizard field properties field properties pane field size property input mask long integer byte validation rule validation text attached field object linking and embedding (OLE) Joint Photographic Experts Group (JPEG or .jpg)	The students will be able to: • Examine relational databases. • Design related tables. • Create one-to-many relationships. • Create lookup fields. • Modify short text fields. • Modify number and currency fields. • Modify date/time fields. • Modify validation properties. • Create attachment fields. **15.4.12.A** ~ Apply the creative and productive use of emerging technologies for educational and personal success. **15.4.12.B** ~ Evaluate the impact of social, legal, ethical, and safe behaviors on digital citizenship. **15.4.12.C** ~ Develop criteria for analyzing hardware options to meet defined needs. **15.4.12.D** ~ Evaluate emerging input technologies. **15.4.12.F** ~ Compare and contrast network environments, including the function of network devices and connectivity issues. **15.4.12.G** ~ Create an advanced digital project using sophisticated design and appropriate software/applications. **15.4.12.J** ~ Create a complex computer program to solve a problem. **15.4.12.L** ~ Find and use primary documentation; employ an accepted protocol for citation. **15.4.12.M** ~ Evaluate the impact of emerging technologies on various career paths and provide examples of industry certifications within the field.

Access

CONTENT/KEY CONCEPTS	OBJECTIVES/STANDARDS
Unit F: Improving Queries Related Vocabulary: select query query design view query datasheet view (Logical View) one-to-many join lines sorting Structured Query Language (SQL) View criteria "AND" criteria "OR" criteria calculated field expression function summary query total row aggregate functions crosstab query crosstab query wizard record source	The students will be able to: • Create multi-table queries. • Apply sorts and view SQL. • Develop "AND" criteria. • Develop "OR" criteria. • Create calculated fields. • Build summary queries. • Build crosstab queries. • Create a report on a query. **15.4.12.A** ~ Apply the creative and productive use of emerging technologies for educational and personal success. **15.4.12.B** ~ Evaluate the impact of social, legal, ethical, and safe behaviors on digital citizenship. **15.4.12.C** ~ Develop criteria for analyzing hardware options to meet defined needs. **15.4.12.D** ~ Evaluate emerging input technologies. **15.4.12.F** ~ Compare and contrast network environments, including the function of network devices and connectivity issues. **15.4.12.G** ~ Create an advanced digital project using sophisticated design and appropriate software/applications. **15.4.12.J** ~ Create a complex computer program to solve a problem. **15.4.12.L** ~ Find and use primary documentation; employ an accepted protocol for citation. **15.4.12.M** ~ Evaluate the impact of emerging technologies on various career paths and provide examples of industry certifications within the field.

Access	
CONTENT/KEY CONCEPTS	**OBJECTIVES/STANDARDS**
Unit G: Enhancing Forms Related Vocabulary: form controls design view attachment control subform main form form layout default view property list box combo box combo box wizard row source property sections form header list rows property command button option group option button tab control	The students will be able to: • Use form design view. • Add subforms. • Align control edges. • Add a combo box for data entry. • Add a combo box to find records. • Add command buttons. • Add option groups. • Add tab controls. **15.4.12.A** ~ Apply the creative and productive use of emerging technologies for educational and personal success. **15.4.12.B** ~ Evaluate the impact of social, legal, ethical, and safe behaviors on digital citizenship. **15.4.12.C** ~ Develop criteria for analyzing hardware options to meet defined needs. **15.4.12.D** ~ Evaluate emerging input technologies. **15.4.12.F** ~ Compare and contrast network environments, including the function of network devices and connectivity issues. **15.4.12.G** ~ Create an advanced digital project using sophisticated design and appropriate software/applications. **15.4.12.J** ~ Create a complex computer program to solve a problem. **15.4.12.L** ~ Find and use primary documentation; employ an accepted protocol for citation. **15.4.12.M** ~ Evaluate the impact of emerging technologies on various career paths and provide examples of industry certifications within the field.

Access	
CONTENT/KEY CONCEPTS	**OBJECTIVES/STANDARDS**
Unit H: Analyzing Data With Reports Related Vocabulary: reports report design view parameter report record source conditional formatting lines format painter themes subreport main report section properties force new page property summary reports	The students will be able to: • Use report design view. • Create parameter reports. • Apply conditional formatting. • Add lines. • Use the format painter and themes. • Add subreports. • Modify sections properties. • Create summary reports. **15.4.12.A** ~ Apply the creative and productive use of emerging technologies for educational and personal success. **15.4.12.B** ~ Evaluate the impact of social, legal, ethical, and safe behaviors on digital citizenship. **15.4.12.C** ~ Develop criteria for analyzing hardware options to meet defined needs. **15.4.12.D** ~ Evaluate emerging input technologies. **15.4.12.F** ~ Compare and contrast network environments, including the function of network devices and connectivity issues. **15.4.12.G** ~ Create an advanced digital project using sophisticated design and appropriate software/applications. **15.4.12.J** ~ Create a complex computer program to solve a problem. **15.4.12.L** ~ Find and use primary documentation; employ an accepted protocol for citation. **15.4.12.M** ~ Evaluate the impact of emerging technologies on various career paths and provide examples of industry certifications within the field.

MOS Access Certification	
CONTENT/KEY CONCEPTS	**OBJECTIVES/STANDARDS**

Microsoft Office Specialist (MOS) Certification, ACCESS
 	
See Key Concepts From
Units A, B, C, D, E, F, G, H
	The students will be able to:
	   • Complete and explain the review packet.
	   • Be awarded the MOS ACCESS Certification.
	
	15.4.12.A ~ Apply the creative and productive use of emerging technologies for educational and personal success.
	15.4.12.B ~ Evaluate the impact of social, legal, ethical, and safe behaviors on digital citizenship.
	15.4.12.C ~ Develop criteria for analyzing hardware options to meet defined needs.
	15.4.12.D ~ Evaluate emerging input technologies.
	15.4.12.F ~ Compare and contrast network environments, including the function of network devices and connectivity issues.
	15.4.12.G ~ Create an advanced digital project using sophisticated design and appropriate software/applications.
	15.4.12.J ~ Create a complex computer program to solve a problem.
	15.4.12.L ~ Find and use primary documentation; employ an accepted protocol for citation.
	15.4.12.M ~ Evaluate the impact of emerging technologies on various career paths and provide examples of industry certifications within the field.

Microsoft Access Final Project	
CONTENT/KEY CONCEPTS	**OBJECTIVES/STANDARDS**
Microsoft ACCESS Final Project See Key Concepts From Units A, B, C, D, E, F, G, H	The students will be able to: • Apply objectives of Microsoft Access units in a well-designed database. **15.4.12.A** ~ Apply the creative and productive use of emerging technologies for educational and personal success. **15.4.12.B** ~ Evaluate the impact of social, legal, ethical, and safe behaviors on digital citizenship. **15.4.12.C** ~ Develop criteria for analyzing hardware options to meet defined needs. **15.4.12.D** ~ Evaluate emerging input technologies. **15.4.12.F** ~ Compare and contrast network environments, including the function of network devices and connectivity issues. **15.4.12.G** ~ Create an advanced digital project using sophisticated design and appropriate software/applications. **15.4.12.J** ~ Create a complex computer program to solve a problem. **15.4.12.L** ~ Find and use primary documentation; employ an accepted protocol for citation. **15.4.12.M** ~ Evaluate the impact of emerging technologies on various career paths and provide examples of industry certifications within the field.